Last Minute Schedules of Football and World's Series Play-by-Play Broadcasts: Bringing Your Old Set Up-to-Date; WCAH, Columbus, a Strictly Home Station

PROGRAM:

Vol. XIV

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SATURDAY, OCTOBER 3, 1925

No. 13

HOOVER MAY LIMIT RADIO

WBAP NOW TO ENTER HIGH-POWER GROUP

FT. WORTH STATION GOES ON 5,000 WATTS OCT. 5

Has Large Reserve Power Also; Tests Show Reception in Every State, Canada and Mexico

Canada and Mexico

FORT WORTH, Texas,—WBAP, the
Star-Tclegram station here and the latest
for make the change to superpower, announces the opening of their new 5,000watt plant Monday night, October 5, with
a program beginning at 7:30 p. m. andrunning until 6 o'clock in the morning.
Already test programs broadcast with
the new equipment have been heard in
every state in the Union, Canada and.
South America: The apparatus used represents the last word in Radio and is a
radical departure from anything hitherto
used. The entire transmitter was designed and built under the supervision of
Engineer W. E. Branch of WBAP's staft.
The total power available is 10,000 watts.

(Continued on page 2)

(Continued on page 2)



WILL DEBATE RESTRICTION **OF STATIONS**

Ether Confab to Decide

Secretary Sees Way to Relieve Congestion—Asks Opinion of All Concerned

WASHINGTON, D. C.—One of the outstanding features of the forthcoming Radio conference to be hold in this city under the auspices of the department of commerce will be the development of ideas as to the number of broadcasting stations which should be licensed, according to Secretary Herbert Hoover. Mr. Hoover is anxious to get the reaction of Continued on page 3. (Continued on page 2)



Ten Receivers Installed to Receive Other Stations

HOT SPRINGS. Ark.—A "Receiving Studio," complete to the last repnement of luxury is the latest addition of Statuck THS, the 'New Arlington hotel here, for the comfort and convenience of its Radio listener guests, Director G. C. Arnoux has announced.

Druscilla Taggart, center, was the first American to broadcast from the Effeltower station. She has appeared a tvarious sta-



GAY PAREE RADIO IS NOT QUITE SO GOOD

SMITH FINDS 4 STATIONS JEALOUS OF ONE ANOTHER

r of Funds Makes Broadcasting System Only Objectionable Feature in City

Artiole VIII by Fred Smith, WLW Director
THE broadcasting situation in Paris
is a strange one. There are four
stations, each operating under a very
different plan from all others. The Elifel
tower is really a military post, but it is
rented for broadcasting to M. Privat
who operates it



Obstacles Impede Progress
With regard to the entire situation in
France one becomes immediately conscious of the tremendous obstacles which impede the natural progress of the art of broadcasting. The government has taken no deficite stand about taxing the

impede the intural progress of the art of broadcasting. The government has taken no deficite stand about taxing the listeners. Theoretically, users of, receiving sets are supposed to pay one franc a year for licenses. But nobody pays. Therefore, there is no definite income. An astonishing amount of jealousy exists between stations.

The PTT of the Post, Telephone and Telegraph, is operated by government employees. M. Lucien Chanton, at the head of PTT broadcasting in Paris, is ambitious to perform a beautiful and worthy service which would demand about a million france a year. But the government will make no prevision for funds, and so the director does not know how, in the world he will obtain the money.

Commercial broadcasting as we know it in America is not permitted in France. Chanton cannot get his money in that manner. Taxation, such as exists in England, Germany and Switzerland, is not favored, so he has no hope in that direction. For the present he must be concent with programs turnished by l'Association Cenerale des Auditeurs. This organization, a national cub of Radio listeners, pays the PTT four thousand francs a month for the use of the station. A committee of the club prepares the programs, submits them to M. Chanton, who reviews, cuts and completes the entire arrangement for performences. As a result of this method, the work of the programs, submits them to M. Chanton, who reviews, cuts and completes the entire arrangement for performences. As a result of this method, the work of the programs, submits them to M. Chanton, who reviews, cuts and completes the entire arrangement for performences and Marseilles, with Angers, Strassbourg and Lille to he opened before January 1. All of these are to he connected with Paris by means of telephone lines, an easy matter for the department of the government.

PTT Controls Telephone Lines

PTT Controls Telephone Lines
One of the chief causes of the existing
unfriendliness between stations in Paris
is the monopoly of telephone lines by the
PTT. Radio-Paris cannot obtain lines for
remote control work. As a result, this
station does a great deal of retrasmission, picking up programs from other
stations.
Radio-Paris is managed by a group of

sion, picking up programs from other stations.
Radio-Paris is managed by a group of energetic and intelligent business men. Secretary General Tabouis represents France at the international conference at Geneva. The director, M. Vinot, who does much of the planning of the programs, introduced me to his friends, Pierre Cusy and Gahriel Germinet, who have written a book which is just ready for publication, called "Theatre Radiophonique." These gentiumen have ambitious plans to develop the Radario and thematic performances for Radio. Already they have staged several. Their ideal of the Radio program, already, known and certain of growth in America, is the performance written both in speech and music expressly for the Radio stage.

It is with regrot that one must point.

out this unfortunate condition of Radio broadcasing in Paris. For where in Europe is there so delightful a place to live? Oh, you may trivel with high hopes to other cities on the continent, believing that your will encounter a more pleusing life. But not so. You come back to Paris eventually with the thrill of the wanderer returning to his native land. Paris with its boulevards, its cafes, parks, cathedrals, great avenues and twisting streets its theaters, cabarets, art galleries, shopes and hotels, its trams, busses, rivor boats and honking taxis; Paris with its good food, freedom and historic atmosphere; Paris the city of eternal charm and fascination.

DEBATE STATION QUOTA

(Continued from page 1)

Radio fans. broadcasters, and manufacturers on this point. The secretary is not wire. The scattery is not his point. The secretary is not wire on this point. The secretary is not the satisfaction.

MIGHTHAWK FOUNDER Or DETROIT PLANT Or Read of Kansas City Star Radio Department is the broadcasting and that there was a great wire of the Nightist improvement in the broadcasting and that

Artiole VIII by Fred Smith, WLWDirector
THE brondcasting situation in Paris
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stations, each operating under a very
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tower is really a military post, but it is
rented for broadcasting to M. Privat
who operates it
with a daily program of music and
news for one houreach evening. He
obtains funds from
a group of Radio
listeners, called
"Friends of the
To wer," who each
pay ten francs a
year.

Radio-Paris is a
commercial station
in tho sense that it
is owned and operated by a company
representative of
the French Radio
industry. Third,
there is a newspaper station owned
and operated by Le Petit Parision. And
finally, the station of the State. L'Ecole
Superleure, generally known as PTT.
Obstacles Impede Progress
With regard to the entire situation in

At the present time there are close to 600 Radio broadcasting stations in this councy and more than 100 are in prospect. Secretary Hoover, following the recent high-power tests of WGY, has expressed himself as feeling that there was a great improvement in the broadcasting and that, a barm had been done. He rays this as no harm had been done. He gave this as the result of his own experience and that of many who have sent letters to his de-partment about the tests.

partment about the tests.

Radlo experts reported to the secretary that there was no great improvement in the fading. Mr. Hoover said that the majority of the communications received by the department showed that the increased power allowed a wider range of distribution and no reports of interference were made. were made.

The changed attitude of the department The changed attitude of the department of commerce is reflected in the fact that several applications have been received and granted recently for the material increasing of broadcasting power to from 3,500 to 5,000 watts.

A year or so ago officials of the department were not at all anxious to grant applications for high-powered stations. In light, however of the experiments which have been exerted on during the past few

have been carried on during the past few months and that fact that little if any local interference resulted, has made the officials realize that the high-powered stations will be beneficial in the long run to the listener.

NOW AT WJR 'MIKE

NIGHTHAWK FOUNDER TO GO TO DETROIT PLANT

Fitzer Succeeds Fitzpatrick as Head of Kansas City Star

KANSAS CITY, Mo.—Leo Fitzpatrick, the "Merry Old Chief" of the Nighthawks has left WDAF to accept a position as program director and encouncer of the new station of the Jewett Radio and

Phonograph, com-pany, WJR, at De-troit.

The Jewett station is a 5,000-watt transmitter with stidlo and offices in the Book-Cadillac hotel and is operated in conjunction with WCX, the Detroit Free Press, who share WJE's new transmitter.

Mr. Fitzpatrick was a pioneer broadcaster and has been identified with WDAF, the broadcasting station of the Kansas City Star since early in 1922.

Previous to that The Jewett sta-



Leo Fitzpatrick

the Kansas City
Star since early in
1922.

Teo Fitzpatrick
Previous to that
he was a feature writer for The Star.
He was given the position of Radio editor
and announcer when The Star first broadcast through the small transmitter of
the Western Radio company. December
5, 1922, he established the Nighthawks,
now one of the largest and most popular Radio fan organizations in the country. It is estimated that there are now
250,000 persons who have received membership cards bearing his signature.
His informality in conducting the
Nighthawk frolics attracted thousands
who tuned in nightly at midnight to be
entertained by the "chief." He has a
ready wit which serves him in good stead
at all times and his humorous and thuely
comments upon mossages of application
are so entertaining that many have expressed the opinion that they would rather
listen to his bantering than to the popular dance music of the Nighthawk orchestra.

Dean Fitzer Succeeds "Chief."

The "Merry Old Chief." is a singer of
popular songs and many are the songs
which he has popularized by broadensting
them each night on the Nighthawk
frolics.
Mr. Fitzpatrick has expressed regret at
leaving The Star, an institution will
which he has been connected for many
years, but the opportunities once to will
which he has been connected for many
years, but the opportunities once to will
take Mr. Fitzpatrick's place as Radio edtro of The Star and chief announcer of
WDAF.

Mr. Fitzpatrick was a runner-up in the
Radio Digest 1925 Gold Cup Award contest number.

17

23

WDAr.

Mr. Fitzpatrick was a runner-up in the Radio Digest 1925 Gold Cup Award contest and was fourth in the first award conducted by Radio Digest in 1924.

Advance Programs for the Week. 8 to Following Sports through Mike An Evening at Home with the Listener In, a chart in Central and Pacific time, showing when to listen in for your favorite stations. Editorials, Indi-Gest and Condensed by Dielectric. Bringing Your Radio Frequency Amplification Up-to-Date, How to Modernize Your Old Set, by F. E. Edelman. A. B. C. Course in Radio Fundamentals, Chapter XXVIII—Electron Tube Oscillator Circuits, by David Penn Moreton

Advance Programs for the Week

Hints on Antenna Construction, Part I-Aerial Insulation, by William Fenwick ... 20 Switch Doubles Condenser's Range; Other Kinks......

CONTENTS

Radio Diggest, Illustrated, Volume XIV, Number 15, published Catego, Ullinds, October 3, 1925. Published, weekly by Radio Diggest Published, 2000,000, 300 N. Desbroom Street, Chicago, Illinds, Subscription rates, yearly Five Dollars; Poreign Postage One Dullar additional; single codes Ten Cents. Endered as second class matter at the period of the Code of the Code of the Code of March 2, 1940,000 and the Code of the Code of March 2, 1940,000 and the Code of the Code of March 2, 1940,000 and the Code of the Code of March 2, 1940,000 and the Code of the Code of March 2, 1940,000 and the Code of the Code of March 2, 1940,000 and the Code of the Code of March 2, 1940,000 and the Code of the Code of March 2, 1940,000 and the Code of t

Looking Ahead

All the Latest News in Sports broadcasting will be found on the sporting page next week and every week following. Baseball will soon be over but there will be plenty of other events miked to keep the fans close to the loud speaker

Away Up at the Top of the Dials is KSD, the station of the St. Louis Post Dispatch broadcasting from the "Show Me!" state. You can't miss it if you turn up in the high nineties and you must not miss the description of it on the feature page in next week's Radio Digest.

The Traveler," a Five Tube Tuned Radio Frequency Receiver will be described in le Iraveler, a Five Tube Tubed Radio Frequency Receiver Will be described in full constructional detail beginning in the next issue. A new style of presentation which will, we are sure, make it easier for Radio Digest readers to follow instructions, is to be used by John G. Ryan, author of the articles. There have been articles on four tube sets and super-lecterodynes but we preferred to wait until we had a five tube set of unusual merit before presenting one of this type.

Excetion of Outdoor Antennas which is the second chapter of the series by William Fenwick on antenna construction, is most timely in next week's issue, as those who have just purchased a receiver with the coming of better weather for Radio reception, can learn of the various types of antenna possible and how they are put up.

Uses of Oscillators in Radio Receivers is the subject of the next article by Prof. D. by Moreton in his A. B. C. series for beginners. While most of us are trying to prevent continuous oscillation in our five tube outfits, there are many places in Radio where a stube generating continuous oscillation is essential. The experimenter will do well to follow this subject closely.

Newsstands Don't Always Have One Left

WHEN YOU WANT

YOU WANT IT!

BE SURE OF YOUR WEEKLY COPY BY SUBSCRIBING NOW

Carried State of the same

SEND IN THE BLANK TODAY

	Chicago, Illinois.								
	Please find enclosed check M. D. for Five Dollars (Six, Foreign) for One Year's Subscription to Radio Digest, Illustrated.								
	Name								
	Olty Slate								

WBAP IS SUPERSTATION

(Continued from page 1)

(Continued from page 1)
However, this great surplus of power will
not be used on the opening night.
The Star-Telegram entered the ranks
of, the broudensters early, being one of
the first newspapers in the field. The first
transmitter was a small. 10-watt affair
which was put on the air in March, 1922.
During September of the same year
WHAP took the air with a new set of the
then powerful 500-watt type.

Wish Befter Reception of WBAP
It is in line with the advancement of
the art and the desire to reach the Radio
audience with programs that are as nearly
free from interference as possible that
this last increase in power has been

made.

The artists and organizations to be presented on the opening night are those who have been identified with WBAP from the first and are well known to fans.

'The program follows (Central time): 7:30-8:30 p. m., Wagner Hawalian trie; 8:30-9:30 p. m., Holy Roller service; 9:30-10:30 p. m., Ward's "Trail Binzers"; 10:30-10:30 p. m., Geo. Orum's Palace theater orchestra; 11:30-12:30 a. m., San S. Losh and assisting artists; 1:30-2:30 a. m., Smr S. Losh and assisting artists; 1:30-2:30 a. m., Whill Poster, organist; 2:30-4 a. m., Panthor Hawalian trie; 4-6 a. m., Bluebonnet Serenaders.

more up the edge of a panel or any other similar piece, use a common wood plane that has been set for fine cutting.

NEWS BRIEFS FROM THE BROADCASTERS

TO GIVE ANOTHER BILL OF 1-ACT PLAYLETS

Alaskan Steamers Get KFOA New Service; Wisconsin University Plant Is on Schedule Again

Another program devoted exclusively to dramatics will be heard Wednesday evening. October 7, over KOA, General Electric broadcasting station at Denver. Presentations include "The Rector," a cue-act coundry the scene of which is Iaid in a country parsonage; a dramatic scene from "Ronneo and Juliet," and a one-act Tantasy, "Nevertheless," These plays will be given by the KOA players under direction of Iris Ruth Pavey. Instrumental numbers by the KOA orchestra will be featured between plays.

The steamers running to Alaska have as their principal source of news Station EFOA at Seattle. A news bulletin published on board the S.S. Alaska every morning contains news items obtained by morning contains nenthe Radio operator.

Station WHA. University of Wisconsin, which has been silent since the close of the summer session during the first week its August, broadcast its first autumn program recently, on a wave length of \$55.4 meters. The Monday, Wednesday and Briday evening programs will be continued throughout the year.

In the future, the Thursday night concert of band music will be furnished by the United States army band, playing in Washington and brought to New York by land wire and broadcast by WJZ at \$:30. Eastern time. The first of this new series of concerts was given on Thursday. September 24, and will continue indefinitely.

The WGES News is the name of a monthly four-page paper now being distributed free of charge to members of the nudience of WGES, Coyne Blectrical school station, Oak Park, III. The paper contains interesting articles pertaining to the WGES artists and staff.

Song biographies have been inaugurated as a special weekly feature of the "Little Brown Church in the Vale" over WLS. the Sears-thochuck Agricultural Foundation station, Sunday evenings. These are in charge of Harry W. Funday, Canadian lyric tenor and exclusive WLS artist. He illustrates his stories by lyric interpretations of the various hymns.

Charlie Garland, song writer, barltone and planist, has been made both program and studio director of Station WBBM,

The statement is made locally in Rome, Italy, that listeners in outnumber householders ten to one. White this statement bears marks of exaggeration, Consul Ramilland at Rome advises that favorable progress in broadcasting has been evident in Rome since early in 1924.

The Burroughs Adding Machine company of Detroit has entered the field of Baddo broadcasting and is giving programs every Wednesday evening from 9 to 10 o'clock, Eastern time, from WJR.

A hirthday party was held at Westing-house Station KYW on a recent Thursday when Father Claude J. Fernin, S.J. the man behind KYW's regular Thursday evening feature, "Twenty Minutes of Good Reading," completed his third year of Radio reading of Radio reading.

Eight singers and Vinton La Ferrera and his concent orchestra will present "The Chines of Normandy." by Robert Planquette, over KGO, October 3, from San Francisco.

The first Pacific coast program to be broadcast by a Chicago Radio station was given recently by Station WOK, broad-casting on 217.3 meters. Hereafter this program will be a regular weekly feature of WOK.

The noonday organ recitals presented daily by WRC, Washington, from the First Congregational church constitute one of the most popular features added to the programs of the Radio corporation station this summer, and arrangements have been made to continue these recitals through the cooler months.

One of the most unique and widely popular Radio organizations in the control of the control of the most control of the widely control of the most unique and widely popular Radio organizations in the company of the pat Barnes Your Hotel dearge, an association formed by Rat Barnes at WHT, Chicago, to spread happiness, and cheer into the homes of the intion.

MANY WOULD SAW TUNE ON WOOD SAW

HICAGO.—The musical saw made known to the world by Radio has developed a following and a desire for instruction. Harlan Merrill, perhaps the best known exponent of the musical saw, whose gift on this unique instrument is being made known to the Radio audience over WHT every. Friday night, reports that a manufacturer in Wisconsin has gone into the business of manufacturing musical saws and that the demand is sufficient to keep his small factory operating continually.

WOMEN EQUAL MEN IN RADIO TEST VOTE

ENVER—Women as Radio entertainers held their own in a recent competition waged with their male contenders during a pretentious broadcasting meet at KOA, Denver. This was the popular expression from broadcast listeners, pression from hroadcast listeners, hased upon early returns fom twenty-three states and three Canadian provinces. For every 100 letters and post cards sent to Denver in response to the unique Radio presentation, thirty were "strictly neutral," and the remaining seventy votes were split evenly, for and against.

KNOWN TO ALL THE FANS IN DIXIE



Zenith Plant Reaches Greenland on Try-out

WJAZ Heard by McDonald in Far North

MOUNT PROSPECT. III.—WJAZ, the new superpower broadcasting station here of the Zenith Radio corporation, was heard on its first tost program near Godthaab Harbor, Creeniand, by E. F. McDonald, Jr., president of the Zenith company, who is now returning from the arctir. The new broadcaster was only trunsmitthy with 1,750 watts power when the record was established.

J. Elliot Jenkins, Chicago Radio engineer who designed and built the equipment for WJAZ, was pleased to learn of the splendid initial porformance of the plant, Godthaab Harbor is on the middle portion of the south coast of Greenland at about 46 degrees latitude and 50 degrees longitude.

grees longitude.

grees longitude.

The new Zenith station transmits on a wave length of 322.6 meters, dividing time with KOA, at Denver. Appouncement of the official opening program has not been made.

When space is to be conserved when constructing a multi-tube receiver, use a gang socket.

New Stations

The Fort Sill, Okla., army station, KFRM, has not gone off the air after all. This station has renewed its license and is now using a wave of 242 meters and 50 watts power. Chicago boasts another portable station in WBEZ. This 50-watt outfit, operating on 215.7 meters, will broadcast from various of the smaller theaters of the middle west.

KFAE the State College of Washington's call for over two years, has given place to KWSC. Many of the familiar calls have been changed this summer in accordance with the popular plan of using the initials of the broadcasting organization.

Station WOIK has just received authority from the government to increase its power to 5,000 watts. There are only eight 5,000-watt stations licensed in the country, and the Chicago group now includes three of the eight.

The department of commerce has granted the application of three more stations to increase their power. This mobile company, Lincoln Neb., KFAB, raises the Willard Storage Battery company at Cleveland, Ohio, WTAM, from 2,500 to 3,500 watts; Nebraska Buick Autofrom 2,000 to 3,500.

ICKY ANNOUNCER TO RECEIVE SILVER CUP

D. R. P. COATS HEADS CANA-DIAN GROUP IN AWARD

Rouse Congratulates McNamee and Field—Contest This Year Larger than Last

The Gold Cup Award of 1925 has one nore announcement to make. D. R. P. Coats, chief announcer for CKY, Manitoba Telephone System station at Winnipeg, Canada, is to be presented with a silver token cup in honor of his leading all other Canadian announcers in the final

other Canadian announcers in the instanding.

The precedent thus established by Radio Digest will be continued annually.

The order in which the placing Canadian announcers finished is as follows:

ıΑC	CE AND NAME	STATION	VOTE
1	D. R. P. Coats	CIZX	1,815
2.	J. H. Cartier	CKAC	3,437
8.	H. W. Grant	CFCN	2,236
4.	R. H. Combs	CHNC	857
5.	G. A. Wright	CNRA	856
	Walter Darling	CFCF	844
7.	A. W. Ryan	CNRO	518
S.	D. J. Powers	CFCA	511
9.	Rud Weese	CHIC	197
10.	Fred Carlton	CFAC	88
11.	A. L. Hooper	CKCK	87

Rouse Congratulates Winner

Gene Rouse, announcer for Woodmen the World Station WOAW at Omaha,

of the World Station WOAW at Omahs, upon learning the final results of the Gold Cup Award for 1925 in which he placed third, was quick to congratulate Graham McNamee of WEAF as winner, and Henry Field of KFNF as runner-up. His telegram to Mr. McNamee read: "I congratulate you upon the meritorious decision of the readers of Radio Digest in proclaiming you the world's greatest Radio announcer. It is my hope that this distinction of which you are most deserving, will continue to be your."

Study of Past Two Years! Standings

most deserving, will continue to be your."

Study of Past Two Years' Standings
The count shows 317,990 more votes were east in the 1926 Gold Cup Award than in 1924. The winner last year, George D. Hay, polled 129,651 votes this year to the 189,470 credited to Graham McNamee who topped the list in the 1925 contest. Last year McNamee had but 14,678 counters to his credit when he finished seventh. Sen Kaney who was last among those awarded certificates of merit last year had 7,329 votes, while Norman Brokenshire holder of the sixteenth position in the recent contest, had 10,542. Henry Field this year's runner-up was forty-second in the 1924 finals. Frank S. Lanc is a newcomer to Radio and was not in last year's contest. N. Dean, Cole finished thirty-second last year. Jerry Sullivan was twenty-second. Robert Einery held the thirty-third billet just below Charles Eibstein who was in thirty. Norman Brokenshire was not entered in the 1924 race. The others not mentioned were in the list of leaders last year as they are now.

Original Ether College Opens for Second Year

Iowa State Will Again Give Radio Credits for Courses

IOWA CITY, Ia.—The world's first college of the air will open its second year at the University of Iowa October 5, according to Edward H. Lauer, director of the extension division and ex-officio dean of the college. An enlarged faculty and a more complete course than that offered last spring has been provided. Courses will be broadcast Monday and Wednesday evenings for twelve weeks from WSUI on 484 meters.

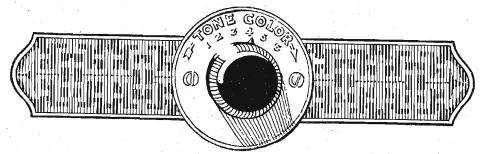
Registration for the new courses will commonce immediately and should becompleted by the opening lecture in order that students may be provided with, the syllabus which outlines the work in each course.

course.

The following courses will be offered:
"Barly lowa History." "American Literature," "lowa Flora," "Problems of Population," "The Teaching of English." Prof. Kirk H. Porter, "Political Parties in the United States," and Prof. Christian A. Ruckmick. "Elementary Psychology." An enrollment fee of \$2 is-charged and \$4 thereafter per semester hour of credit granted. Thus the entire course would entail a charge of but \$86 and the student given university credit which costs.

dent given university credit which costs the average college attendant from \$200 to \$600.

ONE OF THE GREATEST OF RADIO DEVELOPMENTS



Grebe "Colortone"

THIS tone control is, perhaps, the greatest of recent Grebe inventions.

Grebe "Colortone" enables you to alter to your taste, the quality of speech or music from high, thin pitch to deep, round tones with all the variations between. The Synchrophase is independent of the loud speaker's influence.

With the "Colortone" a complete range of tone characteristics is thus available and the best qualities of any loud speaker are brought out.

The "Colortone" makes it possible to suppress considerably the high pitch frequencies caused by heterodyne interference of one station with another and also to reduce, to a great degree, disturbances due to static.

Ask your dealer to demonstrate this as well as the many other exclusive Grebe features; then compare with other sets

A. H. Grebe & Co., Inc., Steinway Hall, 109 West 57th St., New York
Factory: Van Wyck Boulevard, Richmond Hill, N.Y.
Western Branch: 443 So. San Pedro Street, Los Angeles, Cal.



WCAH, at "Columbus, The Heart of Ohio"

William Steinhouer, violinist, and Bessie Speasmaker Parkins, accom-panist, playing in the Entrekin residence studio, are shown below.



NE, two, three, four. Onc, two, three, four. This is the Entrekin Electric company station, 321 Tenth avenue, Columbus, Ohio,

day's contests.

Just a year after the surprise opening of the station, the power was increased to 100 watts and the anniversary program went out to points that never had heard of WCAH.

to points that never had heard of WCAH. Six months later, the power was raised to 150 watts and on the next anniversary it went to 200. With each increase in power, the WCAH family of listeners grew in size. Coast-to-coast reception was reported and the country became intimately acquainted with the Entrekin Electric company, which, before WCAH was born, was known to comparatively few buyers of electrical goods.

The latest increase in power came on April 25, this year, although the formal opening of the newest broadcaster was not held until June 2. The station is now transmitting inter-

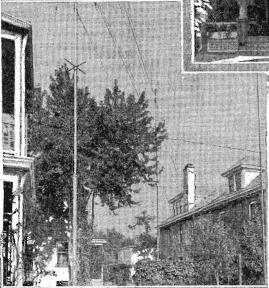
testing.

Thus was a small group of Columbus' carly Radio fans introduced to what a few days later became WCAH, the first Thus was a small group of Columbus' early Radio fans introduced to what a few days later became WCAH, the first regular broadcasting station in the Buckeye capital. I happened to be one of the few listening in that afternoon. It was at about 4:30 o'clock, April 27, 1922. It was indeed a thrill to hear such loud signals on my little one-tube blooper. The testing announcement was followed by several phonograph selections and others agreed with me the next morning that the selections sounded far better than ever issued from a phonograph horn. Announcements and records were alternated for an hour or so, then came a brief silence. This was broken by a woman's voice, saying: 'This is the Entrekin Electric company, 321 West Tenthavenue, Columbus, Ohio, signing off!' Although I never was bold enough to ask, I always have suspected that the feminine voice was that of Mrs. Entrekin; that dinner was ready, and the only way she could get "C. A." as Mr. Entrekin is called by his friends, to leave his new plaything was to sign off and thus end the cittertainment.

The original transmitter at WCAH had a power rated at only 15 watts, but local listeners considered it a whale of a station. Up to this time they had been imited to hearing half a dozen or so distant stations, such as KDKA, WWJ, WBZ, KYW and WJZ, then located at Newark, N. I.

The first regular program was presented the evening of May 9, 1922, including talks by prominent citizens, classical selections by local musicians and the reading of several news bulletins. Soon afterward, WCAH established a twice-a-day news service, at noon and at 7 p. m. The broadcasting of baseball

Operating room on the second floor of the shop in rear of the house. At the imme-date right of Mr. Entrekin is the original 15-watt transmitter.



Antenna masts. Building with chimney is shop containing operating room.

programs at the regular broadcasting proom. o'clock, but upon occasion allows, popular or jazz entertain. No doubt she realizes that ments at midnight. at such an hour, listeners would soon be lulled to unconsciousness by the classics. It requires zippy numbers at midnight to hold the listener and keep



This is the Entrekin residence, 321 West Tenth avenue, where the plant of Station WCAH is located in "Columbus, the Beart of Ohio."

mittently on 500 watts, but will be on a regular schedule very soon again.

The unique feature of WCAH is the fact that only two persons are included in the staff—Mr. and Mrs. C. A. Entrekin. They are the owners of the station. Mr. Entrekin is the manager, engineer, operator and announcer, in addition to being a licensed code operator. Margaret C. Entrekin, his wife, is the program director, studio manager and ... Shutekin.

studio manager and hostess. Much credit must

Much credit must be given to Mrs. En-trekin for the high type programs which she has assembled. She declines to per-mit any but classical

500 - watt set built by C. A. Entrekin.



him awake.

The task confronting Mrs. Entrekin is more difficult than a similar task in (Continued on page 7)



MORE PAID ARTISTS BRING BETTER BILLS

WEEI ADDS PROFESSIONALS TO IMPROVE PROGRAMS

Boston Station Maps Out Excellent Schedule of Acts for Winter's Entertainment

BOSTON.—Better broadcast programs assured through the addition of more puld artists is the plan for the coming season at WEEL, The Edison Electric Illuminating company's station of Boston. WEEL will continue through the season featuring regular and special programs from WEAF in New York. 'By securing more paid professional talent, this station is certain to become even more popular during the coming year.

Already, contracts have been signed for broadcasting music by the Vannini ensemble of the Boston Symphony orebestra and the 18th Century Candlelight orchostra under the direction of Raffacle Martine.

Organize Dance Orchestra

Arrangements are also being made by Professor Martho to organize a real symphony dance orchestra of fitcen nusicians. This dance orchestra composed of symphony musicians, will be heard early in October in their first pro-

No Local Opera

Operas will not be stressed locally. The tabloid opera presented by WEAF Grand Opera company, which is broadcast from this station, seems to fill the bill for opera music.

Dinner speeches are not received any too favorably in New England. Lectures on important subjects will be heard occasionally however.

cusionally however.

The World's series baseball games and
the important college football games of
the Big Pour, and play by play description
of the Davis cup tennis matches are to
be featured during the fall.

Punkinville Program Unique

WEEI has not experimented to any extent with the average Radio drama but they have originated a Punkinville program that seems to have gone the Radio dramatists one better. In creating this broadcast, a program has been developed that is a combination of the old time rural comedy and the hick burlesque vaudeville act. The action is not only speedy but simple, univolved, and easy to follow. The characters in these programs, which have become so, popular, are well known to the listeners as the voices are distinctive.

Every Radio listener in New England knows Punkinville.

WCAH, COLUMBUS, OHIO

WCAH, COLUMBUS, OHIO

(Continued from page 6)
the ordinary Radio studio, since the
WCAH studio is located in the Entrekin
residence. This means that on broadcast
rights, she must entertain the artists
just as if she were giving a party. Any
woman would shrink from the task of
giving from one to three parties a week
in her home, but that's what broadcasting
means in the Entrekin home.
On the other hand, the congenial atmosphere of the home is attractive to
the artists and it never is difficult to
obtain talent at WCAII.

Alt. Entrekin answers every communication to the studio whether it be postcard, letter, or telegram with a personal
note.

When the slower favor but the broad

when the slogan fever hit the broad-casters, Mr. Entrekin was among those who climbed onto the band wagon early, "I'm going to announce like this," he told his wife: "WCAH, broadcasting from Columbus, the Heart of Ohlo." "They'll kid you to death," she told him.

him.
"Let then kid," he replied. "I'm going to try it." And he's still broadcasting. from "Columbus, the Heart of Ohio."

KTHS to Give Dixie Series

HOT SPRINGS, Ark.—The New Arling-on hotel station here, KTHS; has an-ounced that it will broadcast the Dixie baseball league series play-by-play.

WORLD'S SERIES GAMES TAKE AIR

Thirteen Stations Sure to Carry Play-by-Play Results-WEAF Chain May

CHICACO.—World's series broadcasts are the order of the day. During the past week eight more stations have announced their intention of carrying the baseball classic play-by-play, in addition to the five announced in these columns last

casters will give play-by-play descriptions of the national game's wind-up. One of the most important groups of stations which may curry the games is the WEAF chain. It is understood that Graham McNamee will announce the games direct from the field as was done last year. This chain includes WEAF, WCAE, WCAP, WOO, WJAR, WEEI, WWJ, WOC, WSAI, WCCO, WCTS, WTIC, WFI and WGF.

Honor Great Composers on Birthdays at Station WLW

classic play-by-play; in addition to the five announced in these columns last week.

The eight are: KDKA, Pittsburgh; KFOA, Seattle; KTHS, Hot Springs National Park; KYW, Chicago; WBZ, Springfield and Eoston; WEAR, Cleveland: WGY, Schenectady, and WMAQ, Chicago. The five stations announced last week as to carry the games are: KOA, WDAG, WJZ, WRC and WSB.

Although no further stations had made their plans public at the time of going to press, undoubtedly many more broad-

Old Timers Assist at WBZ's Fourth Birthday

Westinghouse Station Celebrates with Four Hour Program

BOSTON .- Westinghouse Station WEZ,

BOSTON.—Westinghouse Station WEZ, which went on the air along with the first broadcasters in the country on September 18, 1921 to be exact, celebrated its fourth anniversary Monday, September 21, with a program lasting four hours.

An all-star program of well-known Radio artists and orchestras were heard during the evening. Nearly every regular entertainer or group of entertainers that had broadcast from WBZ during the past year, was microphoned again during the four-hour celebration.

George H. Jaspert, incidentally, who is director of WBZ, is one of the first persons to act in this capacity. At the time of the opening of KVW in Chicago, four years ago, he was director of the pioneer. Chicago station and was later transferred to his present post. to his present post.

Another group added for the season is the Boston Orchestral Players, under the direction of Joseph Boetje. Working with this orchestra will be artists well known to Radio fans, including Miss Ifelen Barr, who possesses one of the most charming soprano Radio voices on the air; Howard Rennig, tenor, whose voice blends wonderfully with that of Miss Barr in duet numbers; Miss Marjorie Posselt youthful violinist who has studied both here and abroad, and Mrs. Nina G. Del Castillio accompanist and solo planist. The local jazz dance programs from this station will be supplied for the most part by Dok-Eisenbourg's Sinfonians and Ed Andrews' Nautical Garden orchestra. No Local Opera Understand



The radio show season is on. You can go to the show without hopelessly bewildering yourself. Just keep certain basic things in mind:

You don't want any set of a passing type. You can tell very largely by the coils. Most coils "spray" energy all over a set, almost like short-circuiting the wiring! Such coils are also like little aerials in themselves, picking up signals uncontrollably.

There you have the chief causes of intercoupling, scrambling, broad tuning, and Low-Loss Doughnut Coils. They are of a shape which literally "turns in upon itself." So there is no indiscriminate "control of the control of loss of power, now defeated by Thorola So there is no indiscriminate "spraying;" no stray pick-up of signals. Selectivity is at last a positive thing, even in the most congested centers. Losses are overcome, increasing range and volume.

The coils that assure these results are to be found only in the 5-tube Thorola Islodyne receiver. It is one radio instrument at the show whose selectivity, range, volume, clearness, and uniformity of results have definite reasons behind them. You see the reasons when you see Thorola Low-Loss Doughnut Coils in this set. Here is superiority you can identify, understand and hear. For Thorola Islodyne tone is the tone which established Thorola as one of the permanently great names of radio.

At the show, or at your dealer's, keep straight on the modern radio you want. Seek out the set with Thorola Low-Loss Doughnut Coils-Thorola Islodyne. Its entire construction and its appearance are promise of performance which cannot be measured by price.

REICHMANN COMPANY, 1725-39 West 74th Street

CHICAGO



THOROLA SPEAKERS

With vital technical refinements including the self-harmonizing feature, Thorola Loud Speakers increase their margin of leadership. The new Bakelite bell is the largest Bakelite form ever produced. The ingenious throat construction and identifying gold throat-band lend inspiring grace and rugged strength.

Thorola Loud Speaker \$25 Thorola 18. Thoro

Thorola Low-Loss Dough \$12 Coli \$4 Thorola Low-Loss Straight \$5.50 and \$6 Producing Transformers..... \$4.50

SUNDAY EVENING CLUB OPENS AT KYW

Saturday, October 3

Saturday, silent night for: CFCA. CHNC. CNRC.
KRE. CNRM. CNRR. CNRT. CNRW. KFAB. KFOM.
KRX. KFM. KLOS. WRAP. WBZ. WCAU. WCTS.
WG. WBJ. WEEI. WGCP. WHAD, WHN. WHO,
WJAR. WKAQ. WLIT. WSMB, WTIC. WWJ.

Eastern Time Stations

Eastern Time Stations

CHIC. Toronto. Can. (357). S p. m., CRIC Symphony unchestra: Norman Wilsens, somano; Grace Sieware was the control of the control of

S.20). Bible questions and answert, tonce authermore, S.20]. L. Marion Brown, routono's S.30, Malcolan Cate. WOAE, Pittshurgh, Pa. (461.3), 6.20 p. m., dimor concert. William Penn hotels (S.30), studie, nonesert. VGX, Detreit, Mich. (477), 4.15 p. m., The Detroit graphony tric; G. dinner routert. Feel; Gaillian hotel graphony tric; G. dinner router, Feel; Gaillian hotel graphony tric; G. dinner router, 17.15, p. m., "Old New York," Heury Collins Brown: 17.15, p. m., "Old New York," Heury Collins Brown: 17.15, p. m., "Old New York," Heury Collins Brown: 17.15, p. m., "Old New York," Heury Collins, p. m., "Old New York," Heury Collins, p. m., "Old New York," Heury Collins, p. 17.50, George O'Prien, tensor: 17.50, p. 17

11-13, Vincent Lopez and its desirators, WEAR, Cleveland, Ohio (3894.), 7 P. 30, navelty discrete WEAR, Cleveland, Ohio (3894.), 7 P. 30, navelty discrete Control of the C

Pour: 7-33-8. Chalent Front: 8-33 n.m., Chatent Front: 9-30-9-15, policy of solid file. Well of the Front: 9-33 n.m., Chatent Front: 9-33 n.m., Chat

WWI, Detroit, Mich. (352.7), 12:05 p. m., Jules Kloin's Hotel Statter orchestra; 2:30. B of M-Afterigan State football game.

Central Time Stations

KFAB, Lincoln, Nebr. (340.7), 5:30-6:30 p. m., Bel-shan's orchestra; 8:30-9:30, Schnieller and Muclier Piano company.

shaw's orrhesprat S.500-9.00, Schmollor and Anciler Prime companions, lowa (265) 7 p. m., Mrs. Paul KFM. Shenandosh, lowa (265) 7 p. m., Mrs. Paul KFM. Shenandosh, lowa (265) 10 p. m., Mrs. Paul KFM. Indiana (265) 10 p. m., menter the companion of the companion

couert, Suttherness, and Ossenhit, 9:10-10:15, dance court, Suttherness, and Ossenhit, 9:10-10:15, dance of KYW, Chicago, Hi, (53.5.4), 6:23.7 in m, shitdres'; healtime story; 7:7-200, Congress botel; 8:0, Maria Dingeress, sorgrand; Saille Menkes, pianoit; Art Linick, bismortat; Charlie Schultz, tenor. WB SM, Deiroson, III. (226), 5:30-4 p. m., kiddles' joy until the constant of the constant of

Headliners of the Week

RANDALL'S Saturday Nighters, the only troupe of broadcasting artists in the United States capital, will take over the microphone of WRC this Saturday night to present an unusual program in an original way. Nelson Bell, the impressario of the group noted for his wit and humor, will direct the group. The surprise of the evening will be a talk by a popular New York screen star.

stur.

The Chicago Sunday Evoning club opens October 4. Dr. Henry Howard, noted Australian evangelist, will be the principal speaker. Dr. Howard was discovered last summer when he delivered a series of lectures in Central Hall, London. Sunday also marks the return of Rev. S. Parker Cadman to the microphone of WEAF. Dr. Cadman has been abroad attending international church conferences and will have many interesting experiences to relate. This service will also be broadcast by the link stations. Monday is a gula night for WEAF.

also be broadcast by the link stations. Monday is a gala night for WBAD. Fort Worth. The twenty-four hour program, presided over by the Hired Hand himself, celebrates the opening of the new 5.000-watt equipment. This is also an important night for Nashville, Tenn. WSM, the new station directed by Bonnie Barnhardt, long famous at WSB, also opens this same evening with a special program dedicating the entering of Nashville into the broadcasting field.

The Veilled Prophet parade again

The Veiled Prophet parade again

mystifies the Radio fan as he looks at the programs for Tuesday. The only way to find out what it is all about is to tune in for KSD and let the sounds of revelry float in over the loud speaker. KDKA begins an interesting feature this evening. The "Round-the-World" cruise booked for every Tuesday for the rest of 1925 will take the listener to many queer and unusual places. Ross H. Steinner, cruise director for Cooks Tours, will give the talks and the KDKA symphony, music from many lands.

Radio has reverled the foot that

Radio has revealed the fact that America is producing many pronising composers. Rubert H. Whitcomb, who composes both for the voice and the plane, will present some of his compositions Wednesday night as WBZ. Springfield. Suson Heywood, soprano, will assist him.

Cottober is a month when skies are clear and autumn stars may be studied carefully. Thursday will take fans into realms as yet will take fans into realms as yet. The control of the contr

Friday alght is a night when broad-cast listeners come into their own. Radio stations should tune in for WLS and listen to the model program being put on by the Broadcast Lis-teners' association. Frank H. Mc-Donald, the president of the associa-tion, is directing the production.

WEBH, Chicago, III, (270.2), 7.30-8.30 p. m., Orlole orchestra; Howard Nemultier, planist; 8:20-10-20, Orlole orchestra; Marie Kolly, reader; Ray Romayne, Danis orchestra; Marie Kolly, reader; Ray Romayne, Blanche and Rudd Baio; Wayne Arm Grid, tonor; Blanche and Rudd Baio; Wayne Arm Roman (1998), Respectively, Ritta McFawn, soprano; Thomas C. Smith, barlone; Walter Peterson, Kentseky Wonderbour; 12:2, Frank Westhal; Mart 1961, All-American Plenners; Prank Westhal; Mart 1961, All-American Plenners; Prank Westhal; Mart 1961, All-American Plenners; Prank Westhal; Mart 1961, All-American Plenners; All-American Roman (1998), All-American Plenners; All-American Roman (1998), All-American Plenners; All-American Roman (1998), All-American (1998), All-American (1998), All-American (1998), All-American

WKRC. Cincinnati. Ohio (326), S p. m., Marlon McKay and his ownestre; 9, vocal and instrumental classic

music.
W1.5. Chicago. III. (244.5). 7 p. m. taliny ilme, Ford and Glemn; 7:20, George French and III. gatezy or Radio states: S. national hard dence; hour of dance music; II.12. fee Bren's ministrels. WLW. Gienlandta, Ohie (42.3.) 7 p. m., Johanna Grosse, crasnist; 7:35, Seckstary Hawkins; 7:40, Instrumental crio.

W. W. Grielmati, Dhie (422.3), 7, m., Johanna Grosse, organists, 735, Seckaray Hawkins; 740, Instrumental organists, 735, Seckaray Hawkins; 740, Instrumental musical program; 8, Fred. Daw and Rossatt Faret. S.20, Radio photologue; 9, Chicago thetator revue. WMBE, Chicago, 111, (250, 7.8 b. n., Trianon onsemble, Rebects Azulhic; Charles Agne, Marie Carneo, WMBE, Chicago, 111, (250, 7.8 b. n., Trianon onsemble, Rebects Azulhic; Charles Agne, Marie Carneo, The Marie Carneo, Ma WOK, Chicago, III. (217.3), 6-7 p. m., Robert York, the Calwell, work of the Calwell, and t

tenor. Halor Real, accompanist; Kane McDuffee, whister; 10-3. Renn Williams and his Rainbo Skylariki; Jerry Sulfrom, 15 of the Skylariki; Jerry Sulfrom, 15 of the Skylariki; Jerry Sulfrom, 15 of the Skylariki; Jerry Sulfrom, 16 of Skylariki; Jerry Sonick, Bert Davis, Williamson Brothers, 16 of the Skylariki, New Yal, Ginelmanti, Ohio (326), 7-45 p. m., WSAI story latty, 31s. Elbel Knapp Behrman; S. night football sonio, U. of Cincinaud; w. Hanove; 12 midnight, 15 of the Skylariki, 18 of

WSB. Attanta. Ga. (428.2), 8 p. m., irraginlar session of Ernest Rogers rest head club; 19.13. Radiovi ontertainment.

WSBB. New Orleans. La. (319), 6:32-7:30 p. m., illustration of Ernest Rogers of Control of

Mountain Time Stations

(OA, Denver, Cole. (322.4), 12:15 p. m., Righto theater musicale; 9, danco program,

Pacific Time Stations

Pacific Time Stations

(FDA. Seattle, Wash. (454,3), 8:30-9:30 p. m., pregram; 0:30-1:30, Katle Harkness and his orchestragram; 0:30-1:30, Katle Harkness and his orchestraproblem of the state of

K.H. Saattle. Wash. (384-4). S.30-10 p. m., L. C. Warner communy studie programs. Science 1975. Conference of the studies o

Sunday, October 4

Sunday, silent night for: CHIC CHNC, CNRC, CNRC, CNRM, NRR, CNRT, CNRW, KFAB, KFKX, KFMQ, KFOA, KSD, KYW, WAHG, WSAP, WCAU, WCEE, WCX, WDAF, WEBJ, WFI, WGR, WHAD, WHAS, WJR, WLIT, WMC, WOK, WOR, WORD, WRC, WSAI, WSMB, WTIC

Eastern Time Stations

Eastern 1 ime Stations

KD KA, Pittsburgh, Pe. (2003), 1, 10:15 a. m., cimedservices; 2:15 p. m., resuer services, Shadywide Proposterian church, Rer. Much Thomaso R. Shadywide Proposterian church, Rev. Much Thomaso R. Shadywide Procipital single proposed to the Company of the Compa

Hitcherford; 16. 1 B. 8 A floral singers; 10:10, Watchborrow; 16. 1 B. 8 A floral singers; 10:10, 10:10, 10:20, 1. B. 8 A choral singers; 10:10, 10:10, 10:20, 1. B. 8 A choral singers; 10:10, 10:20,

WEEL, Bosten, Mass. (476). 7:10 instantional consister, and his Capitol. Inches pages; 9:15, must Jury Buest, and his Capitol. Inches pages; 9:15, must Jury Buest, and his Capitol. Inches pages; 9:15, must Jury Buest, and his Capitol. 19:16 pages; 9:16, pages; 9:16

Central Time Stations

Bantist church; 7:20 cathods supers; 10:30. First
Central Time Stations

KFAR Litcoln, Nobr. (3d-7), 4-5 p. m., sequer service.
KFAR Litcoln, Nobr. (3d-7), 4-5 p. m., sequer service.
KFAR Litcoln, Nobr. (3d-7), 4-5 p. m., sequer service.
KFAR Litcoln, Nobr. (3d-7), 4-5 p. m., sequer service.
KFAR Litcoln, Nobr. (3d-7), 4-5 p. m., sequer service.
KFAR Litcoln, Nobr. (3d-7), 4-5 p. m., sequer service.
KFAR Litcoln, Nobr. (3d-7), 4-5 p. m., sequer service.
KFAR Litcoln, Nobr. (3d-7), 4-5 p. m., sequer service.
Reversity City, Ma. (2d-7), 5-2 p. m., sequer service.
Reversity City, Ma. (2d-7), 5-2 p. m., sequer service.
Heat Sequer sequ



VEILED PROPHET PARADE FROM KSD

Sunday, October 4

(Continued from page \$)

Fort Worth, Texas' (475.9). 11 a. m., First dist church; 12:30 p. m., kiddies hoor, Uncle

White for worm, 1923 m, white how, nich sillie, tench; 12:30 n, m, keltie how, nich sillie, white how, and the property of the sillie with the sillie sillie Loftx, Hondy Toul Gleon chasers: Cerland Jardon; S.-l. Jazzel McSonn, contrator, Sannore orchester; Sunet, male diparted, Joseph Ralefy Jim Carter, deep the reproduction; 12.5, Naivy olin, tougest.

feature.

WGBD, 21en, III. (344.8). S.p. m., mixed quartet;
Gereid and Daniel Mason, cornect and tromboulist; A.

bartione: H. B. Marfield, sorrano: Gereid Misson,
cornectist; Alter Peters, violinist; Daniel Mason, trans-

teorist; Lillian Edwards, planist; reading, Hester Rubitian.

WCCO. Minneapolis-St. Paul, Minn, (416.4), 10:20 a. n., Plymouth Congressational church; 4:10 n. nr., Lillian Congressational church; 4:10 n. nr., Lillian Congressational church; 4:10 n. nr., Lillian Congressational Congressational Congressational Congressational Congressation Congressational Congressation Congressat

WENR, Chicago, III. (266), 2-4 p. m., Banfand lyric

WTAS, Elgin, 4H. (302.8), 8-32 midulght, Fred Hamm and the Ross wan orchestra; Herbie Mintz, Bahe Payme, Phil Wilear, Evelyn Johnson, Art Sulfer, Rome Vincent, Robad Hinded,
Mountain Time Stations.
KOA, Denver, Code, 632.4), 11 a. m., First Compressional Thurst; J. m. m., ban concent, Chouse Mintel Control, 2 m. m., bank concentrational Control, 2 m. m., bank concentrations, Control, 2 m. m., bank concentrations, Control, 2 m. m., bank control, 2 m., bank control, 2 m., bank contr

program, William Penn lotel; 9, A. & P. Gypsies; II. dance music, Sanders Inn.; 9, 8, p. m., Charlos XAU, Philadelphia. Pa. 2(27.6); 8, p. m., Charlos XAU, Philadelphia. Pa. 2(27.6); 8, p. m., Charlos XAU, Philadelphia. Philadelphia. XIII. Washers, supransis, Kathyun O'Boyle, blandats S.30, Al Lockitart, planuacordian; 9, song hits, Damy Dougherty; 9,30, raik; Wilson N. Durham; popular suites, Don Travaline, Isabel Fine, Max Freedman; 10, Herman Schwartz and hits Bluo Jackets.

WCX, Detroit, Mich. (517), 4:35 p. m., The Detroit

Often Mispronounced;" 6:17-7, Hotel Shelton en-sembler 7:15-7:30, Sports talk, Bill Wathey; 8:39-9:30, Al Redd's hour; 9:30-9:31, Indl, Edward H. Blorstaut, WTIC, Hartford, Conn. (476), 6:30; 9. m., Emit Heim-berger's Bulled Bond trie; 7:45, "Full Grossine," John W. Zitcomb; S. dinner unist. W. Zitcomb; S. dinner unist. W. Deltratt, Mich. (352-7), 12:05; p. m., Jules Klein's Julied Stafter ordectia; 3. Datroit News orchestra; 6. dinner concert, 8. Kows orchestra.

dinner concect; 8. News orthestra; 0. dinner concect; 8. News orthestra.

Central Time Stations

KFAB, Lintein, Nebr. (340-7), 5:30-5:30 n. m., Bulek
Little symplomy, Deithaw's orthestra; 5:30-10:39, BelDards, violonis; Hard Rubberds, Derible; Cheb
Dards, violonis; Hard Rubberds, Derible; Cheb
Grey, Bulek
KFKX, Harlings, Nebr. (268.3), 5:11 p. m., musical
KFKX, Bellendons, Nebr. (268.3), 5:11 p. m., musical
KFKK, Silenandonh, leva (269.), 7 p. na. Smith-Beldling ordecits;
KFVE, University Giy, Ma. 6:30 p. na., Anusement
review, Kominuic Frielding; 7 p. oppular nouse cancert,
undinche-Balke-Celtunier company; Orchecita Rumarine.

Brunswick-Balke-Collembr company; Orchestra Rumaine.

KMA, Shenandon, Jowa (252), 6-7 p. in., dimer program, May's Flower orthester; 9-11, furillux songtion mean; delimin, Withian Books, boy plantist.

Huga mean; delimin, Withian Books, boy plantist.

Huga mean; delimin, Withian Books, boy plantist.

Huga mean; and the New Hanpy Hollew dub orchester; 9.

Wildur E. Oxley, agent; 11-12, Hotsy Totsy hour. Ray

Winn and this New Hanpy Hollew dub orchester; 9.

Winn and this remember of the Justice of the College of the Coll



Marjory Webor Bebestreit, left, is the pianlst and organist who is entertaining during the noon hour Wednesdays at WLW, Cincinnati. Dorothy Talbot, above, is the coloratura soprano who has recently joined the staff of the new Oakland station, KTAB. She is well known to fans because of her former appearances at KPO. Elmer Grosso, right, and his versatile orchestra broadcast dance music from WEAF every other Saturday afternoon.

and Warner brothers morie frolic; Frank Storer, barltone; Howard Flynn, bando; Peggy Mathews, blues singer; Frank Pierco and Vie Beall, comedy songs and others.

hearltenes: Howard Plyon, untou; reasonate songs and olders; singer; Frank Pierco and Vic Beall, comedy songs and olders; (60.0 Sakland, Calif. (265), 1. n. m., First Baptist 7:43. Sirst Baptist church, Calif. Symphony uncheated; 7:43. Sirst Baptist church, First University from; services, Church of Our Pattier, First University 7:59-9 p. m., Ethical Calif. (1998), 1999. M. Lekhton's Areado cafetoria orchestra, Jack Crusskaw, leader; 6:20-7, Art Hickman's Jillimore hotel cancert orchestra, Edward Elizapatrick, director; 7-7.30, Arthur, Baltedy, Street Store company, arranged by J. Howard Johnson.

Street Store company, arranged by J. Howard donn-KMX, Hellywood, Calif. (33.9), 7-8 p. m. First Pre-hyderian church of Hollywood, Rev. Stowart P. Mae-Leiman, poster; 8-9, Ambasador hold consert or-chestra, Josef Rosenfeld, director; 9-19:30, program, Bererly Hills Nurserles, Russian string tric; Calmon Labovisid, violinist; Raquel Nieto, soncano. (PQ, Sam Francisco, Calif. (428.3), 3-4, p. m., Marshall Giscliman, organist; 6, Waldonart Lind and the States Infel; 8, Palane emerch ordestra; 8:30-10, Rudy Sefger's Pairmont hotel ordestra; 8:30-10, Rudy Sefger's Pairmont hotel ordestra; 8:30-10, Rudy

Monday, October 5

Monday, silent night for: CHIC, CNRC, CNRE CNRM, NHR. KNYW CORT, KCEM KEMA, KHI KHIC, WEBH, KCEM KEMA, KWI WENR, WFI, WGES, WGS, WGN, WHAS, WENR, WFI, WGES, WGS, WG, WQI, WRC WREO, WLS, WMAQ, WMBB, WOC, WQI, WRC WREO.

Eastern Time Stations
CHIC. Terento, Can. (357), 8 p. m., CHIC Symptony
orthestra; George Milner, tocalist.
HNC. Terento, Can. (356.9), 10 p. m., CHNO Little
symptomy urchestra; Alice Hodgetts, soprano; Sydney
Walsh, tempo.

OHNC. Tereste. Can. (258.9). 10 p. m., CHNO Little-symbolous purchestris. Altho-Bulestis. Septrano, Sydney Walsh. 1990.

Walsh. 1990.

William Committee Com Symplony urchesity: Affect Hotsetti, sortano; Sydney K. M. A. Pittaburgh, Pa. (399.1), 6:15 p. m., disparence of the content o

for Hitle folks, Midred U. Hagan, 6, occasion of the Midred Vision of th

organist; 5:36-1, Panther Hawaiian trio; 4-6, Bluewalls, Cemenders, H. (228), 6-7 p. m., Stewart-Warner
stutio, Clem Dary, Jimmy Jurdon, Charlie Gartand,
Nate Caldwell, Eddio Leitis, Cerima Jarden, Patey
O'Sullivan, Lew Kussell, Alamo orchectra.
Patey
O'Sullivan, Lew Kussell, Alamo orchectra.
Wall, Carlon, James J. (2008)
P. & R. Gambly, 8:15, Bamila Hunt, organist.
WAAF, Ramsas City, Mo. (355, 8), 8-7 p. m., plano
tunitz in number on the Duo-Art; dialect readines.
WAAF, Ramsas City, Mo. (355, 8), 8-7 p. m., plano
tunitz in number on the Duo-Art; dialect readines.
S-9:30, Iranhan hand; Ivanboe gize club; 11:35-1 a. m.,
Merry Old Chief, Carl Nordhers's Planatian players:
Ted Meys, organist: Eddie Kutha's Kanuss City
WFAA, Dallas, Fexas (475, 9), 6:36-7:39 p. m., artho
(collins and his orchestia.
WGA, Chiesan, H. (370-2), 12:30-12; p. m., Drake concert
organists. Market Meyers, Carlon, Carlon, Carlon, Carlon,
WGA, Chiesan, H. (370-2), 12:30-16; p. m., Arthur
organists. Masshall Frield tea room orchestra; 6:36-7.
Drake concert smarshle, Blandstone streng outside.
WHAD, Milwaukae, Wis. (275), 6:36-7; p. m., Arthur
organists. Masshall Frield tea room orchestra; 5:36-7.
Drake concert smarshle, Blandstone strengs outside.
WHAD, Milwaukae, Wis. (275), 6:30-8:30 p. m., advance
atadenta, Drake University Censervation of Music;
Hours, Carlon, Ca

(A. T. Norum, tenor; 9:38-11:30. Frank Westphal; American Ploneovs; James Beatmont, A. Dallas, Tesas (475.9). 6:33-5:30 p. m., Radio le class, Dr. William M. Anderson; 3-ñ. First black chard; 5:30-11, Lilgon Smith's orchesticant, James Charles, Comparison of the Comparison of th

isemble. Milwaukee, Wis. (275), 3:15 p. un., band con-

WEAT CONTINUES.

WHAS, Louisville, Ky. (399.8), 9:57 s. m., band concert.

WHAS, Louisville, Ky. (399.8), 9:57 s. m., organ product: 10. Fuuril. Avenue Presbytechan charrest.

WHO, Des Monnes, Iswa (526), 11 n. m., University cluster acretice; 7:309-320, Recsa-Hughes orchestra.

WHBO, Chiesapo. III. (220), 10:15 n. m., Edicewator Presbytechan church; 2-4, m., Doroniva Davis Dillow, sourcain; Curroll Martin, tr. Records Jerubern. curroll Martin, plantist, Joo Allaboutch, (envr. 10-12, Victor Voome, Joa Allaboutch, Dan Blasse, Teel Mortot, Harry Gelse, Wickef, Cincinnati, Ohio (422.3), 0:35 p. m., Walnut Hills Christian church, Dr. J. J. Cartiborry; 10. Gene Schmidt, hartinge: Walter Bridge, tenor; Mercel WLS, Chicago, III. (344.8), 6:20 p. m., Rajob Ramerson, organist; 7-7:55. Little Brawn church; Jittle Brown church; John, pp. 100. p. m. actions.

church
WOAW, Omaha, Nehr. (526), 9 a.m., chaped service.
Rev. R. R. Brown; 9, Zlou English Lutteran church,
Kole Lunskren, pastor.
WOC, Davenport, Iewa (483.6), 8-8:30 p. m., church
cerrice, Rev. J. Seoul, Carr; 9:39-11-20, Palmer Little

wood, Davenport, 1998 (488,8); 8:839 p. m., chirch sortice, Rec. d. Soul, Carry, 5:30-11:30, Palmer Little symmious. With the symmious. With the symmious of t

www.americanradiohistory.com

LISTENERS GIVE PROGRAM AT WLS

Monday, October 5

(Continued from page 9)

WSAI, Cincinnati Ohio (329), 8 n. m. A. and P. Gypsics; 9-9:15. news review, Alfison Stanley; 9:15, Carl Schuete, Jainste, Ridhard Pawey, tenor; Waldeno Johnston, violitats; Merrell Schwartz, baritone. WSE, Alfanta, Ga. (42.3), 8 p. m. Ritz Harmony Boys orchestrs; 10:45, Itaalout entertainment. WSM, Nashville, Tenn. (232.8), 7 p. m.-2 a. m., open-

WSM, NOSSYIII, CHIII. (26.63); I.p. Int. 2 a. I.i., Operation of the control of t



Danny Bougherty and his
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Mountain Time Stations

KOA, Danver, Cole. (322.4), 6:30 p. m., Herbert White and his Silver State orchestra: 7:30, sandman's hour; 8, scientific hostbuil, Toro McNamara; 3:10, Canon City music club.

Pacific Time Stations

City music club.

Pacific Time Stations

KFOA, Seattle, Wash. (434.3), 6:15-8:15 p. m., Shormish, Chay and company program; 8:30-10. Three transportations of the company o

Tuesday, October 6

Tuesday, silent night for: CFCA, CHIC, CHNC, CNRC, CNRE, CNRM, CNRW, CNRT, KFKX, KOA, WAHG, WBBR, WCTS, WGCP, WHAD, WKAQ, WLIT, WBR, WSMB.

Eastern Time Stations

Eastern Time Stations
KO(A. Pithburgh, Ps. (309.1), 6-35 p. m., dinner consert; 7:301, children's period; 8:30, travel talk, Roof Skinner; KDKA Little Symmbony orchestra, Victor Saudet, director; 10:30, Grand theater concert, WAHG, Richmond Hill, N. V. (315-6), 12:36-12:35 p. m., mucleal process, 333, 1), 6:30 p. m., Lee Reisman's Hard Leans censenber; 9:15, Christs R. Reisman's Hard Leans censenber; 9:15, Josephine Simpson Koch, 20-prans, 9:25, Villiam Brown, prinsit; 1), Alberta M. Kaliber, violitide, 8, (461.3), 6:30 p. m., dinner concert, William Prem. botel; 8, pregram from New York; 8:30, Gold Dust twins; 9, Keerandy hour; 10, grand appers.

WGAU, Philadelphia, Pa. (277-5), 7-50 p. m., Smallen-burg chural szelety: Henry Thumber, conductor; S. Alberta Morris, suprano; Gertruda Schultz, contrallo; Kathryn O'Isuch, himist; 9, "What Psycholosists Say Abunt Thus Preventian", Rev. John W. Studewell, 9-15, entertalment; 2-59, popular sones, Thery John [19-20] Elliy Hayes and this Lathay Pan Onton or

wheelth, Worcester, Mass. (268), 8-5:30 p. m., Rosa Gorman and bis Earl Carroll Vanities; 5:30-0, program 9-10. Evercady hour; 10-11 WEAF grand opera com

WCX, Detroit, Mich. (517), 2 p. m., nows and markets: 1:15. The Detroit Symptomy trio; 6, dinner concert, Bonk-Cadillar hotel; S. musical program; 10, the Red

8. Ross Gorman's orchestrs; 8:30. Gold Dust Twins; 9. Exercicly hour; 10. WEAP grand opera company. 9. Exercicly hour; 10. WEAP grand opera company. Geological Science 18. A travelend in owner-fundation; 10:30-11:30, Arrowhead Ind. dance orchestra. WEAR Suffallo, N. Y. (319), 2:30-4:30, P. In., WGR stitemon program; 8:30-7:30, Vincant Lopes Hotel WGLH Gold Dust Twins, Everendy hour, grand opera-geonect.

Stealer dance oreheelra, Barool Gleener, director; S-11. WEAP Gold Dust Twins, Errenchy hour, grand opera WEAV, Schlenestady, N. V. (379.5), 6.20, p. m., "The Farm Factory for Ande Products," Harold L. Turkey; 6.20, dinner program, Butel Van Curler orthestra, '2.50, files string market; Mir. Don Wood, Commentary, 19.50, W. Spaneer Trumman's Morel May-offwer ordersta, WRC. (275), 7.30 b. m., house of the commentary of the c

quartet.

WOR, Newark, N. J. (405.2), 6:15-6:17 p. m., "Words
Often Mispronounced"; 6:17-6:30, Hotel Shelton ensemble: 6:30-7, Man in Moon; 7-7:30, Rotel Shelton

semble: 6:30-7, Man in Mone; 7-7:30, Horel Stelton ensemble.

WRC, Washington, D. C. (488.5), 7 p. m., Shoreham hotel ordicate; 3, Wurltier musicate, WAZ, 9, "The Post Historia Stuastics in Washington for the Post Historia Stuastics in Washington for the Post Historia Washington, Control of Washington, Washington, Washington, S. 7 p. m., dinner ensemble, Washington, Washingto

Central Time Stations

RFAB. Lincoln, Nebr. (240,7), 5:30-6:30 p. m., Bulek Little symphony, Belshaw's orchestrat; Bulek athletic club; 8:30-10:30, outsicale, University of Nebrasks, NFDM, Beaumont, Ieras (315.0), 3:9 p. m., Delbiew hand and orchestrat; Ruth McGower, 12 year old vacultst; Jammy McHargh, Irving Mills, voord dieb. (NGC) (30,7), m., pipe organisation of the complex of the

hand and ordicatra; Ruth McGowen, 14 year old vocalita; Jimmy McHarb, Irricha Mills, vocal duck. KFMR Shenandash, lowa (266), 7 p. m., pipe organ KFMR Shenandash, lowa (266), 7 p. m., pipe organ KFMR Shenandash, lowa (266), 7 p. m., pipe organ KFVE, University Gity, Mo. (240), 6:30 p. m., Amusement review, Romaine Fleiding; 10, trlo, Mr. and Jarr. Moh. Bignert and Mize, MacKenaio, violitati, organization of the state of the state

Mountain Time Stations

CNRR, Regina, Can. (435). S.p. m., sludlo program, Jack Bell, Mrs. Thereo Geleg. (BA). Denye, Colu. (322.4), 12:15 p. m., Rialto theater musicale; 6:30. Herbort White and his Silver State orchester; 7:30, News-Tilmes concern.

Pacific Time Stations

orchesten; 7:30, News-Times concert.

Pacific Time Stations

KFOA, Seattle, Wash. (454.3), 6:36-9:15 p. m., Rhodes
Despriment stores, 8:30, Imagesm, 9:30-11:30, Mode
Despriment stores, 8:30, Imagesm, 9:30-11:30, Mode
KFWB, Hollywood, Calif. (252), 6:7 p. m., children's
hour. Biz. Brother of KFWE; 7, Boward Boall, 20f
Instructor, 2:45, Interpolence brevitties, 8-40, Processon, 10-11
Charles Bosuchumn, tenur; Ruy Kellocz and Bill
Hatch, the size twins; 9:-10, program, H. L. Crockett
Budgon-Essex dealer; H. D. Crockett and his quartick, Wes Wetts and bis kalelo, Polty Rocute, are
tell, Wes Wetts and bis kalelo, Polty Rocute, are
Kellowed, 11, Warner Bros. Frolle, direction Charlie
Wellum-11, Warner Bros. Frolle, direction Charlie
KGO, Oakland, Calif. (361), 6:7 p. in., dimer conent. Wiler B. Allen; 8, KGO Little avanishory ormer. Wiler B. Allen; 8, KGO Little avanishory ormer. Wiler B. Allen; 8, KGO Little avanishory ormer. Kellowed, Calif. (361), 7:15:5 p. m., talli; ClarkKondall and company; 8:-9, colucarinata and style talk,
KGW, Pertland, Ore. (491.5), 7:15:5 p. m., talli; ClarkKondall and company; 8:-9, colucarinata and style talk,
KGW, Pertland, Ore. (491.5), 7:15:5 p. m., talli; ClarkKondall and company; 8:-9, colucarinata and style talk,
KGW, Salland, Calif. (336.2), 8:50 p. m., telestion
to Arabe and the States with the state of the columns o

chestra.

P.O. San Francisco, Calif. (428.3), 8:10 p. m., Waldemar Lind, and the States Restaurant orchestra; 7-7:20, Rady Solers's Falinoun hotel orchestra; 8-9, 7:20, Hassock Whiteomb; 9-10, Basslan music, Mota Moto Olf company; 10-11, Jack Coakley's Cabirlians.

Wednesday, October 7

Wednesday, silent night for: CHIC, CHNC, CNRC, CNRE, CNRM, CNRR, CNRW, CNRT, KFOM, KFKX, KGO, KLDS, KTCL, WBBR, WGBD, WCTS, WFA, WFI, WGC, WGY, WHAR, WIP, WMC, WOAW, WORD, WREO.

Eastern Time Stations

Eastern Time Stations

CNRO, Ottawa, Can. (435), 3 p. m., Chategu Laurier concert ortheistra, 9, Alian Carr. tenor; Mrs. F. I. and Carr. tenorise and

G. nikord; (1:10, Eolayan Rorke, bartiume; Eleanor Wields, WCTS, Worcester, Mass. (288), 7:45, p. m., talk, Rahnert N. Shaw; S. enneert. W. S. Derreit, Mich. (3:17), 2 p. m., news and markaces, 4:15, The Delevit Symphony trin; 5, dianor WEAF, New York, N. Y. (491.5), 4-5, n. n., Raw Nichuls orchestra; 6-7, dianor music, Waldorf Asturb; 7:50, saviers, Ellited Symmense of America; 7:9-8, missial irrarem; 5-8-50, Haydre's Progress—Fire Declaration of Indoorneers; 10-11, Inam Traubadours; 11-12, Ben Bernie and bis Holei Roccordle critestata.

WEAR, Cirvitand, Ohio (339.4), 9 n. m., world's sories, 7. Hotel Ulevalund activates.
WEBJ. New York, N. Y. (272.6), \$5.3.30 n. m., Avon Concoly Four: \$3.39, Robit trie; 79.216, Carrie Cohen, princip; 91.510, Ackeani, done or robustly Brother clob; 7.30, C. B. Collins, tener; Nelson Ash, pianist; 3. New York, Huylers in: program; \$3.09, Radio Equilibrated company. Earl Nelson and his nhe; 9. 10.116, 19.

9.6-15. CHILL.
9.6-15

Central Time Stations

CNRW, Winnipeg, Can. (384.4), 9 p. m., dance program; 10, Port Garry hard trie; Orean Hogan,

man: 10. For Garry hard trie; Orem Hogan spiring.

KFAD, Lincola, Nebr. (349.7), 5:30-6:30 p. m., dimer omecut; 8:30-10:30. Belsium's orthesiar: Ranhi Hall, bandish: Markid tries of the state of the s

KOLL, Council Blutts, Iowa (2701, 100 m. 100

10. Statewise Petus.

11. Statewise Petus.

12. State State

Dr. Henry Howard of Landon England Wallend Howard was for several to the Sunday Evening club this year. Dr. Howard was for seventeen year in their of an obscure on is sion in Melbourne, the will be heard October 4 and 11 from KYW.



mildrecht einreit servlier. S. Gorten Cooke ensemble;
2. New York, Janus Translanderts; 18-25. Wellte Briefesten's Collseum orteitesta; 11:33. Wellte Briefesten's Collseum orteitesta; 11:33. Eddie. Durisseldier.
2013. Kannes City. Mo. (35:50.). 6-7 p. m., adorsa, Walfer Marchard College Colleg

STAR GAZE THURSDAY WITH WTIC



Mrs. Refuge Baye Loving, soprano, is called upon to sing during special long distance programs at KFDM, Beaumont. Her renditions of Spanish songs appeal to the fans of Central and South America.

WSM8, New Orlens, La. (319), 6:30-7:30 p. in., dinmer hour program, organ recitat; 8:30-10:30, de luxe
FUGURIUM,
WARDER, M. (1998), 3-10:30 p. in., Fred Hanan
WARDER, Holmond Hill, N. Y. (315,6), 12:30-12:55
Lohanon, Art Sullier, Babe Payne, Herbux Schweiter,
Holand Hingkel, Clarence Parish, Pat Ward, Barry
Darky, Si Berg, West Town Harmony Bers.

WJAR, Providence, R. I. (305.9), S. D. m., Larkinhtes; 3:30, musical programs; 9. Advater Kent Radio artists; 10, Goodfele Silvertoon Cod orbitation. WLIT, Philadelphia, Pa. (394.5), 7:30 D. m., Deam Daddy's Lectime stories.

WMCA, New York, N. V. (300.7), 12-122:30 p. WMCA, New York, N. V. (300.7), 12-122:30 p. WMCA, New York, S. Cambert, S. (200.7), 12-122:30 Digit.

Doddy's bestime stories.

WIGA, New York, N. Y. (3407), 12-12:30 p. 1.

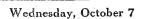
WIGA, New York, N. Y. (3407), 12-12:30 p. 1.

WIGA, New York, N. Y. (3407), 12-12:30 p. 1.

WIGA, New York, N. Y. (3407), 12-12. Emits of the season of his Hotel McAlpin ortheatrs.

WIYO, New York, N. Y. (320), 7-7:10 n. m. market high spoot; 7:10-7:30, Clur Arnard perheatrs; 7:30-13-14, New York, N. Y. (320), 7-7:10 n. m. market high spoot; 7:10-7:30, Clur Arnard perheatrs; 7:30-14-3, Song recitals; 9:50-10-10, dance programs; 10:10-10-30, Wilson Control of the Hotel Arnard New York, N. Y. (17-7), Song recitals; 9:50-10-10, dance programs; 10:50-10-30, Song recitals; 9:50-10-10, dance programs; 10:50-10-30, Song recitals; 9:50-10-10, dance programs; 20:30-14, Song recitals; 9:50-10-10-10, dance programs; 20:30-10-10, dance programs; 20:30-10-10, dance programs; 20:30-10-10, dance parket of Homeland, 20:30-10, dance parket of Homel

Anita Vinograd, below, is the promising young violinist who is appearing regularly Mone ay nights at WHAD, Milwaukee. Miss Vinograd won first place in all collistrict Music contest at the Jilwaukee Normal school in Max and during the past season has been concert mistress of the sil-city onchestm.



(Continued from page 10)

(Continued from page 10)

(Ges. Oak Park, II. (250), 7-3 p. m., litchard Date, fortiont: Bottler Wise, surroun John MacFatlane, Continued Bottler, Street West, Street Wise, Street West, S

Neugar orchestra; 10:59-12, nutdnight dance program. W180, Chicago, III. (220), 8-8 n. m., James Lutdansky, Austrianeteor; Chester Newman, bardione; Carl J.Immer, planist; Joe Alisbough, temer; 10-12, Anno Will-llains, Joe Verges, Harry Geise, Joe Alisbough, WKNC, Ginchansh, Ohio (422,23), 8 p. m., heak review, Mice B. Cher; S.13, Marton McKey and his orchestra.

WLS, Chicago, III. (344.6), 6:30 p. m., Rabbi Emerson, opensist; 7, Juliaty line, Ford, and Giena; 7:20, WLS; trice; 7:45, May-Bardey, controlle; 8, syntopation bourc, Christene James, director, 9, College Im orchestra; 10, Young Men's Council (namere; 10:30, College Jim orchestra; 10; 10:45, Ford and Glem time; 11, Rabbi Emerson's concert.

Mountain Time Stations

OA, Denver, Colo. (322.4), 6:30 p. m., Desbort White and his Silver State orchesters, S. selentule fembalt, Too McNamaris Silo. The Reteats, seems train Romeo and Juliet," KOA players; 10, dance program.

Colo Merkadara S.10. The Rector, "some head companies and Julet," Rol. players 10, dance program.

Pacific Time Stations

KFOA, Seattle, Wash, (4854), 8:45 8:15 p. m., Hopper Kelly company; 8:30-10, These studio program.

KFWB, Hellyword, Callf. (2822), 6:7 p. m., children's hour, Big Brother of KFWE; 7:7:39, Moutant Motors are the context of the companies of t

ranged by J. Howard Joinson; 1920 31:30. Art Steinman's Bilmore bold dince eticlestra, Earl Buttnett, Franke Bilmore, 1920 31:30. Art Steinman's Bilmore bold dince eticlestra, Earl Buttnett, KNXM Hellywood, Callf. (338.9), 5:20-3:15 p. m., Wertleer Howard Books and Steinman Commence of the Steinman Lindia Grant Landto orderstra. Paul Finstein, better: 7:3. Analogsador helpertran, Steinman Villam Lindia Grant Landto orderstra, Standt and the Molec; 10 11, during program. The Rich, Hercules Gasottoe commony. Elimer, Mandy and the Molec; 10 11, during program. D. m., Waldelmar, Lindi and the States Redsumant orderstra. 7-7:30, Rudy Sedger's Fatrmant hotel orderstra; 3:0, Alwester Kent artists; 0.10, thendrich Silvertran Candia Gardina Gardina

Thursday, October 8

Thursday, silent night for: CHIC, CHNC, CNRE, CNRR, CNRT, KFAB, KFOM, KFKX, KFMQ, KFOA, KFUE, KGW, KOA, KSD, KTCL, PWX, WAHG, WCEE, WEBJ, WHAD, WJJD, WKAQ, WLIT, WOR.

CARM, Monteal, Can. (411), 339 p. m., H. M. Canadian Grandier Gurds band. KDKA, Pittburgh. Pa. (1811), 515 p. m., J. doner. concert; 7:30, children's period; 3:30, concert, KDKA

8:45, evening of oners, Madame Vinello-Johnson, dl-

Fred Bast is one reason for the popularity of Crandall's Saturday Nighters at WEG. Washington, D. C. His jovial baricon voice has endeared him to the hearts of many fair fans.

S:45. evening of onera, Madman Vinello-Johnson, directed.

New York, N. V. (27.6), S. p. m. Escaption

WBRR, Sid, Newsl electricans; S20, Sundy Selections; S20,

WBRR, Sid, Vant Shinna; Sid, vonal selections; S20,

Hawatian inquiette, Pe. (401.3), 6:30 p. m. dimensions.

WGAE, Philadelphia, Pen. (201.3), 6:30 p. m. dimensions.

Cord orchestra.

WGAU, Philadelphia, Pen. (277.9), 8:30 p. m. Ellip

WCAI, Workerstein, Mass. (268), 8:8:30. The Larkinites;

S:30.9 program; 9:10, miscellameous program; 10-11, Silvertown (201.9), 8:30 p. m. Maiorit

WEAR, New York, N. Y. (491.5), 6-7 p. m., dinner

monel, Wielderi-Astocia; 7:100 services, Greater New

Sermaders; 8:5:30, "The Larkinites"; 8:30-9, talk,

George Elliptic Cooley; 9-10, Matteries; 8:30-9, talk,

George Elliptic Cooley; 9-10, Antatate Kent Rudle

attivity: 19-11, Silvertown Cord orchestra, 13-12, Vin
WEAR, Cleyeland, Ohio (389-4), 7 p. m., Mariorito

Mode's Melody Moids; 8, K. T. I. megram; 9,

Channers Lee's orchestra; 10, Vincon Percy ordan

WEER, Cleyeland, Ohio (370.2), m., program; dance

orchestra. Willan We Citchia of Cooley and quested

WEEL, Bacton, Mass. (478), 2 p. m., program, dance

Moorée's Model Meidis, S. R. T. I. prestrant, 9, Channesy Lee's unchestra, 10, Vincent Percy organ rectiful.

Channesy Lee's unchestra, 10, Vincent Percy organ annectiful.

ELI, 122, What We Thinks of You's and superfect typ-outs, National Barber Shop quartet centest; 5:48, 10e Herman's Terrage narian ornivestra; 6:30, 19th Barber Charles of You's and superfect typ-outs, National Barber Shop quartet centest; 5:48, 19th Barber Charles Shop quartet centest; 5:48, 19th Barber Charles Charles

Central Time Stations

NFNF, Shenaudah, lowa (265), 7, p. in., concert, Pricett Indicated the No. (441), 8, p. in., Document Concert, Conc

(Continued on page 12)

WSM, OPENS MONDAY; WBAP ON

Index to Popular Concerts

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

Saturday, October 3: \$30, WGES 8:45, WEAF: 9, WEAF, WGES, WNYC; 9:30, WGES; 10, WREO; 10:30, WEAF, WRC; 10:45, WEAF.

19:30, WEAF, WRC: 10:45, WEAF, WARAF, WARG: 8, WGBS: 8:30, WGR; 8:25, WAHG: 8, WGBS: 8:30, WGR; WGR, WHO; 9, WCAU, WEAF, WGR, WHAZ; 10, WGR, WHAZ; 11, WLIF; 11:30, WRN; 12, WAHG: 1, WARG: WARG: WARG: WARG: WARG: WARG: 1, WARG: 1

Tuesday, October 8: 7, WMCA: 8 WEAR: \$:30, WMCA: 9, WDZ, WEAR; 11, WHN; 11:30, WHN.

Wednesday, October 7: 7:30, WAHG, WELL, WHN: 7:45. WAHG; WELL, WHN: 7:45. WAHG; S. WAHG, WELL, WGCP, S:30, WALG, S. WAHG, WGCP, S:30, WALG, S. WAHG, WGCP, S:30, WAHG, WGCP, S:30, WAHG, WGCP, S. WHAG, WGCP, S. WAHG, S. WAHG, WGCP, S. WAHG, S

WCAU; 10, WGCP; 11, WHN.
Thursday, October 8: 7:30, WEAF;
8. WCAE, WCTS, WEAF, WFI,
WMCA: 8:15, WEZ: 9:30, WCAU; 10,
WHN, WNYC; 10:20, WBZ,
Friday, October 9: 7:30, WEET;
7:45, WARIG, WIY: 8, WGCP, WIR:
8:30, WBDI, WGCP, WHN: 9, WGE;
9:15, WBZ, WGCP; 9:30, WARIG,
WHN: 9:15, WGCP; 10, WLIT; 10:30,
WHN, WLIT; 11:30, WHN, WTIC.

Central Time Stations

Central Time Stations
Saturday, October 3: 6:30, WFAA;
7:20, WLS; T30, WAIRE; S. WEBM,
WEBM, WLS; T30, WAIRE; S. WEBM,
WEBM, WLS; WMAQ, WLAS; 3:30,
WOR, WLS; WMAQ, WLAS; WBDM,
WEBM; WOR, WAIRE, WHAS, WHEBM;
WOR, WQ, WAIRE, WHAS, WHEBM;
11. KOTL, WEBM, WLS; WOAW,
WOK, WQ,I, WICK, WOAW,
WOK, WQ,I, USA, WEBM; 11:46,
WDAF; 12, WEBM, WEBM; USA,
WDAF; 12, WEBM, WEBM; WEBM;
WEBM, WEBM, WO, WQ,J, WSAT;
12:30, WDAF, WO, WQJ, I, WBBM,
WEBM, WENR, WQJ, WA, W, WBBM,
WENR, WQJ, WSAT;
Sunday, October 4: 7:20, KOU,
Sunday, October 4: 7:20, KOU,
Sunday, October 4: 7:20, KOU,

WENE, WOJ.

Sunday, October 4: 7:30, KOLL:

SWDEM, WTAS: 9, WBEM, WTAS:

10.13, KTHAN, WTAS: 11, KTHAN,

WTAS: 12, WELEM, AS: 11, KTHAN,

WTAS: 12, WELEM, AS: 61, WEDAN,

6:30, WFAA, WOAN, 6:15, WCGO,

WMBE, WOK, 9:25, KTHE; 9:30,

KFAB: 10, KTAB, KTYJE, WMEE,

WOK, WTAS: 10:30, WHT: 11, KOIL,

WHO, WOK: 11:45, WDAF: 12, WHT.

WOK; 1-6 a, m., WEAP.

Tussday, October 6: 6, WOAW.

Tuesday, October 6: 6, WOAW; 7:30, KPRC, WBAF; 8, WEBM, WSB, WTAS: 9, WEBM, WMBE, WTAS, WOAW; 9:30 WOAL; 10, KFVE,

WBBM, WOK, WQJ.

Thursday, October 8: 6:20, WPAA;
. WOC, WSAL; 7:20, WEAP; 8,
WJESM, WHAD, WTAS: 9, KMA,
WJBM, WHAD, WTAS: 9, KMA,
WJBM, WHAD, WMBB, WJAS:
9:30, KTPS, WOAL; 10, KMA, KYW,
WBLM, WMBB, WOK, WQJ. WTAS;
10:03, WLW: 10:30, WGN, WILT:
10:45, WSAL; 11, KOIL, WBBM,
WFAA, WOC, WOK, WQJ, WTAS;
11:20, WLW: 11:45, VDAF: 12, WHT,
WOK: 12:15, WLW, WQJ; 1, WQJ.

Friday, October 9: 6:20 WFAA - 8

Priday, October 9: 6:30. WFAA; 8, WBBM, WLS, WOC, WTAS; 9, WBBM, WLS, WOC, WTAS; 9, 9:30. WTAS; 9:45. WLS: 10, KFVE, KVW, WOK, WQI: 10:30, KYW, WGK, WQI: 10:30, KYW, WGK, WGK, WGY; 11:35. WDAF; 12, WHT, WOK, WQJ: 11:45. WDAF; 12, WHT, WOK, WQJ: 1, WQJ: 1

Wednesday, October 7, 10, KFWA. Friday, October 9: 10, KFWA.

Pacific Time Stations Adding 11me Stations
Saturday, October 3: 8, KFWB,
RNX; 9, KNN, KPO; 10, KFWB, KFI;
11, KNX; 11:20, KHJ, KTCL; 12,
KNX: 12:20, KHJ; 1, KNX; 1:30,
KHJ.

Sunday, October 4: 8, KHJ; 9, KFWB; 10, KFWB, Monday, October 5: 9, KNX; 10, KFWB; 11, KFWB; 12, KFWB.

Thesday, October 6: 8, KFWB, KNX; 9, KNN, KPO; 10, KFWB, KNX; 11, KFWB.

Wednesday, October 7: 8, KGW, KPO: 9, KFWB, KNX; 10, KNX; 11, KFWE; 11, KNX.

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

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

550, fishing streams and fish, Jack Bosz; S.-9, Brustan, Starr Plano monitory presenting Hollywase Sythiam Kings in averagements Genetic Treavils, Int. Mitchell Buller, sunvano: 9-10, program, Don P. Sulli, Inc., Dana-Moon ordiestra, Suller starts Sol. Boogli's Junior Hawatian 1956, 6-11. Warne Brothers for Chief, direction clumble Welmon.

Brothers' frolle, direction Chaille Wellman.

860, Oakland, Calif., (361), S. p. m., "Music of the Family Farm Play of 102". "The Pipes of 10." Hardy Platch, directory, Genera Medison, Inosex; John J. Myhan, Jenny, Aselin Sperry, hartfune; 10-12, Ben J. Myhan, Jenny, Aselin Sperry, hartfune; 10-12, Ben M. J. Leise, Argoine, Calif. (462, 2), 5-20-6, p. m., Leise, J. J. Leise, J. Leise

Burtact, Lender.

KNX. Hallwood, Cellf. (336.9), \$5.00-\$1.5 p. m., WurHizer blice osgan studio, Town Tastler; \$6.13, tract
ones, N. P. Alder; \$6.30-7. Atwater Kent Braith orfreed. Rull Findels, ledder; 7-S. program, Recordones, Rull Findels, ledder; 7-S. program, RecordHowatt, planologue; \$8-10, INXX. Jeanne procure,
19-11, Ray West? Coconoui Grore dance orrheiter,
from Anjbassador hotol.

KPO, San Francisco, Callf. (428,3), 7-7-30 p. m., Rudy
Sciger's Patrimon hotel stehesita; \$-9, program,
George Cascol Coffre company; 3-10, profusat,
and she citch, Olembale 50ks; 10-11, Jack Conher's
Colpitalia.

Friday, October 9

Friday, silent night for: CHIC, CHNC, CNRC, CNRM, CNRR, CNRW, KFMQ, KGO, KLOS, KFRC, WBBR, WCBD, WFI, WGBS, WIP, WKAQ, WKRC, WLW, WOR, WRC, WREO, WSAI, WSMB.

Eastern Time Stations

NRT, Toronto, Can. (356.9). 6:30 p. no. Luigi Ro-naucill and his King Edward hotel concert orehestra. 9, "Yeoman of the Guneri," Reclandl Steward, director, 11, Juizi Romanelll and his King Edward hotel dunce orehestra.

orenestra.

KDKA. Pittsburgh. Pa. (309.1), 6:13 p. m. dinner concert; 7:30, children's period; 8:30, KDKA string quartet; MiceDowell quartet, Lyman Almy Perkins

usariest; MicDowell quartet, 155 mm, 1115, 255 p., m., director.
WAHG, Richmond Hill, N. V. (315,6), 12:30-12:35 p., m., musical program: 7:30-10:30, musical program: 8-10:30, musical program: 10:30-10:30, musical program: 10:30-10:30, m., Lee Relstant's Bello Leone createdite: S. Lillian Winer, m. 10:30-10:30, 10:3

9.33. Sid. Relutierz, piants: 9.15. Captey Plaza or-ciostra; 10.29. McCheoly's Singing orchestra. WCAE, Pittsburgh, Pa. (461.3), 6:30 p. m., dinner connect, Wiltiam Fenn hotel; 8, address, current motor toples; 3:30, concert.

tor toples; 8:30, concert.

WCAU. Philiadophia. Pp. (227.6), 8 p. in. 1979-201.

Philiadophia Italiu Exportion: 9, Experting Exportion: 24 concerns exported to the Exportion of the Concerns of the Concerns

program.

WCX. Detreit. Mich. (517), 2 p. m., news and markets: 4.15, The Detreit Symplomy trie; 6, dinner convert. Book-Cadillae hotel; 19, Blue 100m dance convert.

connect. Book-Catilline hotel; 10, Ellus room durce orchestra. WEAF. N. V. 1987. N. V. 1987. St. 7. n. m. dinner orchestra. WeAF. N. V. 1987. N. V. 1987. St. 7. n. m. dinner orchestra. Watcher Associat. 177.50. Come St. Mannatol. Great Nield in archestra. 177.50. Come St. Mannatol. The Tella a Starg. Blanche Elizabeth Water 1745. St. 1987. Tella a Starg. Blanche Elizabeth Water 1745. St. 1987. Tella a Starg. 1879. St. 10. "Spear and Canapany's Mannatol. Mannatol. 1988. St. 1989. St

Datto.
WGRS. New York. N. Y. (315.5), 0-6-30 p. m. Uncia Gectoe; 5:30-7-30, orchestra.
WGCP. New York. N. Y. (315.6), 8-8:15 m. m. Stolle-and, Hayenes, agginessars, 3:16-8,398, Biggs, Soller.

May, snorane; 8:30-8:15. Deb Ward and the three little Wards: N-15-6. Humaie Pipun; 9-9:15. Mee Man, Bartiner 9:15-9:20. Stylere Hersan, singer, Carlon, S. Bartiner, S. Bartiner, S. Bartiner, S. Bartiner, S. Bartiner, S. Bartiner, G. Bartiner, S. Bartiner, S. Bartiner, G. Bartiner, S. Barti

Arthur Platz, left, is one of those versatile artists sought after by program directors. He has a fine tonor voice, plays the organ with more than usual skill and is a sympathetic accompanist. He will give an organ concert October 4 and a group of tenor solos October 11. Kay group of the organ with a property of the personality girl at WEBH, is above the personality girl at group of new source annual as only Kay can sing them. Tune in Wethersday.

WGV, Schenettady, M. Y. (379.25), 8:50 p. m., Interna-liand Sunday stront leaton? The Transaction of Sunday Strand theater archaeter: Julius Bodement, Abany Strand theater archaeter: Julius Bodement, Interna-te Watters, orranist; 7:10, concept, 'The Rivals,' Youtherton, The Kork Chip, director, 10:50, Aire Charles A. Reilly, Dartlond, Wilson, Crader; Charles A. Reilly, Dartlond, Santa Santa

WHAR, Atlantic Gity, N. J. (275), 7:30 p. m., fashion calk; S. Seaside hetel trie; 11:15, Stratul theater organ recital.

organ recital.

WHN, New York, N. Y. (361.2), 7:50-8 n. m., "Cheer-rill Philosyndor," Burr Melhinski: 16:30-11, Haseland dance orchestra; 11:30-12, Chu Alabam orrchestra; 12:42:50, Siver Slipner revue.

WIAR, Providence, R. 1. (365.9), 8 p. m., story teller, Ellmengel Playlic Library; 8:41, musical program; 3, Maine Creamery oniertainers; 11, Providence-Bittmore dance orchestra.

dance orchestra.

WILT, Philadelphia, Pa. (394.5), 7:50 p. m., Dream, Duddy's heiltine sorries: 9 program from Balin shory club concert.

WMCA, New York, N. Y. (340.7), 12-12-25 p. m., Ol-cott Yail's string ensemble; 5-6:30, Object Yail's string ensemble; 5-6:30, Object Yail's ensemble; 5-6:57-39, Ernie Golden and his Hotel Mr. Alpin orderstra; 7-4:5-8, "Helps for letter Ratterlos," "Methods of District and Land Anto school: 11:15-11:45, Donald Planon, dramatic rottle, selbool: 11:15-11:45, Donald Planon, dramatic critis.

11.15-1.145 Donald Flamm, dramatic critic. French WYO, New Yo, New York, New Yo, New York, New Yor

Central Time Stations

KFAB, Linzeln, Nehr, (340-7), 5:30-6:30 o. m., alliner hour romest; S:30-10:30, Ruth Miconerman, suvrain; Beishaw's ordestra; H. F. Mittal, bartlone; Trinity erchestra. KFDM, Bedumont, Texas (315.6), 8-10 n. m., Magnotin Petroleum combany's retherty band.

Hotorleum company's refuncy louid.
KFAX: Hastings, Nehr, (288.3), 9-14, p. m., Bustings, Comp Fire Girls.
(EFMF: Shermandan), Jones (286), 7-0, m., Smiday school lesson; 7-20, concert. Tom Keenan, director.
(FFME: University City, Mn., (240), 6-20, m., Annues ment review, Romandan discipling, in tolic Gibbons and Benge Million sentantial constructions.

DANCING

Central Standard Tim Saturday, October , Kaw, Way, West Vog, Wiss; 8:05, Wi

When we see Krew 13 Krew 14 Krew 14 Krew 14 Krew 15 Krew 16 Kr

Rns, Sno, Will.
Friffay, October 9:
Friffay, October 9:
Friffay, October 9:
Friffay, Wenn, Wenr, Wish, Wild, Wis, 10, Krew, Wirk, Wish, Wild, Wi

Thursday, October 8

(Continued from page 11)

(COURTHURD ITOM page 11)
riolinist, 12:6-1, Oriole orrhestra; storles, Wayne Myers; Paul Smill, Lans Brothers,
WENR, Chicago, HI. (260, 6-7 p. no. Bauhand byris
tiful; 8-19, Booc Kutin, Wie Frodericke, All-American
Ploucees, Ward and Patalo Incursory singers.
Western State of Chicago, 201-12:6 p. m. Ferl's
trained and Chicago, 201-12:6 p. m. Drake ComKirsch, Ben Kanter, Lew Butler, Partish and Wird
WGN, Chicago, III. (270-2), 12:16 p. m. Drake Com-

my ADOX; Joynerison si-leys; Phil Wilson, Walter Kirsch, Ben Kaniter, Lew Butter, Partall and Ward WGN. Chicago, III. (370.2), 12.10 n. m., Drako convert consumple, Blackstone string minister; 44.30, Lea time, Marshall Pirit tea recent enchastra; 6339-7530, estime quinties; 33.39-320, WYN String, 1916, 10.200, 11.30, Juzz seamper, Jack Chapman's dance ordesatra. WHAD, Milwaukee, Wis. (275), 6.7 n. m., Arthur Richter, organist; S-10, heavilar dance hits, Dexter Wilsonista and Eliger's Create roof ordesatra.
WHAS, Louisville, Ky. (339,8), 7:30-5 n. m., mixed oncert, Mys. J. B. Hamon, director.
WHO, Dos Moines, fewa (376) 7:30-8 p. m., Rabigh opilate; 3-8; Bankers' dife trie; 11.13, Bankers' Life Little Symphoule orchestra.

Life Little Symphonic orchestra. WHO, Chicago III. (226), 6-8 n. m., classical dimer-convert; Elife D. Hoffman, surrano; Joe Allaboush, classical convert; Elife D. Hoffman, surrano; Joe Allaboush, classical; artists announced 12-3 n. m., ujdmight sandorer; Dan Russa, Teclifortiu, Rury Geise, Joe Allaboush, Paul Sinall, Victor Young and others.
WKRC, Ginclanati, Ohlo (422.3), 8 p. m., Pete Mincowsky, violiniat; Al Kirschoer, pianist; Pen Golden, sasophunstr.

Fucusts.

WLW. Ginelmati. Ohio (422.3). 7 n. m. dinuer concert. Botel Gibsen urchester, Juhon Visentii, director; 18, three minus message; Girls Service Mupendruent of the United State, excension; 19-05,
nopular morgam, the Doberts Medsel Boux; 10-30,
nopular morgam, the Doberts Medsel Boux; 10-30,
Verrea Foster, WLW's phonournal by soprano;
19-15, the WLW orchestra, at hings and reeds; concluding organ meters; 12, Midnish Bow Wess, the
Eay Nyne, organish and chaints, and IM Tin Kan

WMAG, Chicago, III. (447.3). 6 p. m., Chicago HisRep talk, Jasses, U. Rurdati, 8-15, Itan Sesati bree-

gram; 8:00, musicain; 8:50, fituatela fails; 9, Hai-varity of Chiraco lectine, Dr. Will; 9:20, Gentral Trust company lifec clin.

WMBR, Chicaso, HI. (250), 7-8 n. m. Trianon en-centric, Chiraco Peterskii, Mildred Marches, Grence Jasobs, D. Sullivan; 9-11, Tvianon orchestra, Witel-lawn theater enclosure, Charlete Agne, Dure Wil-Huus, Elste White, Harold Stokes, WMC, Memphis, Tenp. (499.7), 8:30 p. m., nusleal program, Tate Durchy, 1997.

Huma, Elsie White, Harold Stokes.

WMC, Memphis, Tenn. (1997), 8:20 p. m., musiced program, Tate Dawkins.

WOAW, Omaha, Nebr. (326), 5 p. m., American Legion; 3:39, American Legion; 9, American Legion; 10, Larkinites; 8:49, Attentor New Health and Legion; 10, Larkinites; 10, Larkinit

Mountain Time Stations
CNRC, Calgary, Can. (485.8), 9 n. m., Gearge Boothown, Buffones: Jeanstote Boury, appearer C. N. H.
symplomy corfuserra,
KOA, Denver, Colo. (392.4), 6:30 p. m., Barbert White
suid bits Silver State orrhestra; 7:30, farm question box.

Pacific Time Stations

KF.WB. Hellywood, Calif. (252), 7:15 p. m., micro-phone highling, 7:10. Howard Beath tell on Golf;

ON AIR WITH NEW SUPERSTATION



beweiß, Jazel O'Neil, Wayin Kling; 9-13, Trianon urtherstin, Woodham Beach or orderstin; Jack Mirman,
WMC, Monnhie, Jonn. (499,7), 8:30 p. m., concert.
Harry Kodin; J., beidnight trailin.
WOAW, Omaha, Nebr. (526), 1 p. m., Gilbert Juffy and
his little symplomy; 6, nonic review, Hester Brouson
Compet, 6:29, American Legion; 9, American Legion,
WOC, Davagener, Jova (483,5), 8-8 p. m., Mrs. 8 J.
WOC, Davagener, Jova (483,5), 8-4 p. m., Mrs. 8 J.
Linky Wass, reads.
L

WAAS, Eligh, III. (302.8), S-10:50 p. m., Fred Hammand the Eost own orchesters: Berbie Miniz, Toning Dunlar, Brock sisters, Art. Stiller, Walter Danovan, Borger Welberg, Rohad Hincket.

Mountain Time Stations , Edmenton Can. (516.9), 8:50-10:30 p. m., Al-a Instrumental trib.

betta Instrumental Irio.

KOA. Derwer, Cole. (322-4). 6:30 p. nt., Berbert White and like Silver Slate ordinerra; S. wienstlie football, and like Silver Slate ordinerra; S. wienstlie football, and MacNamare; K. 10. R. Freese, Ina Rains, Hubba MacNamare; K. 10. R. Freese, Ina Rains, Hubba French Footbert, Samuel Stein, Carrie Austender Minner, Iris Huth Pavey.

Pacific Time Stations GFOA, Seattle, Wash. (454.3), 6:45-8:15 p. m., Sherman, thay and company studio program: 8:30-10. Times studio program: 10-11:30, Eddle Haraness and his orchestra.

cclesuts.

Hellywood, Callf. (232), 7:39 p. m., misrophens, less; 8:9, program, Munic Mar Visti subdividers Mar Visti surdividers, Mary Visti unrelestra, Charles Beauchamp, beaut wood string trie; 9:10, Bill Theel's Southers deance orderestra, Alma Loo Barnes, pepular dance orderestra, Alma Loo Barnes, relatinist.

Adonty Collins, tenor; Syd Lippman, claimist. Warner Brothers' fruit, direction Charlie

Hollywood string trie; 9-70. Bill Theet's Southern Five dance ordicetra. Aims Loo Barnes, partial Pive dance ordicetra. Aims Loo Barnes, partial 10-11. Warner Brothers' (1016. Lipman, chaille 10-11. Brothers' (1016. Lipman, c

KPO. San Francisco, Calif. (428.3), 7.7:30 p. m... Carus Trobbe's summert exchasing 8-11; Palene hotel

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 3: 8, WCN, WEAF, WMCA, WREO; 5:17, WOR; 6:30, WGAE: 7, WEAF, WMYC, WRC; 7:15, WEAF; 7:35, WEAF; 8, WIBIR, WNYC; 8:15, WRC, 8:30, WEAF; 10, WEAF; 10,

10, WEAF.

10, WEAF:

Snaday, October 4: 6, WCAU; 6:30,
WCAE, WON; 7, WEAR; 7:20, WCAE,
WCTS, WEAF, WEEI; WWJ; 8,
WBZ, WEAR, WGIS, WGCP; 9, WBZ,
WEAR, WGIS, WGCP; 9, WBZ,
WEAR, WGY, WHAR, WNYC; 9:16,
WCAE, WCT, WEAF, WEET; 9:20,
WNYC; 9:45, WC7S, WGCP; 10,
WNYC; 11, WHN; 11:15, WHAR.

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

MONIDAY, October 5: 6, WCX, WEAF,
WMCA, WREO, WW1; 6:06, WIP;
6:30, CPCA, WBZ, WCAE, WGY,
WTIC; 7, WEAF, WEAI, WJR,
WOO; 6:15, WEAF; 7:30, WEEI,
WGY, WMCA; 8, WEER, WTZ,
WCAU, WCX, WHAR, WTIC; 8:30, CHNC,
KDKA, WBBR, WIZ, WGCP; 8:45,
WEAF, WOO; 8:55, WEBER; 9, WEZ,
WCAE, WEEF; 9:10, WLIT; 9:15,
WGCP; 9:30, WBZ; 10, CHNC, WEAF,
WOO; 10:10, WEEE; 10:15, WOO;
10:30, KDKA; 10:40, WEEE; 11.
WHIN.

WIN.

Tuesday, October 6: 6, WEZ, WCN.
WEAF, WMCA, WREO, WWJ; 6:05,
WIP; 6:17, WORR, 6:29, WCAJE, WGY.
WIIC; 7, WEAR, WIEL, WGBS,
WJR, WOR, WIIC, WVJ; 7:39,
WTIC; 7:39, WCAJE, WCAJE, WCAJE,
WTIC; 7:39, WCAJE, WCAJE, WCAJE,
WCN, WEAR, WIEL, WGR, WCAJE,
WCN, WEAR, WIEL, WGR, WCAJE,
WCN, WARR, WIEL, WGR,
WCN, WEAR, WEEL, WFL, WGR,
WCN, WEAF, WEEL, WFL, WGR,
WCN, WEAF, WEEL, WFL, WGR,
WCH, WCRS, WLAJE, WEEL,
WFL, WGR, 9:15, WREO; 9:39, WEBZ,
WHN, WRC, WTIC; 19, WCAJE,
WCTS, WEAF, WEAR, WEEL, WFL,
WGA, 10:39, WGR; 1:15, WHAR.
Wednesday, October 7: 6, WCN,
Wednesday, October 7: 6, WCN,

WMCA; 10:30, WGR; 11:15, WHAR.
Wednesday, October 7: 6, WCX,
WEAF, WMCA, WRIEO, WWJ; 6:05,
WIP; 6:20, WEZ, WCAE, WTIC; 6:45,
WGY; 7, WEAR, WHI; 7:20, WTIC;
7:30, WEAF, WEEL, WOO: 8, WEZ,
WCTS, WCX, WEAF, WFEL, WKAQ,
WMCA, WWJ; 8:05, WNYC; 8:15,
WCAU, WOR; 8:30, KDKA, WBC,
WCAU, WEAF, WOO, WOR; 8:45,
WEZ, WCAU, WEEJ; 9, WRZ, WCAU;
WGR, WOR; 9:15, WEZ, WCAU;
9:30, WNYC; 9:45, WOR; 10, WEAF,
WEBI, WGR, WNYC, WOO; 11,
WCAE. WEEI, WCAE,

WCAE

Thursday, October 8: 6, WEZ.
WCX, WEAF, WMCA, WREO, WW.;
6:05, WIP; 6:17, WOR; 6:30, WCAE;
WGBS, WUY, WOR, WYIC; 7,
WEAF, WEAR, WGES, WIR, WW.J;
7:30, WCAL, WEEJ, WHN, WOO,
WRC; 7:45, WGY, WYIC; 8, WEBR,
WBZ, WCAL, WCX, WEAR, WEB,
WGR, WGY, WHAR, WIP, WTIC;
\$:15, WNYC; \$:30, KDKA, WEZ,
WCTS, WEEJ, WHN, WMCA, WREO;
\$:40, WBER; 8:45, WEZ; 9, WCAE,
WCAU, WCAF, WEEJ, WFJ, WGR,
WCAU, WEAF, WEEJ, WFJ, WGR,
WCAU, WCAE, WCAU, WCS,
WEAR, WYC, WGR, WGY;
10, WCAE, WCAU, WCF,
WEAR, WDEI, WGR, WGY;
10:18, KDKA; 11:30, WGY.

Triday, October 9: 5, WCX, WMCA, WRED, WWI: 8:05, WIP: 6:05, CNFT, WEZ, WCAE, 7, WEBJ, WCY, WIR, WOR, WTIC: 7: 5:10, WEJ, WOO, WTIC: 7: 5:5, WEJ, WEJ, WOO, WTIC: 7: 5; WEJ, WHAR; WOZ, WCA, WEJ, WCX, WEJ, WCA, WCAE, WCO; 9:30, WEEJ, WCAU, WEJ, WCO; 9:30, WEEJ, WCAE, WNC, WOO; 9:30, WEEJ, WCAE, WNC, WOO; 10:30, WGR, WGY; 11:15, WHAR.

Central Time Stations

Central Ime Stations
Saturday, Ootober 3: 5, KFAR,
WENR, WMAQ, WOAW, WOK; 5:15,
WCCO; 6:30, WGN; 7, KOH, KSN,
KYW, WGN, WMEB, 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,
KPNC; 9:30, WOC.

Sunday, October 4: 6:30, KLDS, WHT: 6:45, WORD, 7, KYW, WLS, WORD, 9:30, WHO; 8, KFDM, KPRC, WCBD, WFAA, WGN, WQJ: 8:30, WLW; 3, WQJ: 8:10, KTHS; 9:16,

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

WOC: 10:30, WHT; 11, WOC.

MONDAY, October S: 6, KFAB, KMA,
WHAD, WOAW, WOK: 6:30, WGN;
6:45, WOAW, KFR, WHT, WLW,
WAIBS; 7:30, KOIL, KPRC, WHAD,
WHO; 8, KFRC, WHAD, WHO,
WI,W, WORD, WOS; 8:30, KPRC,
WHAP, 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.

TUSSGAY, October 6: 6, ETAR

WSAI; 11, WBAF, WSAI.

Tuesday, October 6: 6, KFAB, KMA, WILAD, WMAQ, WOK; 6:05, WCCO; 6:30, WFAA, WGN, WLW; 6:45, KSB; 7, KFNF, KYW, WITT, WLS, WMEB, WQJ; 7:30, KOIL, WCCO, WILAS, WHO, WOC; 7:45, WSAI; 8, KFPM, KLDS, KYW, WCBD, WCCO, WJLW, WMAQ, WOC, WORD; 8:30, KPRC, WGN, WLW, WSG, WAL, WOAL, WORD; 8:45, KYW, 8:50, WMAQ; 9, KPPC, KPM, KFMQ, KMA, KPRC, KTMS, WCCO, WJAS, WLW, WCC, WSAI; 9:23, KTMS; 9:30, WBAF; 10, KMC, KYW, WSAI; 11, WHO.

Wife.

Wednesday, October 7: 6, KMA, WIJAD, WALAQ, WOK; 6:15, WIS; 6:30, KOIL, WGN, WIJO; 7, KENC, KPRC, KYW, WHT, WLW, WAEB, WQJ; 7:30, WHAD; 8, KPRC, KYW, WGCO, WDAF, WHAD; 8, KPRC, KYW, WOGO, WDAF, WHAD; 8, KPRC, WGN, WOAL; 9, KMA, KRIC, WGN, WOAL; 9, KMA, WGCO, WHAD; WIS, WMAQ, WOG; 9, KTBS; 9:25, KTBS; 9:30, PWX; 9:45, KTBS; 19:25, KTBS; 9:30, PWX; 9:45, KTBS; 10:30, WLW; 11; 11:30, WGCO, WSAI; 10:10, WSAI; 10:20, WLW; 11; 11:45, WLW, TINS; 9:45, KTBS; 10:30, WLW; 11; 11:45, WLW, TINS; 11:45, WLW, TINS; 11:45, WLW

10, WEAP; 10:40, WLW; 11, WHO.

Friday, October 9: 6: 5: WEAD,
WMAQ, WOAW, WOK: 6: 5: WCCO:
6: 50, WCN; 6: 50, WALGO; 7. KYW.
WHT, WLS, WQI; 7: 7: KYW.
KOIL, KED, KYW. WEAP,
WHO: 8. KFDW, WCCO, WDAP;
WHAD, WHAQ, WSAI, 8: 30, KPAL;
WFAA, WGN, WHAD, WHO, WMAQ,
WMC, WORD; 9, KFDM, KPICK,
WHAD, WMAQ; 9: 05, WCCO: 9: 10,
KTHS: 9: 30, KFAB, KTHS,
9: 45, KTHS; 10, KFKX.

Mountain Time Stations Monday, October 5: 6:30, KOA; 8:10, KOA.

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

Wednesday, October 7: 6:30, KOA; 8:10, KOA;

Thursday, October 8: 6:30, KOA; 9, CNRC.

Friday, October 9: 6:30, KOA; 8:10, KOA; 8:30-10:30, CNRE.

Pacific Time Stations

Saturday, October 3: 6, KFOA,
KHJ; 6:30, KNX; 6:45, KFOA; 7,
KNX; 7:30, KNX; 8:10, KGO; 8:15,
KHJ.

Sunday, October 4: 6:36, KHJ; 6:35, KPO; 7, KHJ, KNX; 8, KHJ, KNX, RPO; 9, KHJ, KNX; 10, KNX; Monday, October 5: 6, KFØA, KGG; 6:30, KNX; 6:45, KFØA; 7, KPO; 7:30, KNX; 8, KGW, KHJ; 9, KGW; 10, KHJ;

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

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

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

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

DANCING

ntral Standard Time atorday, October 2 Kaw, Wey, Wolde 2. Wiss: Nath Win

Kirs, Kpo, Wqj.
Friday, October 9;
S. Kyw. Wenn.
Weer, Windlo. Wiss, 8:39,
Kyw. Wenn. Wiss, 8:39,
Kyw. Wenn. Wiss,
Kym. Wenn. Wiss,
Kym. Wenn. Went. Win.
Windl. Won; 0. Kyw.
Windl. Won; 0. Kyw.
Windl. Wingl. W. Wen.
Windl. Wingl. Win.
Windl. Wingl. Win.
Windl. Wingl. 10, Kfrey.
Windr. Winfl. 10:30,
Weec. Windl. Wild. U.,
Kfwb. Who: 11:45, Wdst.

KMA Shemaudah, Iswa (252), 6-7 p. m., dimer presents, Cold., domestic seteric toples, Leona Tesel, Roll., Cauncil Bluffs, Iswa (278), 7-30 p. m., Church of Joseph Carlotte, KSD, St. Louis, Mg. (545.1), 7-30 p. m., "Commerce Honr," John F. Kiburz, Ridish, Mrs. J. P. Kiburz, planist, Mrs. Springs National Park, Ark. (3748), p. 18748, Het Springs National Park, Ark. (3748), p. 18748, Het Springs National Park, Ark. (3748), p. 18748, Het Springs National Park, Ark. (3748), p. 18749, J. 1874

Jonior Euterpean chub; 9:39-10:35, musicule.
WBBM, Chicago, HI. (220), 8-10 p. m. Stewart-Warner
studin, Alamo orchestra, hew Russoll, Murray Smith,
Earl Bergman, Pates O'Sellikan, Stewart-Warner
sylophone (clo; Yera Harding,
WCCO, Mineapolit-St. Paul, Minn. (416.4), 6:15 p. m.,
Gewige Oslovn's Nicolite hotel orchestra; 10:50, dance
program.

Nocolom minespains. St. Path., mini., (476.-4), 6:15 p. m., processor Steeled to best orientary; 20:06, deare opportant.

WDAF, Kanasa Gify, Ma. (365.5), 6-7 p. m., plano tuning in number; antieres. Kanasa City editheres; bureau; Tell-Mc-a-Story lasty: Trianam encountie; shureau; Tell-Mc-a-Story lasty: Lasty open minesters; trianam encountie; shureau; shur

Coyne Bunjo (Inc.) recurred Netson. W GN. Chicago, Ill. (370.2), 12:10 p. m., Drake convert cassuable, Blackstone siring quintet; 4-4.30, ten time. Marshall Filed tea grown ordinaria; 5:03-130, Drako camert ensemble, Blackstone string quintet; 5:03-030, WGN string tel; 10:303-11:30, juzy seamper, Juck Chapman's dames orchestra.

WHAD, Mivaukee, Wis. (275), 6-7 p. m., Arthur Richter, organist; 5::0-10, Wisconsin theater review. WHAS, Louisville, Ky. (399.8), 7:39-9 p. m., cencert, libite class orchestra.

Hibie class orchestra.

WHO. Des Meines, Iowa (328), 7:30-9 p. m., band concert, High School of Menson; L1-12, Zela Palmer and her Kirkwood hotel orchestra.

WHO. Chicago, Hi. (226), 8-8 p. m., clesslend dinner concert; Carl Lalmer, banist; Joo Allabough, tener; artisly; 10-2 u. m., West brothers, gulfarlist; Boll title; Joo Vergoz; Lonner Frindman, programo; Pearl Liblicanan, accompaniet, Mark Pisiner, Jarry Gelse; Joo Alsabough, Tool Patristo, Den Russo.

WLS, Chicago, III. (344.6), 6:30-11 p. m., mudel pro-gram, Brandesst Listeners, association, Frank Mac-Deneld, president.

www. president.

WMAR, Chicago, III. (447.5). S. p. m., piusleži lecture,
Mr. and Airs. Marx. 18. Obcodorber: Scio, Whitney
Print, B. Chiversity of Chicago lecture, 8:20, Whitney
Mylege, Space.

FOLLOWING SPORTS THROUGH MIKE

DISTANT GAMES ARE ON WGN SCHEDULES

RYAN AND NEAL WILL MIKE BIG MIDWEST CONTESTS

Station Engineer Will Use Unique Microphone Arrangement in Broadcasting Big Ten Gridiron Tilts

CHICAGO.-Preparations for broadcast

casting Big Ten Gridinon Tilts

CHICAGO.—Preparations for broadcasting four of the most important Big Tenconference football games and a trio or inusual intersectional contests by WGN, the Chicago Tribune station on the Drake hotel, have been almost completed, Director Quin A. Ryan has just announced. The following list of games will obtroadcast by WGN:

October 3, Nebraska at Illinois
October 17. Wisconsin at Michigan
October 17. Wisconsin at Hilinois
October 31, Illinois at Pennyslvania
November 17. Chicago at Illinois
November 17. Chicago at Illinois
The schedule outlined above is by no means a final one," said Director Ryan, "since it is the station's policy to present all the most important games of the season and to give the fans an opportunity to 'hear' the best midwest teams in action. There may be some mid-sease of changes in the present list to inch a games of wider interest.

Game Every Scaturday

"As will be noticed in the sobedule, there are several open Saturdays on all of which games will be broadcast. The teams so far listed represent, according to the football sharps, probably the strong at aggregations in the midwest.

"Notre Daine, last year's national champion, will of course be forced to build an entire new team owing to losses by gradulation, but Coach Knute Rockne's success building elevens, makes the inclusion of at least on Notre Dame game imperative."

clusion of at least one Notre Dame game imperative."

imperative."

Distance makes no difference to WGN
when there is an interesting game due.
The Nebraska-Notre Dame game and
the Illinois-Pennsylvania contest will be
broadcast respectively direct from Lincoln
(Continued on page 21).

Big Kick-Off Saturday in 1925 Radio Football

Harvard, Chicago, Cincinnati, and Holy Cross on Air

Holy Cross on Air

Most of the leading college football teams start their regular schedules on Saturday, October 3, and at the same time several broadcasting stations will start carrying the games over the air to those umble to attend. Among these stations are WEZ, WSAI, KYW and WMAQ.

The high spots on the WEZ schedule include the games of the "Big Three," Harvard, Yale, and Princeton, and other important thits in the East. Play-by-play accounts of these games will be milted direct from the field. Station WIZ, in New York, will have charge of the pick-up for games played in New York and in return WEZ will pick-up the Harvard-Yale game for them.

Besides the Harvard games, the Boston station will fill out its schedule with games played by Holy Cross.
The complete WEZ schedule follows: October 3—Harvard vs. Middlebury. October 11—Harvard vs. Middlebury. October 21—Harvard vs. Holy Cross. October 21—Harvard vs. Bucknell. November 7—Princeton vs. Harvard.

Sport Broadcasts

FOOTBALL

Saturday, October 3

Amherst-Princeton, WJZ (454.3), Chicago-Kentucky, KYW WMAQ (447.5). (535.4)

Manover-Cincinnati (8:00 p. m. Central time), WSAI (325.9).

Harvard-Renssalaer, WBZ (223.1): Michigan Aggies-U. of Michigan, WWJ

Nebraska-Illinois, WGN (370.2) North Dakota-Minnesota, WCCO (416.4) Dakota - Northwestern,

WORLD'S SERIES

Opening Date, October 7

KDKA, KFOA. KOA, KPRC. KTHS, XW, WBZ, WCAE, WCCO, WDAG, WEAR, WEAR, WGN, WGY, WGR, WJZ, WMAQ, WRC, WSB, WTIC, WWJ.

(See bage 15 for wave lengths.)

November 14—Yale vs. Princeton. November 21—Harvard vs. Yale. November 28—Cornell vs. Pennsylvania. November 28.—Boston college vs. Holy Cross.

Mikes Night Games

Cross.

Mikes Night Games

Station WSAI opened the 1925 football season over the milke last Saturday with a rather unique game to describe to the dans. The game was played at night between the University of Cincinnati and Transylvania. A special eradiant fluid was placed in the ball and it appeared silver-like under the rays of the powerful are lights illuminating the field. The next game, that on October 3, when "Cincy" clashes with Hanover, will also be played under the same night conditions.

The remainder of the games will be played in the afternoon, and they like the first will be brought to the homes of the listeners by Bugene Mittendorf, play-by-play. Mr. Mittendorf is now manager of WiRRC, but he will be back at the WSAI mike for the games as he was last year. The other Cincinnati home games to be miked are: October 16, Georgetown: October 17, Ottorbien: October 24, Dennison; October 31; Dayton; November 14, Ohlo; and November 28, Miami.

Totten Baok at WMAQ

Totten Back at WMAQ

After having successfully broadcast most every home game played by the Chicago Cubs basebull tenm, Hal Totten will commence another senson of football announcing over WMAQ, the Chicago Daily News station, on October 3, when the University of Chicago tackles the University of Chicago tackles the University of Kentucky at Stagg field, Chicago. H. M. Eeardsley will cooperate with Totten this time as he will subsequently at Stagg field.

Totten this time as he will subsequently at Stagg field.

KYW, Chicago Westinghouse Atation, will also breadcast the Chicago U home games. The KYW microphones will be in charge of Harold "Shorty" Fall, assistant director.

The dates of the games are: October 10, Ohlo State, October 17, Northwestern; October 31, Purdue: November 14, Dartmouth; and November 21, Wisconsin.

Washington U. Games Over KFOA

YASHINGTON C. Gallies Over the No. SEATTLLE, Wash.—All University of Washington football games will be broadeast direct from the university stadium through Station KFOA, Rhodes Department store here. The first game will be on Saturday, October 10.

ADDITIONAL SPORTS REFER TO PAGE 7

STATIONS IN ORDER OF WAVE LENGTHS USED

ŀ	Minter Coll	Meters Call	Meters Call	Meters Call	Meters Call	Meters Call
١			309.1 KDKA		406 WBAR	468.5 WCAP
ı	215 KTAB 217.3 WOK	278 KOIL	315.6 KFDM	365.6 WHB		468.5 WRC
ı		278 WCAU	315.6 WAHG	S70 CYB		475.9 WBAP
ı	226 WBBM 226 WIBO	278 WLBL		370.2 WEBH	416.4 WCCO	475.9 WTIC
ı		278 WRBC	319 WGR		421 KIAF	475.9 WFAA
ı	240 KFVE 243.8 WAMD	280.2 WNAC	319 WSMB	374.8 KTHS	422.3 WLW	480 CYL
ı			322.4 KOA	379.5 WGY	422.3 WKRC	483.6 WOC
1	250 WGES 250 WMBB	282.8 WOAN	325.9 WSAT	379.5 WHAZ	428.3 WSB	483.6 WSU1
Н	252 KFWB	285.5 WICAR		384.4 CKY	428.3 KPO	491.5 KGW
1	252 WGCP	285.5 WREO	333.1 WEZ	384.4 KJR		491.5 WEAF
1	261 KFWA	288.3 KFKX	336.9 KNX		434.5 NAA	490.7 WMC
١	265.5 WMAK	293.9 KJS	340.7 KFAB.	389.4 WEAR	435 AT9	508.2 KLX
1	266 KFNF	293.9 WBAV	340.7 WKAQ.	389.4 WTAM	434.5 CFCN	508.2 WIP
1	266 WBCN		340.7 WMCA.	394.5 WFI	440.9 KLDS	508.2 WOO
1	268 WCTS		344.6 WCBD	394.5 WLIT	440.9 WDWF	516.9 CJCA 516.9 WCX
ı	272.6 WBBR		1344.6 WLS	394.6 WOAL	1440.9 W.O.S	516.9 WCX 516.9 WJR
1	272,6 WEBJ	299.8 KSL	348.6 KWSC	399.8 WHAS	447.5 WMAQ 447.5 WQJ	526 WHO
1	272.6 WFBH		348.6 /EE1	399.8 WHT	454.8 KFOA	526 WNYC
1	273 KWKH	Landin MITTIN		LAGO TOTAL	454.3 WJZ	526 WOAW
-	273 WRW		356.9 CCA	05.2 KHJ		535.4 KYW
1	275 WHAD	302.8 WEAS	356.9 CHNC		461.3 WCAE	
	275 WHAR					545.1 KSD
	275 WORD	305.0 WJAR	1991'7 AA XIIIA	1400.2 110.11	(10.	0 1012 22-22



"The voice of the people"

If you are confused about Radio—if the din of conflicting claims and statements has left you more puzzled than ever-turn to the one infallible test-

the consistent preference of the public.

Choose wisely by analysing the judgment of the multitude who have already made a careful selection. Their choice is summarized in the circle above. Study it! By official figures, it shows that to an overwhelming degree FREED-EISEMANN is the largest manufacturer of Neutrodyne Radio Receivers in the world.

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Back in the very beginning of the Radio industry, even before the days of general broadcasting, FREED-EISEMANN engineers were already perfecting tone, simplicity and selectivity.

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Our dealers are so sure of the performance of the FREED-EISEMANN that this week they will gladly install a set in your home without obligation - so that you may learn the joys it will give you. Telephone your dealer today for your set.

> Greed-Eisemann Radio Corporation MANHATTAN BRIDGE PLAZA, BROOKLYN, N.Y.



The famous NR-20, \$175.00

Ade luxe Neutrodyne* Receiver in a handsome mahogany cabinet. *Licensed by Independent Radio Mfrs. Inc., under Hazeltine pats. Nos. 145080, 1469228, 153388. Other sets at \$75, \$90 and \$110.

FREED-**EISEMANN**

Mastery in Radio

An Evening at Home with the Listener In

(FOR CENTRAL TIME)				(Tabular form and listings copy- righted. Reproduction is forbidden.)			(FOR PACIFIC TIME)											
Call	Saturday	Sunday	Menday	Tuesday	Wednesday	Thursday	Friday	Call	Location	Met.	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday 5:00- 7:55	Friday	Call
AT9 CFCA	Silent Silent	5:00- 6:00 7:00- 8:00	Silent Silent	Silent Silent	Silent 7:15-19:45	7:00- 8:55 8:00-10:45			Fort Bragg, N. C	435 356.9 434.5	Silent Silent 9:00-11:00	3:00- 4:00 5:00- 6:00 Silent	Silent Silent Silent	Silent Silent Silent	Silent 5:15- S:45 Silent	6:00- 7:00 6:00- 8:45 7:00- 8:00	Silent	CFGA
CHNC CHNC	11:00- 1:00 Stlent	Silent	Silent 7:00- 8:00 8:50-10:30	Silent Silent 8:30- 9:00	Silent Silent 7:00- 9:00	9:00-10:00 8:00- 9:00 10:00-12:00	Silent		Calgary, Alta Teronto, Ont Edmonton, Can	356.9 516.9	Silent 8:00-10:00	Silent 6:30- 7:30	5:00- 5:09 6:30- 8:30	Silent 6:30- 7:00	Silent 5:00- 7:00	6:00-7:00 8:00-10:00	Stlent 7:00-11:00	CHCN
CKAC CKAC	10:00-12:00 6:30-10:00 6:30- 8:15	8:30- 9:30 Silent 7:00- 9:45	Silent Silent	6:30-10:00 8:30-10:45	Silent Silent	7:30-10:00 8:00- 9:00		CKAG	Montreal, Que Winnipeg, Man	410.7 384.4	4:30- 8:00 4:30- 6:15	Silent 5:00- 7:45	Silent	4:30 - 8:00 6:80 - 8:45	Silent Silent	4:005:00 6:00- 7:00	Silent. 6:30-7:45 Silent	CKAC CKY CNRO
CNRO CYB	7:30-12:30 10:80-11:45	Silent Silent	Silent	Silent 9:15- 10:15	7:30-12:30 Silent	Silent Silent	Silent		Ottawa, Ont	434.5	5:30-10:30 8:30- 9:45	Silent Silent	Silent Silent	Silent 7:15- 8:15	5:30-10:30 Silent	Silent	Silent	OYB
CYL	Silent	8:00 - 9:30 Silent	Silent 9:15-10:30	8:00- 9:30 Silent	Silent	Silent		CYL	Mexico City, Mex Mexico City, Mex	480 330	Silent	6:00- 7:30 Silent	Silent 7:15- 8:30	8:00- 7:30 Stlent	Silent Silent	Silent Silent	8:00- 7:30 7:15- 8:45 5:45- 8:55	CYL
KDKA KFAB	7:45- 8:55 5:30- 6:30	6:00- 7:00 4:00- 5:00	7:45- S:55 5:30-10:80	7:43-10:30 5:30-10:30	7:45 - 8:55 5:30-10:80	7:00-10:30 Silent	7:45- 8:55 5:30-10:30	KDKA KFAB	Pittsburgh, Pa Lincoln, Nebr	309.1	5:45- 6:55 5:30- 4:30	4:00- 5:09 2:00- 3:00 6:00- 7:00	5:45- 6:55 3:30- 8:30 Silent	5:45- 5:30 3:30- 8:30 6:00- 8:30	5:45- 6:55 3:30- 8:30 Silent	5:00- 8:30 Silent Silent	3:30- 8:30 8:00- 8:30	KFAB
KFOM KFI	Silent 8:45- 2:00	8:00- 0:00 6:00- 1:00	Silent 8:45- 1:90	8:00-10:30 8:45- 1:00 Silent	Sllent 8:45- 1:00 Sllent	Silent 8:45- 1:00 Silent		KFDM KFI KFKX	Beaumont, Texas Los Angeles, Calif Hastings, Nebr	315.6 467 288.3	Silent 6:45-12:60 Silent	4:00-11:00 Silent	6:45-11:00 7:00- 9:00	6:00- 8:30 6:45-11:00 Slient	6:45-11:00 Stient	6:45-11:00 Silent	6:45-11:00	KFICX
KFKX	Silent	Silent	9:00-11:00 Silent	9:00-10:00	7:30- 8:30	Silent	Silent		Fayetteville, Ark	299.8	Silent 5:30 - 7:30	Silent 4:30- 7:15	Silent 5:30- 7:30	7:00- 8:00 5:39- 7:30	5:30- 6:30	5:30 - 7:30	5:30-7:30	KENG
KFNF KFOA KEUO	7:30- 9:30 8:00- 1:30	6:30- 9:15 Silent 8:15- 9:15	7:30- 9:30 8:00-12:00 8:00- 9:00	7:30- 9:30 8:00- 1:00 Silent	7:30-9:30 8:00-12:00 9:15-10:15	7:30- 9:80 Silent Silent	7:30 - 9:30 8:00 - 1:30 Silent	KFOA	Sealtle, Wash	454.3 545.1	0:00-11:30 Silent	Silent 6:15- 7:15	6:00-10:00 6:00-7:00	6:00-11:00 Silent	6:00-10:00 7:15- 8:15	Silent	6:00-11:30 Bilent	KF0A KFU0
KEVE	Silent 10:00-12:00 Silent		10:00-12:00 10:00-11:00	10:00-12:00	10:00-12:00 10:00-12:00		10:00-12:00 10:00-12:00	KFVE KFWA	University City, Mo Ogden, Utah	261	8:00-10:00 Silent	S:00- 9:00 Silent	8:00-10:00 8:00-9:00	8:00-10:00 Silent	S:00-10:00 S:00-10:00	Silent Silent	8:00-10:00 8:00-10:00 8:00-11:00	KFVE KFWA KEWB
KFWB KGO	10:00- 1:00 10:00- 2:00	11:00 - 1:00 5:30-11:00	9:00-1:00 10:00-12:00	9:00-1:00 10:00-12:00	9:00- 1:00 8:00- 9:00	9:30- 1:00	10:00 - 1:00	KEWB KGO	Hollywood, Calif Oakland, Calif	361.2 491.5	8:00-11:00 S:00-12:00 10:00-12:00	9:00-11:00 3:30- 9:00	7:00-11:00 8:00-10:00	7:00-11:00 8:00-10:00 7:45-12:00	7:00-11:00 6:00- 7:00 0:00-11:00	7:39-11:00 8:00-12:00 7:45-12:00	6:00-7:00 9:00-10:30	KG0 KGW
KHJ	12:00 - 2:00 7:80 - 4:00	9:45-11:00 8:00-12:00	8:00-9:00 8:00-12:00	9:45- 2:00 7:30- 1:00	11:00- 1:00 7:30- 1:30	9:45- 2:60 7:30- 1:00	7.00 2.00	KH3	Los Angeles, Calif	405.2	5:80- 2:00	7:45-9:00 6:00-10:00	6:00-7:00	5:30-11:00	5:80-11:80 7:00- 3:00	5:30-11:00 Silent	5:30-11:30 7:00- 8:00	KIAF
KIAF KJR	8Hent 10:30-12:00	4:00 - 5:00 9:15-11:00	0:00-10:00 0:00-1:00	Silent 10:30-12:00	9:00-10:00 0:00-12:00	Stlent 10:80- 2:00	9:00-10:00 10:80- 1:00	KJR	Sthtipok, Minn	384.4 293.9	Stient	2:00- 3:00 7:00- 8:00	7:00- 8:00 7:00-11:00 Silent	Silent Silent 8:00- 9:00	7:00-10:00 Silent	8:00-12:00 8:00- D:00	8:30-11:00 Silent	KJR KJS
KJŠ KLDS	Silent Silent	9:15-11;30 6:30-10:00	Silent Silent 8:00- 1:00	10:00-11:00 8:00-9:00	Silent Silent	10:00-11:00 8:00- 9:00	811ent SHent 8:00-12:30	KLOS KLOS	Independence, Mo Oakland, Calif	440.9 508.2	Silent Silent Silent	7:15- 9:30 4:30- 8:00 Stlent	Silent 6:00-11:00	G:00- 7:00 Sflent	Silent 6:00-11:30	6:00- 7:00 Silent	Silent 6:00-10:30	KLDS
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MEBI	7:30-12:30 Silent	Silent	Silent	7:00- 8:00	7:00 9:00	Silent	6:00- 8:00 7:00- 8:00	WEBI	New Yerk, N. Y	348.6	Silent	1:20- 7:20		4:88- 8:00	5:00 8:00	5:00 - 8:00	\$:00- 6:00 5:00- 6:00	WEEL
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WFI WGB6	7:00- 8:30 5:00-10:30	0:30-7:30 7:09-8:00	Silent 0:00- 5:15	7:00-11:00 5:00-10:30	Silent	7:00-10:00 5:00- 7:45	Silent Silent	WEBS	Philadelphia, Pa New York, N. Y	394.5 315.6 315.6	5:00- 6:30 3:00- 8:30 Silent	5:00- 5:00 5:00- 6:00 5:00- 8:15	4:00- 4:15	5:00- 0:00 5:00- 8:30 Silent	Silent 3:00-5:00 5:00-8:15	5:00- 8:00 3:00- 5:45 Silent	Silent Silent 5:00- 8:00	WEBS
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WHAD		3:15 - 4:15 6:50-12:15	6:00-10:00 6:30- 9:00	6:00- 7:00	6:00-12:86 Silent			WHAD	Milwaukes, Wis Atlantic City, N. J	275 275	4:00 - 5:00 4:30 - 7:00	1:15- 2:15 4:00-10:15	4:30-7:00		Stlent	4:30 - 3:00	4:00-10:15	WHAR
WHAS	7:80- 9:00 Silent		Silent. 7:15- 9:15	7:38 9:30 Silent	7:30 - 9:00 - Silent		7:30 - 9:00 Silent:	WHAS	Trey, N. Y.	309.8 379.5 365.6	5:39- 7:00 Silent	2:00- 3:00 Silent 6:00-11:00	5:15- 7:15	5:80- 7:30 Silent Silent	5:30- 7:00 Silont 5:00- 6:00	5:30- 7:00 SHent 6:00- 8:30	Silent	WHAZ
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WIP	7:00-11:05 Silent		Silent	7:00-12:00 8:30- 9:00	Silent	7:00-12:00	Silent 7:00-11:00	WIP	Philadelphia, Pa Previdence, R. I	. 300.A	Silent	4:20- 7:14		5:00-10:00 4:00-7:00	4:30 - 8:00	water transfer and	5:00- 9:00	WIAR
BALW	6:00-11:00 6:45- 1:00	Silont 8:45-10:00	6:00-11:00 6:45-1:00	6:451:00	6:45c 1:00	Silent			Pitisburgh, Pa	302.8	4:45-11:00	0:15- 8:00	4:00- 9:00 4:45-11:00 4:00- 7:00	4:45-11:00	4:45- 8:00	Silent	4:30 - 8:00	Q LLM 19
A1A 81A	6:00-10:00 SHent	7:15-8:15	6:00- 9:00 Silent	7:30-10:15	Silent	7:30- 9:00	7 45 - 8:45		Detroit, Mich New York, N. Y New York, N. Y		Silent	5:15- 6:1	Silent	5:30- 8:13	Silent	5:30- 7:00	5:15- 6:45	WJY
WIZ WKAQ WKAR	6:00-10:30 Bilent 11:80- 1:00	6:00-8:00		Silent	8:30-10:30 0:00- 8:00 7:00- 8:13	Silent	7:15- 9:4: Silent 6:00- 7:0:	WKAR	San Juan, P. R	285.5	Silent 9:30-11:00	4:00- 6:00 Silent	Silent Silent	Silent	4:00- 6:00 5:00- 6:15	Silent	Stlent	WKAR
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WLIT WLS	Silent 7:45- 1:00		6:30-10:00 Silent	7:00- 8:00	6:30-10:00 7:00-11:30	7:00-3:55	6:30-10:00 7:00-11:30	WLS	Philadelphia, Pa Chicago, III	344.6	5:45-11:00	Silent 5:30 - 6:53 5:30 - 7:30	Stlent	5:00- 7:00		5:09 - 6:50	4:30- 8:00 5:00- 3:30 Stient	WLS
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WNAC	7:00- 0:00 6:00- 0:31	2:00- 8:30 8:00-10:80	7:00- 8:00 6:35- 9:80	7:00- 9:00	7:00 - 0:00 6:30-9:30	7:00 - 9:00	6:30- 9:3	WNAC	New York, N. Y	280.2 526 394.3	5:00- 7:00 4:00- 7:00 6:30- 7:30		6:30 - 7:30	4:10- 7:30 n-an- 8:30	4:30- 7:30	1:35- 7:30	4:30- 7:30	
WOAR	Silent	9:00-10:00	9:00-10:00	9:00-10:00	9:00-10:00		9:00-10:0	WOAN	Lawrenceburg, Tenn Omaha, Nebr	. 282.8 . 526	Silent 4:00-10:00	7:00-8:00	7:00-8:00 4:00-9:00	7:00- 8:00 4:00-11:00	7:00- 8:00 Silent	1:99- 8:00 4:00- 8:00	1:00- 8:00	WOAN
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WRBC	6:00-10:3		Silent	5:10:10:00 6:00:10:00 7:15- 9:00		Silent 6:00-10:00 7:15 3:00		WREC	Valparaise, Ind	168.5 285.5	4:00- 8:30 7:00- 9:0	Silent Silent	Silent	4:00- 8:0	0 Silent	4:00- 8:00 5:15- 7:0	0 Silent	WREC
WREC			Silent 8:00-10:30	8:00-10:30	8:00-10:3	8:00:10:30	8:00-10:3	WRW	Tarrytown, N. Y	273	0:00 8:30	5:00- 8:3	0 6:00-8:30	8:00-8:3	6:00- 8:3	0:00-8:3	6:00-8:3	0 WRW
WSAI WSB.	8:00-12:0	0 7:30-9:1	8:00-12:0	0 8:00-12:00	10:00-12:00 10:45-12:0	U 8:00-12:00	8:00-12:0	WSAI	Mason, OAtlanta, Ga	_ 428.3	8:00-10:0	0 5:30 - 7:1		6:00-10:0		0:00-10:0	0 6:00-1n:0	WSAI WSE
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MM1	Stient	5:20 9:0	n 5:00- 8:0	0 5:00-8:0	5:00- 9:0	0 5 :00-11:3		(KAM)	Detroit, Mich	352.		8:20- 7:0	0 3:00- 6:00	3:00- 8:0	0 3:00-7:0	3:00- 9:8	0. 3:00- 7:0	

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Vol. XIV

Saturday, October 3, 1925

Limitation of Broadcasters

SECRETARY HERBERT HOOVER, of the department of commerce, under whose administration Radio falls, has expressed himself as desirous of the

Radio falls, has expressed himself as desirous of the consideration of a plan for the limitation of broadcasting stations. Note: Mr. Hoover does not necessarily recommend the limitation of stations. He only announces that this is a subject he would like to have discussed at the forthcoming. Radio conference. He asks the opinions of dealers, manufacturers, broadcasters and the general public.

Radio Digest is in a splendid position to give much valuable information to the department of commerce on this very subject from the staudpoint of the general public. Over fifty thousand "Consensus of Opinion" ballots, it will be remembered, were received by this publication from its readers and their friends when it was desired to learn what the public thought of the limitation of issuance of broadcasting licenses in accordance with the Kintner or some similar, perhaps improved, plan. These are still on file. Almost unaminous the vote stood in favor of limiting licenses according to some logical plan.

We do not ask that existing stations be forced to of off the air, but we do believe that it would be most desirable not to allow new stations to take the air until an exclusive wave is available for the period of operation of the station, either as a result of some older broadcaster closing down, or as a result of

older broadcaster closing down, or as a result of technical research which will open up new wave bands, the "other roads."

Time and time again we have suggested that the United States senate and house of representatives study the problem a bit more carefully and provide sufficient funds with which the Radio section of the department of commerce might work. The "police force" of the air cannot keep the "traffic" regulated without "whistles" and "traffic semaphores." In Radio language, the Radio supervisors, limited in number as they are in the first place, cannot adjust broadcasting stations and keep them adjusted to the exact assigned wave lengths without possessing precision frequency meters and similar Radio measuring and observing apparatus.

apparatus.

These meters sometimes cost as much as would a new and useless culvert for the tributary between the sovereign states of Wynken and Blynken—paid for, of course, from the famous pork barrel, or rivers and large appropriation bill harbors appropriation bill.

harbors appropriation bill.

Or a decimal, calibrated wavenieter has been known to cost all of a tenth of what it does to send a senator on a beautiful joy-ride on a U. S. Shipping Board vessel, the Leviathan for example (first-class \$2,000 stateroom), to the Zulu or Philippine Isles to investigate the proximity of vermin in the straws of the straw-thathed roofs of native huts.

However, we must not stoop, in these dignified columns, to criticize the actions of senators. We will leave that mission for Vice-President Dawes, a very capable gentleman, who knows the kind of language to use on such occasions.

capable gentleman, who knows the kind of language to use on such occasions.

What we started to say was, let's first of all provide sufficient funds for the Radio section. Congress allowed \$125,000 last year. That wasn't half enough Give the supervisors what they need so that the listening public will get what they want—clear reception from properly adjusted and operated broadcasting stations.

ing stations.

Then, if it is still necessary to limit broadcasting stations, all right, we'll limit them!

Radio Beckons Youth

Radio Beckons Youth

I't WAS once, "Go West, young man, go West,"
but now has changed to, "Study Radio, young man,
study Radio." Opportunities in Radio, far beyond the
most vivid imaginations, await the youth of today.
Not long ago a Seattle boy—he is hardly more than
that—sent in a drawing of a cone type reproducer to
a large Radio manufacturer. That manufacturer is
now making nearly a thousand of these cone speakers
every day, and the youth is in the employ of the company at a splendid salary.

Do not discourage the lad who "messes up" the basement work room with wires and "that Radio junk!"

RADIO INDI-GEST

To Graham McNamee, Gold Cup Winner

Whether at home, or club, or seashore, or mountain realms so rare, a treat is sure in store for you When Mae is on the air.

Just twist and turn the dials around Till New York comes in You'll see That you have stumbled onto WEAF and McNumee.

He handles all the worth while stuff And takes you right along With him to mingle, see, or hear Be it sports, dance or song.

He makes you see just what he sees Tho he's nowhere around For description, wit, his equal In Radio cannot be found. B. V. L

The foregoing are but four stanzas of a ten stanza em written by B. V. L. in honor of McNamee's victory.

Useless Facts and Figures

Ed Squires, former announcer at many stations, is a Yale graduate, according to a newspaper clipping. So that's the reason we uneducated bozos can't comprehend him!

Earthquakes are said to clear the air of static, but who the—— well, who cares to have pet carthquakes under his antenna?

Swear words are almost as handy as electric soldering irons when building one's own receiver.

Radio helped save seven tourists and four Swiss guides and porters during the past tourist season in the Swiss Alps. The number of Swiss cheeses so rescued has not yet been tabulated.

The Duke of York makes distaphone records of his broadcast speeches from 2LO, London. He likes to hear his speeches repeated. The duke seems to be alone in this proposition.

Magnetized screw drivers will not pick up brass

Bachelors tune in the most distant stations on the loud speaker.

Unmarried women get a chance to listen in much more than their homemaker sisters. GOOFY GUS.

The Mystery of the Ether

The Mystery or the Liner
Through walls of my humble cottage
Comes the breath of the mountain air;
And lot the voices of angels
Seem to vibrate everywhere.
Over the waves in the other
Such harmony divine—
It seems to come from another world
And enter this soul of mine.

RHEA SHELDON.

A Warning

Now that I have killed off all the slow announcers, abolished most sojranos, and put out of business all stations not observing silent nights, I will next train my guns on editors of Radio Journals who throw my contributions in the W. B.

I am vindictive, revengeful, and remorscless when I go on the war path! GEORGE.

Listen here old bean, you should threaten Radio editors who live in Chicago! It is to laugh! Ha! Ha! Next time one of the overland limited trains whizzes through one of those tanks you make on your shoe string selling trips, wave at someone on the observation platform and maybe they will toss you and old Chicago paper containing some of our choice crime news. Besides that our desk overlooks the Cook county Juli, or "Hotel de Druggan," where our best gummen sleep off the effects of nocturnal carousing in the company of the guards.

And now to show you that we are not afraid of you we will publish one of your poems:

An Ambitious Egoist

I want to be a 'nouncer, And in a studio stand; A microphone before me, A program in my hand.

I want to be a houncer. So folks may hear me speak; I know I'd be a dandy, My voice is soft and sleek.

I want to be a 'nouncer. And next year's contest win; I'll bet I'd have as many votes As all the rest get in.
GEORGE, THE WANDERING MINSTREL.

Beware of Static!

Frantic Mistress: "Jane, Jane! Come quickly, and take the parrot away—the mester's dropped his tube set." CHEERIO.

Not long ago the Japanese government announced that they were going to erect a station on the island of Yap, and now R. H. C. writes in and says they are all wrong, that we have enough Yap stations now!

News of the Week



Condensed BY DIELECTRIC

There is a fascination to one station, among the hundreds of broadcasters, that doubtless assures it a very large nightly audience—WSB, Atlanta. It is not only the personality of their popular announcer which impels one to dial to four hundred and twenty-eight meters, but to an atmosphere of southern hospitality. "Atmosphere" is sometimes difficult to get across the footlights, yet a number of broadcasting studios are really successful in accomplishing that very thing. Who, for instance, fails to note it when the Melody orchestra is performing for us?

At least a portion of one of the programs presented through WEAR, Cleveland, recently was of a satisfying nature in more than one respect. A variety of vocal arrangements won first place, although the violin selections were not far behind and the orchestra's work left a favorable impression, if not especially impressive. The voices of a tenor and baritone blended to make their singing of well-known numbers quite the hit of the evening. Then followed a quartet singing of "Kentucky Babe", which deserves honorable mention, and viloin playing of no mean order.

Once in so often I manage to get around to WBZ at Springfield, Mass., to see how this old timer is coming on. The other evening was one of such occasions. The Hotel Brunswick orthestra should be classed among our leaders entertaining by Radio and usually has a program with a broad appeal. As I listened, however, the numbers selected appeared to have been chosen with less care than customarily, while their rendition was at times open to censure. That will soon be forgotten and forgiven.

Another station to be mentioned here for its variety program with capable execution is WSAI, the United States Playing Card company at Cincinnati. Here also we had violin playing which certainly brought pleasure to most in the Radio audience and soprano and contralto singing equally effective. In the course of the singing there was a contralto and soprano duet of "The Rosary". There is a song demanding intelligent treatment or it degenerates into a sad mess of meaningless phrases set to commonplace music—countless times it is so. Again, one may sit in awe and reverence, as we did when these two ladies used their voices to reveal its soul. to reveal its soul.

After the mutitudinous renditions of "The Sidewalks of New York" to which so many listeners were treated who sat in at the past Democratic convention in New York city, the song should be familiar in every state in the Union. Taking this as his text, an entertainer in the studio of WHT, Chicago, presented various ways in which the music might be given. The stunt was rather novel in that it included not only varying interpretations of the melody, but also as played out different instruments. The effect was out of the ordinary and discloses another means of varying features.

WEAF, New York, is no doubt rejoicing over the high honor paid to one of its announcers, Graham McNamee, the recipient of the gold cup award (which is simply another item in the list Radio Digest has sponsored for improving broadcasting). "Mac" has my sympathics, for every announcer and his friends will immediately prepare to wrest the honor from him another year. So much for that. My purpose in mentioning WEAF was to call attention to Jacob's symphony orchestra. They played two compositions recently, one composed by Sibelius and the other by Albanez which stood out in a splendidly arranged program. The former was especially graceful and well played.

The second secon

Bringing Your R.F. Amplification Up-To-Date

How to Modernize Your Old Set

By P. E. Edelman

INTRODUCING refinements in radio frequency amplification, let us suppose, first of all, that you have a tuned radio frequency set that won't quite work through local broadcasters. Maybe you have one of the kind labelled neuturedyne or some other dyne. Or, threstead of a diner variety you have a home built luncheon or breakfirst type which is satisfying event that you cannot institute the set. satisfying, except that you cannot j reach out through locals every night.

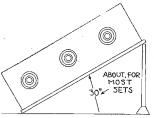
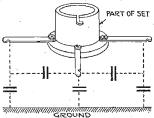




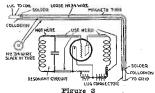
Figure 1

If you remove your aerial and ground wires you can still tune in the local stations nicely. This is because coils, acting as radio transformers, also act as ministure loop antennas. Now, as a simple experiment requiring no changes in wiring, tip your entire set up on one end, as illustrated by figure 1, so that the turns of the tube coils are in exact horizontal position. Work the set this way, and the coils no longer act as loop pickups. This is because the magnetic



CAPACITY EFFECT OF SUPERFLUOUS BUS WIRING MAKES SET HAVE CONDENSER PICKUP OF LOCAL STATIONS Figure 2

Figure 2
Fine business, so far. But perhaps your set is weighed down with ounces and ounces of old style bus bar wiring, pretty perhaps, yet forming a fairly good size condenser plate, as indicated by figure 2. The heavy bus connector does some good if actually used between the coils and



wire when properly applied as a connector in such parts of the circuit as are not measurably affected by the very small resistance offered by the smaller wire. Yet this change reduces capacity coupling, and is a real refinement. To get mechanical strength in small wire I have designed the combination shown in figure 2, which is easily made from magneto tubing, wire and colloidn. Such conductors can be used from the resonant

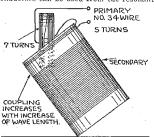


Figure 4

coil and condenser circuit (not in resonant coil and condenser circuit (not in resonant circuit isself) to grid, to filament and to plate terminals. Minimize capacity effects in the set and you minimize capacity energy pickups.

A further improvement in this general refinement or overhauling of familiar R.F.

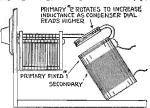


Figure 5

Figure 5

will now make the primary of the second transformer coil as shown by figure 4, as a variometer wound with number 34 dae, wire, and turnable by a knob, you can throw away the stabilizers in the old set, potentiometers, neutralizing condensors, resistances, and what-nots. Besides, you will now begin to range those higher wave length stations which were but feebly heard with the old set. The reason is that most stabilizing methods to be effective on the lower range of broadcast wave lengths have to do this at the expense of full amplification efficiency at the higher wave lengths. This fault may be overcome by automatic or (Continued on page 13)

Good Radio Requires Good Material

T Is just as impossible to build dependable radio with poor material as it is to build a good automobile or a good locomotive that way. Formica panels, base panels, winding tubes, insulating bushings and washers have the qualities that make lasting durability possible.

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- 1 Formica is used by nearly all the leading set makers—and has for years been used by more so trained to makers and has for years been used by more set insisted forwards and only other materials.

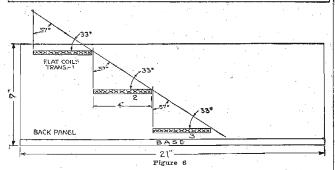
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MODERNIZING YOUR OLD R.F. SET

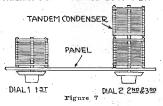


(Continued from page 17)
semi-automatic change in the primary to secondary coupling, or the effective number of primary turns of the transformer may be varied simultaneously with changes in the wave length range of dial settings on the condensers. Figure 5 indicates this.

Coming back to the tipped up set, arranged to get the coils horizontal; well, the old set deesn't look so handsome that way. Besides, to arrange the coils thisway on a new panel, we may think, requires an unlikely tall panel. Not at all, Look at figure 6; use flat type coils, keep the old inter-coil angles, but leave the coils horizontally placed if you are not so anxious to hear the local stations when distant programs are on the air.

Combining Dials

Maybe by this time you are considering rebuilding the old diner set? Well, you are in for an interesting time, and perhaps several genuine silent nights while changes are in progress. Why not cut off one of those three dials? See figure 7, and get any of the better makes of tandem condensers on the market. Don't forget to



length in each Radio stage, as indicated for example by figure 8.

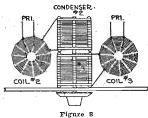


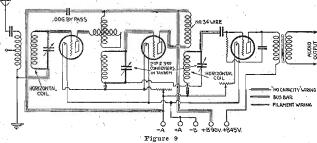
Figure 8

If you have really gone this far in redressing the old set, maybe you will go further and fix up the audio stages and speaker in latest 1925-26 style. But that is another subject, reserved, as the song says, for "Some Other Day."

Figure 9 shows about the way the revamped circuit on the old R.F. set should look when entirely changed, and you may be disappointed if you do not make at least some of the changes suggested, because local broadcast stations are being built closer and closer. Some morning you may find one going up right in your own city block.

Just as a final suggestion, if you have never had any experience before at rehulding set, better study the whole thing carefully before touching a wire. Decide definitely just what changes you are going to make and have all new parts ready before starting.

Never drive a nail into hard rubber or composition. Drill a hole.





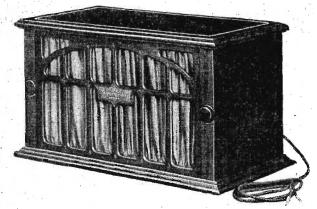
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Quality Broadcasting to Match Quality Products



hand the analysis of the second of the secon

B. C. Course in Radio Fundamentals

Chapter XXVIII—Electron Tube Oscillator Circuits

By David Penn Moreton

In THE previous chapters it was pointed out that, in order that a vacuum tube may sustain undamped oscillations, it is supply necessary to couple the plate and grid circuits to a common oscillatory circuit, or some arrangement of coupled oscillatory circuits, in such a manner that the resulting grid to plate coupling will be negative. The number of circuits which will meet these requirements is very large, and the actual quantitative relations are special in practically every case. In spite of their many differences, all of these vacuum tube oscillator circuits may be shown to be derived from one of a comparatively small number of, so to speak, Jundamental or elementary circuits. These fundamental circuits will be briefly described in the following parabriefly described in the following para-

Inductive Compline The first fundamental circuit is shown in figure 111, where the plate and grid

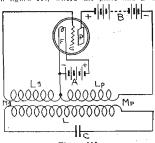
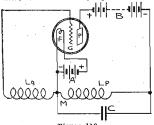


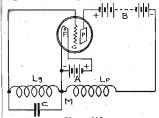
Figure 111

Figure 111

circuits of the tube are independently and inductively coupled to the coil L by means of the coils L₀ and L₀. The coil L forms part of an oscillatory circuit. If an oscillation is in some manner started in the circuit composed of L and C, the resulting oscillatory current induces, through the mutual inductance Me, an alternating electrical pressure in the grid coil L₀, which, in time, sets up a corresponding pulsating current in the plate circuit. This pulsating plate current. Howing in the plate coil Lip, induces, through the nutual inductance M_p, an alternating electrical pressure in coil L, which, for suitable coupling and coils, is



in synchronism with the electrical pressure operating in the oscillatory circuit LC, and just of the required amplitude to compensate for the energy losses in that circuit.



latory circuits, are used for different pur-

modification of the circui Another shown in figure 111, is given in figure 114. In this circuit the oscillating cur-

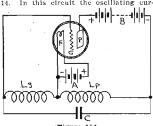


Figure 114

Tigure 114
rent flows in the grid and plate coils connected in series and no mutual inductance is required between these coils. The voltage drop across the two coils due to the common alternating current flowing in them, determines the alternating plate and grid electrical pressures.

A special form of the circuit shown in

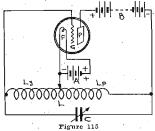


Figure 115 figure 114, is shown in figure 115. In this case the filament is connected to the grid case the filament is connected to the grid and plate through a sliding contact, the coils $L_{\rm g}$ and $L_{\rm b}$ being actually parts of a single coll wound on a straight cylindrical form. The coupling between the grid and plate circuits is then adjusted by means of the filament sliding contact, while the frequency of the generated oscillations may be varied by means of the variable condenser C. This arrangement has the

Special cases of the circuit shown in figure 112 and the coupling and frequency of oscillation are practically independent.

Capacity Coupling

Electrostatic or capacity coupling of the circuits may be used instead of the inactive coupling between the grid, plate and oscillation figure 116, has been used in his circuits may be used instead of the inactive coupling. For example, the elecut shown in figure 116, has been used in the choke coil is not required.

Electrostatic or capacity coupling. For example, the elecut shown in figure 116, has been used in the choke coil is not required. The choke coil is not required.

Electrostatic or capacity coupling. In that the coupling for example, the elecut shown in figure 116, has been used in the choke coil is not required. The choke coil is not required.

Figure 113

Interest two circuits, are used in series with the resistance of the coupling for the condencer C_c, but, in general, the rosistance of the choke coil is not required in the choke coil is not required.

Electrostatic or capacity coupling. In the choke coil is not required.

Electrostatic or capacity coupling of the circuits may be used in series with the resistance of R in order to avoid short circuit; the condencer C_c, but, in general, the rosistance R, is sufficiently high in value so that the choke coil is not required.

Electrostatic or capacity coupling of the circuits may be used in series with the condencer C_c, but, in general, the rosistance R, is sufficiently high in value so that the choke coil is not required.

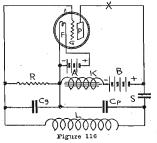
Electrostatic or capacity coupling. In the choke coil is not required.

Electrostatic or capacity coupling. In the choke coil is not required.

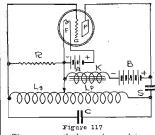
Electrostatic or capacity coupling. In the choke coil is not required.

Electrostatic or capacity coupling. In the choke coil is not required.

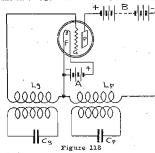
Electrostatic or capacity coupling. In the choke coil is not required. the battery and thus the coil prevents the



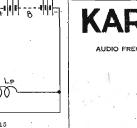
battery from short circuiting the con-denser C_b. The grid is insulated from the filament and a high resistance R is con-nected as, shown in the figure to provide a leakage path for the negative charge nected as snown in the ingure to produce a leakage path for the negative charge which would otherwise accumulate on it, and which, atter a short time, would stop the flow of current. In the plate circuit and block the tube. A choke coll is some-



The same method may be used in supplying direct current energy to the plate circuit by electromagnetic coupling as shown in figure 117. These methods of



connecting the plate battery B require a condenser S, as shown in figures 116 and 117 between the battery and plate circuit (Continued on page 20)





a Marvel of Transformers That Brought Real Musical Quality to Radio Reception

JUST one year ago the Karas Harmonik. Audio Frequency Transformer took the radio world by storm.

Nothing like it had ever began known before. For the first time, seientific study had been devoted to perfectling an audio transformer too. High, low and medium frequencies are amplified to equal degree. Bass notes pour from the speaker in full harmonics and rich overtones, formerly lost, come out in their full beauty.

Music critics approve the results.

Music crities approve the results of Karas Harmonik amplification with great enthusiasm. Prominent radio engineers pronounce it a technical masterpiece. Technical editors have specified Karas Harmoniks in their circuits. The triumph of the Karas Harmonik is complete!

But, for all of this, the enjoyment of the Karas Harmonik amplification has been too greatly confined to onclass of radio enthusiasts. Home set builders bought Karas Harmoniks by the tens of thousands.

It was the owners of factory-built sets who missed the delightful pleas-ure of real, true radio music in their homes. For set manufacturers were prevented by price from adopting Karas Harmoniks for their sets.

Karas Harmoniks for their sets.

Today there are in use, hundreds
of thousands of sets—good sets—
which could be vastly improved in
musical quality by the simple operation of replacing the old transformers with Karas Harmoniks. You see
may be all you desire from the standpoint of seelectivity. Tungs, an
out equipped with Karas Harmonik
andlo Frequency Transformers, you
are NOT getting mearly the musical
quality you can just as well enjoy.

You can install Karas Harmoniks

You can install Karas Harmoniks

quality you can just as well enjoy.

You can install Karas Harmonics yourself. Or, any radio repair man can do it for you. Make up your mind to do it now—at once, Cet a pair of Karas Harmoniks TODAY!

In large cities, most good dealers carry Karas Harmoniks—and in many small towns. If your dealer is out of them, order direct from us. Send no money. Just apy the postman \$7.00 each upon delivery.

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Two Models; \$14.75 and \$27.50

Radio owners are buying the Crosley Musicone at the rate of 500,000 before January first for the very sensible reason that it reproduces the entire range of music and the human voice with uncanny

500,000 Before Jan.



KARAS ELECTRIC CO., 4048 N. Rockwell St., Chicago, Ill. For Over 30 Years, Makers of PRECISION Electrical Apparatus.

Hints on Antenna Erection

Part I—Aerial Insulation

By William Fenwick

In the witter's opinion at least, every broadcast-listener who has not had, or does not intend to have, an expert install their outfit, should obtain an elementary text-book on radio frequency alternating currents, several of which are on the market that sell for less then one doilar. The reason for this is so the beginner may acquire a knowledge of their peculiar behaviour, which is indeed, to put it mildly, amazing in the extreme in the mind of a layman. As this subject handled completely is not within the scope of this series, just a brief outline of it shall be given.

or In the writer's opinion at least, every broadcast-listener who has not had, or does not intend to have, an expert install their outfit, should obtain an elementary text-book on radio frequency alternating currents, several of which are on the market that sell for less then one dollar. The reason for this is so the beginner may acquire a knowledge of their peculiar behaviour, which is indeed, to put it mildly, amazing in the extreme in the mind of å layman. As this subject handled completely is not within the scope of this series, just a brief outline of it shall be given.

Losses at Radio Frequency

These high frequency oscillations—or alternating currents—which are set up in a receiving antenna by a passing Radio wave will creep along any surface which is moist, or which merely has a thin film of dirt upon it, as dust particles are fairly good high frequency conductors. For example, a few years ago the majority of "hams" utilized as a grid leaft, a piece of cardboard with either a pencil or India luk line on it; thus, the graphite or carbon particles deposited, created a high resistance unit. Also, when these oscillating currents flow along a conductor—c. g. a wire—any mass which happens to be located within a few feet will absorb a certain amount of energy from it; i. e., an alternating electromotive force will be induced in the object in the same manner as when two colls are inductively coupled in a circuit, and energy is transferred from one to the other.

Obviously, when the aforementioned conductor is an aerial wire or the lead-in, and an object such as a building, a tree, etc., is near it, it means just one thing—losses. And when the small amount of the same in amount of the energy from extended on highly point. The lead-in should as a prid lead of the provent leakage than a circuit, and energy is transferred from one to the other.

Obviously, when the aforementioned conductor is an aerial wire or the lead-in, and an object such as a building, a tree, etc., is near it, it means just one thing—losses.

T is the purpose of the writer in the energy which is induced in the antenna present series to describe for the benefit of the Radioist the best procedure in the construction and installation of the many varieties of Radio antennae, or as some prefer to call them "wave-catchers."

In the writer's opinion at least, every broadcast-listener who has not had, or does not intend to have an every investigation.

Better reception this season than last!

WOULD you like better radio reception this fall and winter than last? Better distance? Better volume? Better tone? You will enjoy better results in every way, this season, if you keep your tubes at full efficiency with the Jefferson Home Tube Rejuvenator.

All tubes deteriorate rapidly with use. The Jefferson Tube Rejuvenator "brings them back" in 10 minutes! Use it once a month—keep your tubes like new. Completely restores paralyzed or exhausted tubes. Doubles and trebles tube life, quickly paying for itself through this great saving.

Takes large or small tubes —types 201-A,301-A,UV-199, C-299, 5-VA. Attach to any alternating current electric light socket in your home. The Jefferson Home Rejuvenator for tubes is as essential for satisfactory radio reception as a charger for storage batteries. Get one now; start the season with your tubes in perfect condition. Sold by leading dealers in radio supplies, and fully guaranteed.

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Your radio, no matter how costly, can be no better than its transformers. Our experience as the world's largest manufacrurers of small transformers is everywhere recognized by leading radio engineers who carefully specify "Jefferson." If you want amplification without distortion -clear, pure, sweet, natural tones from your radio—make sure it is equipped with Jefferson Transformers. Sold by the better radio dealers, used by leading set manufacturers.



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Keeps radio tubes like new



Look for this blue and orange display carton on your dealer's counter. It contains the Jefferson Tube Rejuvenator.



SUPERTRON MFG. CO., Inc., Hoboken, New Jersey

Export Department, 220 Broadway, New York City

NUMBER

\$2.00

The second of th

switch Doubles Condenser's Range

Wiring Scheme Permits 3 Scales on Condenser

I had a variable condenser with a maximum capacity of .00025 infd and a minimum of .000007 mfd, which I wished to use in a regenerative three circuit set. In

WORKSHOP KINKS EARN A DOLLAR-

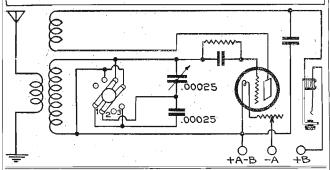
THERE are many little kinks worked out at home that would aid your fellow Radio worker if only he knew about them. There are new hook-ups, new ways of making parts and various unique ways of operating sets that are discovered every day. Radio Digest is very much interested in obtaining such material. 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

connection with the proposed lowering of the broadcast wave band from 200 to 150 meters, I inserted the scheme shown herewith, which is, I trust, self explanatory. In one position you will note that the two condensers are in parallel giving, a maximum capacity of .0005 mfd. or 500 micromicrofarads, in the next position the variable condenser is used alone with a maximum of .00025 mfd. or 250 micromicrofarads. while in the third position the maximum of .00025 mid. or 250 micronicro-farads, while in the third position the two condensers are in series giving a mini-mum of 6.445 micromicrofarads and a maximum of .000125 mid. or 125 micro-microfarads. With a coil that puts KSD at 99 on the condenser dial when the two canacities

condenser dial when the two capacities are in parallel, I can get well below 150 meters when the capacities are in series. This stunt can also be used on tuned radio frequency sets and super-heterodynes.-L. R. Hennessy, Hudson, N. Y.

DIAGRAM FOR TRIPLING VARIATION



WGN GIVES FOOTBALL

(Continued from page 14) (Continued from page 14) and Philadelphia, necessitating the use of over a thousand miles of leased telephone wire in each case to bring the story of each game to the transmitting set atop the Drake hotel. All of the other games will mean out-of-town lines for WGN, as well

Byan Has Style of His Own

well.

Ryan Has Style of His Own

Mr. Ryan, who made a name for himgelf last fall as a football announcer,
will again handle the microphone for
WGN, following the same methods that
thrilled his hearers during the big games
presented a year ago. In depleting a football game, Quin has left the stereotyped
lanes of announcing in favor of a style
distinctively his own-one that is deft,
witty and sparkling—which does more
than convey the mere mechanical details
of the game in progress.

It takes no great mental effort on the
part of the listener to imagine he is viewing the contest; in fact, through the
medium of his loud speaker he becomes,
under the sitmulus of Ryan's vivid description, an attendent at the game—he is

one of the rabid, cheering fans, or in the next instant he is circling the ends with a fleetfooted halfback—the urge and roar of it are omnipresent. The listener "feels" the gaine, and his excitement rises with each daring inanoeuver of the elevens.

Unique Microphone Arrangement When broadcasting a football game, WGN goes on the air about half an hour before the referee's whistle summons the combating elevens, and Ryan's introductory announcement prepares the listener for what is to follow.

The technical details are in the hands of Paul G. Neal, chief engineer of WGN. He evolved the idea last fall of paralleling five microphones and placing them at various points on the gridinon to catch the sounds of the game.

A "mike" is usually situated at each goal post to get the cheers, the college songs, and those spontaneous roars that greet every successful play. Other microphones occupy still other vantage points,

and one is at Quin Ryan's elbow where he identifies the different cheers and songs

for the listoners. It is this inferophone arrangement coupled with Ryan's announcing that makes WGN football broadcasts what they are. Mr. Neal will be in charge of the mechanical arrangements at all the games this fall.



Radio's Most Beautiful Speaker

WRITE today for illustrated description in colors of Voice that Thrills: You will be delighted with artistic stippled dinish and the porgeons colors of Youn Crief models in Green and Golden Polycur. Ask your Dealer to show you a Town Crief models in Green and color to the color of the color

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The Tungar is a G-E product developed in the great Research Labora-tories of General Electric.

Two ampere size (East of the Rockles) . \$18.00 60 cycles-IIO volta

If you want distance and clear tone from your radio set, your storage battery must have its partner-the Tungar Battery Charger.

Two clips and a plug to connect to the house current. That's all there is to it. Or you can make permanent connection and just throw a switch.

The new Tungar charges
The new Tungar charges The Tungar charges while you sleep-it makes



Tungar-a registered trademark is found only on the genuine. Look for it on the name plate

Merchandise Division General Electric Company, Bridgeport, Conn.





Ouestions and Answers

Amplifier Voltage
(14612) PS. Waite Park, Minn.
Why is it that I cannot use more than 45 volts of B current on my 4-tube regenerative set?

A.—Without more data on the construction of your receiver we cannot advise why the limit to the voltage you can apply is but 45 volts. Send on the circuit and some details as to make of parts etc., and we may be able to help you. Using audio transformers of any ratio, if three stages, or not more than 2 to 1 if three stages, you should be able to put 90 volts on the amplifiers: with any of the resistance coupling kits, this should be feasible also, and 135 volts would be better.

Dolco Plant as B Power Supply (14602) EB, Evansville, Ind.

I would like to have a hook-up for a B eliminator to use with a farm lighting plant supplying 32 volts D. C. Also, how I might cut down the voltage to six volts to get rid of the A hattery?

A.—The only possible way you could get B battery power from such a system would be in the purchase of a 32-volt to 150-volt dynamotor, and then carefully filter the output with condensers and chokes. Such units are for sale by many concerns, being army material purchased during the war from General Electric company.

company.

The other problem is easily solved as you need only connect a wire to the negative end of the 32-volt bank of batteries and tap in after the third cell for the plus 6-volt lead. If the set is some distance from these batteries it may be necessary to tap in after fourth cell to get 8 volts

Men Wanted to build radio sets in spare time. Leon Lambert, Wichita, Kansas,

Hear What YOU Like

Thank You -

YOUR OWN Name and Address Printed Free on Applause Carde Stations gladly put on re-quested humbers. We print special cards that get ATTEN-TION. Appland your favorities. Send No Money

Send as money-just pay postman when you get cards. Urder NUW Radio Printers, Dept. 9417, Marengo, Ill





Storage "B" Battery

110% Lasts Indefinitely—Pays for Itself
Economy and performance unbeard of before. Recharged
at a negligible cost. Approved and listed as Estandard by
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Still, link-Standards. Redio News Lab., Lighter, Inc., and other inportant institution. Equipment with Solid Riber Las., Allacer,
Still, Link-Standards. Redio News Lab., Lighter, Inc., and other inreased plates. Order your today.

SEND NO MONEY wanted am two well ship day
gdde in received. Extra Offert 6 better singles 60 volls), 322.76.

Seab with order. Mult your order novie. Exper cost descout the

order, Mall your order now!

WORLD BATTERY COMPANY

Wabash Ave. Dept.76 Chicago, III.

re of the Famous World Radio "A" Storge Battery

100 Amp. 511 52; 150 Amp. \$15.55; 140 Amp. 524.02.

All equipper with State Ember Case

World strong Batton Red in Dials at 21 washer for the new 100 mark World Storage Batton Washer for Washer for Mark World Storage Batton Batton, WSBC, Chicago

(or more still with greater distance) to allow for voltage drop in the long lines to set.

A. B. C. RADIO COURSE

A. B. C. RADIO COURSE

(Continued from page 19)
inductance L₂ in order to prevent the direct
current plate circuit EKFPB being short
circuited by the low resistance coil. The
capacity of the condenser S is sufficiently
large to offer a low impedance to the
alternating current component of the
plate current.

Another possible combination is given in
figure 118, which shows the use of separate plate and grid oscillatory circuits.
(Having explained, in successive chapters, the principles of oscillating tube circuits and methods of combining inductance and capacity to form them, Professort Moreton next week shows a number of
practical applications in Radio usage, of
these hook-ups.—Editor's Note).

ANTENNA ERECTION

Continued from page 20)
a roof is considered about right, while
much more separation then this is desirable from metal covered roofs, steel
buildings, trees, and such.

Short vs. Long Aerial
When utilizing a tree as a support, always remember to insert the insulator

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.

Verify Stations Heard With New Reception Cards SEND NO MONEY



Special card to send stations, Spaces for station, city, wave longth, owner, dist settings,

Good grade cords. Quality printing. 125 cards, \$1.00.
Money REFUNDED If Not DELIGHTED Tay postman after cards arrive. Postpaid if you prefer nay with order. Send order today—NOW. Postal will do. Radio Printers, Dept. 9917, Marengo, Ill.



Announcing a new and very practical battery connector, the Jones Cabelug consists of a five wire coded cable, anchored to an insulated block, cable ends projecting from the block serving as terminals for the set leads. The block is permanently mounted on the panel or sub-panel, allowing the set builder to complete his wiring arrangement, and leaving nothing to connect but the battery ends. No binding posts required.

HOWARD B. JONES

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CHICAGO

The MOLLIFORMER REPLACES **B**"

SEND FOR complete description of this power-in the property of the property of the property of the an hoar, at most reasonable cost. Uses the current from the Ught socket. Excellent for Suners and all THF Sets—source greater (Partly, DX and Volume —Noticines, no Tubes per Acids—Utilizes full ware sectification.

Guaranteed to Give Complete Satisfaction or Your Money Refunded.

Kits include Restifiers
Parts sold separately if desired.
DEALERS—Write for our propesties

C. E. JACOBS, Sole Mnfr. 2802 N. Redzie Ave.

not less then ten feet from the nearest branch. Although this may shorten your aerial quite a bit, keen in mind that a short one away from all obstacles is infinitely more efficient then a long one whose energy is being almost completely lost by absorption, et cetera. A point worth noting here is, that a low, short aerial is more selective and will pick up much less interference then a long, high one. Therefore, the logical thing for those who are fortunate enough to possess such a location to do is, to erect a large antenna for winter use, when the other is practically static free, and a small one for the summer when there is so much "noise fiying around."

It might be worth noting here that the connections become corroded from the weather as time goes on, and that he is wise who attempts to combat it. An excellent aid in so doing is to wrap each joint in the antenna proper with waterproof tape and then give them a coat of varnish or shellac. Thus it can easily be seen that any soot or other substances.

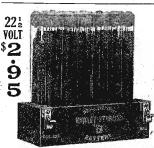
Make \$100 WEEKLY in spare time. Sell what the public wants—long distance radio receiving sets. Two sales weekly pays \$100 profit. No big investment, no canvassing. Sharpe of Colorado made \$955 in one month. Representatives wanted at once. This plan is sweeping the country—write today before your county is gone. OZARKA. Inc., 128D West Austin Ave., Chicago.

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**Institute of the state of the st

bership entitles you to: (1) FRIES loom-left 64 ap. (2); (2) now revised sheets left 64 ap. (3); (2) now revised sheets left 64 ap. (3); (2) now revised sheets left 64 ap. (3); (3) FRIES reconstitution of the sheet of the shee



11's OUT—Complete reglasting reads to run non-add, on-sulphating 22%-rolt rechargeable "IP" tunner but-ray, \$2.95, includes chamical. Does not lose its characteristic anding idle. Special 2-22% voits (45 volts) \$5.25; 30 oits \$11.05; \$10.05; \$11.05; \$10.

which would tend to accummulate on the wires and eat away the connections—introducing high resistance—will effectively be prevented from doing so. Undoubtedly it is unnecessary to add that every joint in the aerial should be soldered, for no matter how good an unsoldered connection is made, each wire will acquire from weather conditions a thin film of dirt, thereby creating a separation between wires.

(Having shown the necessity of care in antenna construction, Mr.) Fonwick will-next take up the various types of outdoor antenna and the construction of cach. Fortable types are also considered, as is the directional effect of most aerials.—Editor's Note.) Editor's Note.)

New Perpetual LOG
Loose Leaf for Revisions — Radio Map FREE
New 64 Bage bas. Corrected sheets may
be seemed as changes in calls, were
lengths, owners, etc., never. Biolas 504
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suggestions. Station list by wave lengths
by states, etc. Owners, Trouble aids.
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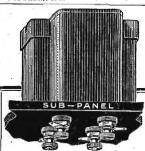


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Made in a variety of sizes mid knocked down, easily set up. Holes bored for every screw. Naother cabi-nets offer such unusual values.

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SUB-PANEL MOUNTING TYPE They permit a neater assombly, shorten-ing of leads and concealing of wiring— as in factory built sets. Same ratios as in factory built sets. Same ratios— same prices—as standard type Thordar-sons. Order direct if dealer cannot supply.

Makers of sets costing up to hundreds of dollars each are mighty particular to use only the best transformer. Fallow the production of the production to the production of the

TYPES and PRICES

AMPLIFYING TRA TRANSFORMERS

Standard on the majority of quality sets

Write for free hook-up bulletins.

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Chicago, U.S.A.

Radiophone Broadcasting Stations

Corrected Every Week-Part I

FIND MISTAKES AND YOU'LL GET DOLLAR

NE DOLLAR will be paid to the Radio fan reader of Radio Digest submitting the most errors in any one station's listing in the 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 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 corrected listings and new stations in order to distinguish them.

United States

. 08. Canton. O. 425 meters. Holds. 135th Fleid Artillery O. N. G. 475 meters. Liquis. 135th Fleid Artillery O. N. G. 435 meters. 750 waits. U. S. Government. Announcer. Liquis. James Y. Loetto. Stepan, The Pieneer Broadcasting Station of the Company Language Company Station of the Company Language Company Station of the Company Language Company Company Language Company Company Language Company AV7, 18. Paul, Minn, 560 moters, 6th ini. Minn. Central review, 8th Paul Armory, Irrevalura scheduler AV8. Dayten, 0. McCobt Field, Eng. Dirision affectives are incompared to the contral review of the contral review. Deliver of the contral review of the contral review of the contral review.

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deven. Shuha. "Where Shimmer vyriners. Land S. Sann. 153-6530 pm. nerg., weather, 1608 reports. R. F.A.F. Denwer, Cole. 278 meters, 300 watts. Western Radio Corn. (F.A.F. Denwer, Cole. 278 meters, 300 watts. Western Radio Corn. Cole. 261 meters, 500 watts. Mountain. These States of the Cole. 160 pm. 178 pm. 1

2511. Thurs, Sun, 8-9 pm, Biblic beson, sormon, symbol, Style Taxona, Wash, 23 meters, 50 waits. First substration thurch, Amounter, Brank Taves, Sun, 1 nm, 75-63-500, Parelle, tests, 100 waits. Lesse Ray Dality, 743-8-15 nm, Parelle, Symbol, Color, 238 meters, 15 waits, School, Regist, No. One.

Regist, No. One.

Regist, No. One.

Regist, Dality, 743-8-15 nm, Parelle, Nilsian, Regist, No. One.

Regist, Dality, 743-8-16 nm, Parelle, Nilsian, Nilsian, Nilsian, Parelle, Dality, 74-50 pm, Beditmen Silvers, Nilsian, Phys. Regist, Nilsian, Nilsian, Phys. Regist, Nilsian, Nilsian, Nilsian, Phys. Regist, Nilsian, Nilsian, Phys. Regist, Nilsian, Nilsi

The wen Biere. Daily 7-128 pm, bettime street. The First Court of the Court of the

Fig. 13:30-1:35 pm, band concert; 7-7:30, children's Central St. 20, concrets Sun, 11-12 m, 8-9 pm; Central St. 20, concrets Sun, 11-12 m, 8-9 pm; Central St. 20, concrets Sun, 11-12 m, 8-9 pm; Central St. 20, concrets Sun, 12-12 m, Central St. 20, concrets Sun, 12-13 m, Central St. 20, concrets St. 21, concrets St. 20, concrete St. 20, concrete St. 20, concrets St. 20, concrete St. 20, concret

KFEQ, Ook, Nohr, 268 meters, 500 watts, J. L. ScrozTath. Amouncer, Characte Roch, Daily ex Sun, 2-3
The Amouncer, Characte Roch, Daily ex Sun, 2-3
The Amouncer, Characte Roch, Daily ex Sun, 2-3
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The General Sulface Amouncer, Walton, C. Chark, Siogan: Wolse of the Conur K
KFFF, Mobelt, Mo. 22 maters, 50 watts. First,
Bapitist Chuch. Announcer, Granville Ray, Slogan.
The Geopel Messenger of the Afr.
The Geopel Messenger of the Afr.
KFFV, Lamont, Ja. 250 meters, 100 watts,
GraceKFFC, Baton Bouge, La. 268 meters, 100 watts.
KFGC, Baton Bouge, La. 268 meters, 100 watts.
KFGC, Baton Bouge, La. 262 meters, 200 watts.
KFGC, Baton Bouge, La. 262 meters, 200 watts.
KFGC, Cantral, Man, chapel scrilee, 11 pm, special
KFGC, Cantral, Chart, 270, moders, 500 watts.
Lehand Stanford Univ., Calif. 270, moders, 500 watts.
KFGC, Bonn, Ja. 225 meters, 100 watts, Cristy
KFGC, Bonn, Ja. 250 meters, 100 watts, Cristy

Meters and the state of the sta

State Trachter College. Amounteer, Burley F. Wellen, Ching. Ching

KFLP, Coder Rapids, Ja. 256 meters, 20 watts. Everett KFLR, Althungurgue, N. M. 234 meters, 200 watts. U. & N. M. Anneuners, Phillip S, Donnell, Slocan, W. S. M. Anneuners, Phillip S, Donnell, Slocan, W. M. Anneuners, Phillip S, Donnell, Slocan, W. M. Anneuners, R. W. Thacker, Slocan, "Heart of the Martic Velley," Mon. Thins, Sat. S. 30-10 pm. cancert. Sat. S. 30 pm. Sunday school leism. Central III. 229 moiest. 200 watts. Swedth States of the Martic Velley, "Mon. Thins, Sat. States of the Martic Velley," Mon. States of the Martic Velley, "Mon. States of the Martic Velley," Mon. States of the Martic Velley, "Mon. States of the Martic Velley," Mon. States of the Martic Velley, "Mon. States of the Martic Velley," Mon. States of the Martin Velley, "Mon. States of the Martin Vell

sinti-fins (Sweellth); 9:30, eerrles (English). Central. KFLX, Galveston, Texas 240 meters, 10 watts, George R. Clough.

KFLX, Galveston, Texas 240 meters, 100 watts. Atlantic clouds, 100 meters, 100 watts. The contract of a watts. The contract of a watts, 100 meters, 150 watts. U. of a watts, 100 meters, 100 watts. Well, 100 meters, 100 meters, 100 watts. Well, 100 meters, 1

6:16. Times bulletins, concert. Datty ex cuts, anus, anus, 6:435 pm, orchestra, baschal); 8:39:10 pm. Timos morram. Mon. Tues, Wed. Pri, 6:45-8:15 pm. studio morram. Mon. Tues, Wed. Pri, 6:45-8:15 pm. studio morram. Mon. Tues, Wed. Pri, 6:45-8:15 pm. studio morram. Mon. Tues, 8:40 pm. orchestra. Practike. Prog. Rev. 10:16-11:20 pm. consetten. Practike. Fol., Marengo, 1a. 234 uneters. 10 watts. Echaphone Radio Shop. Slegan, "Where Your Ship Comes In. Daily ex Suns, 3:30-11 pm. Thurs, 5:30 contents in. Daily ex Suns, 3:30-11 pm. Thurs, 5:30 watts. Prior Mon. State of the studio of the

of Literation. Technical High. Announcers, Juna Johnson, 1979. St. Paul, Minn. 252 meters. So, waits. Heason KPPY, St. Paul, Minn. 252 meters. So, waits. Heason Central.

KPPG. Los. Annelles. Calif. 233 meters. 100 waits. KFPG. Therman Raulo Contral.

KFPG. Correct Raulo Contral St. Waits. C. C. Harster, announcer. 252 meters. 15 waits. C. C. Harster, announcer. 252 meters. 15 waits. C. C. Harster, announcer. 252 meters. 16 waits. The Son Furniture No. Announcer. Dark Adversarial, The Son Furniture No. Announcer. Dark Adversarial, Tens. 16 meters. 16 waits. The Son Furniture No. Announcer. Dark Adversarial Particular Proposer. Leasted at Greenville, Texas, Whore You Find. "The Blackest Land, the Whitest People." Daily of Particular Proposer. Control.

KPPM. Control. 25 meters. 250 waits. Los KPPM. Los Augeles. Calif. 251 meters. 250 waits. Los KPPM. Control. 26 meters. 100 waits. Symon. Son. Son. 25 meters. 25 meters. 25 waits. Los KPPM. Control. 26 meters. 100 waits. Symon. Meters. 25 meters. 25 meters. 25 waits. 25 meters. 25 m

KFHW, Olympia, Wadi. 215.8 meters. 50 watts, United Proteins of Olympia. Slogan, "Make the World a Proteinstood." Thurs, 9-10 no. Son, 12-12-15 no. KFHX, Pullian, Wadi. 217 meters. 10 watts. J. Gordon Klengard. Aunonneer. Aunonneer. De Aunonneer. Aunonneer.

Others. Upland, Calif. 211.1 meters. 50 watts. L. E.

of Education Technical High. Announces, Juno Johnson.

KFOY, St. Paul, Minn. 222 meters. 50 waits. Becom Radio Service. There, 11-12 m. Suc., 330-4-30 pm.

KFOY, St. Paul, Minn. 222 meters. 50 waits. Becom Radio Service. There are also service. The service of the service of the service of the service of the service. The service of the service of the service of the service of the service. The service of the service of the service of the service. The service of the service. The service of the service. The service of the service

| KFWV. Pertland, Ore. 212.6 meters. 5 watts. Wilbur (FYM).
| Frettimn O. Heller. | Calif. 202.0 meters. 100 watts. Sanda Alaria Valley Relieved Company. |
| Frettimn O. Heller. | Calif. 202.0 meters. 100 watts. Sanda Alaria Valley Relieved Company. |
| KFXG. Sanda Alaria Valley Relieved Company. |
| KFXG. Sanda Alaria Valley Relieved Company. |
KFXE.	Waterlon. In. 250 meters. 100 watts.	L. H. Shirane.			
KFXE.	Waterlon. In. 250 meters. 100 watts.	Electrical Relieved Company.			
KFXE.	KFXE.	Waterlon. In. 250 meters. 500 watts.			
FXE.	KFXE.	Waterlon. In. 252 meters. 500 watts.			
FXE.	KFXE.	FXE.	Sanda	Calif.	
FXE.	KFXE.	FXE.	Sanda	Calif.	
FXE.	KFXE.	FXE.	Sanda	Calif.	
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KFXE.	KF				

RARC, Hellywood, Calif. 208.2 meters. 250 waits,
*Neculif & Ratenseroft. Co. Announcer, "Rashings."

*Neculif & Ratenseroft. Co. Announcer, "Rashings."

*Neculif & Ratenseroft. Co. Announcer, "Rashings."

*Max. Hollywood, Calif. 236.5 meters. 500 waits. Lac.
*Anneeles Evening, Express. Announcer, "Torm Crier."

Dails ex Sun. 1:30 and gen. 8. talki, 9, time: 10,
2000 Crier; 20:30, home hour; 12-1, pap, organ; 2-4,
8. 2000 Crier; 20:30, home hour; 12-1, pap, organ; 2-4,
8:30-7. Mon. 4 pm, 7-12, Phuer, "7-11 pm. Trees.

Wed, 7-10 pm. Fri, Sat, 7-2 am. Pacific.

Wed, 7-10 pm. Fri, Sat, 8-2 am. Pacific.

Wed, 7-10 pm. Fri, Sat, 8-2 am. Pacific.

Max. Bonneer, Colo. 22-2, anders. 5, 300 waits.

Wede, 7-10 pm. Fri, Sat, 8-2 am. Pacific.

Max. Bonneer, Colo. 22-2, anders. 5, 2000 waits.

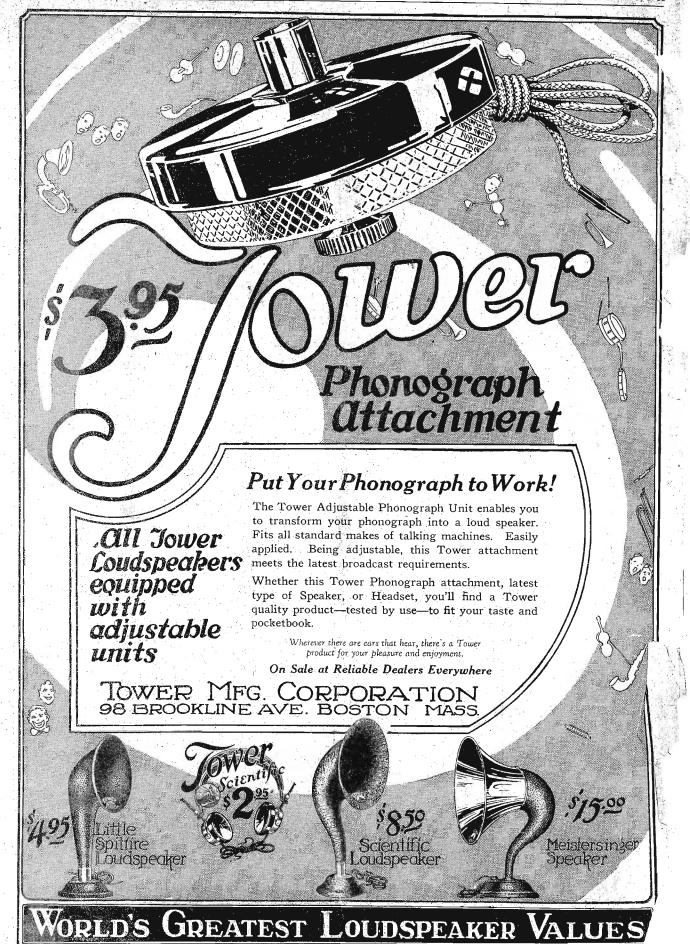
Wede, 7-10 pm. Fri, Sat, 8-2 am. Pacific.

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