Best Ways to Eliminate Interference

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FIRST DECEMBER NUMBER, 1926

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How to Build Bruno Regenatrol Set; New Accessories; Woman's Page and Programs; List of Stations in Order of Wave Lengths; Lady Listeners Love Lester of WOAW

WHOZIT POPULAR HIT WITH ALL LISTENERS

FANS CLAMOR FOR PRIZES FOR SOLVING PICTURES

Not Too Late to Start—November 15 Issues Available—\$26,000 in Prizes Offered

(Rules for WHOZIT on Page 18)

Off with a WOW!

Twenty-four great broadcasting stations scattered across the continent send in that universal report for the beginning

of the Radio Digest's new national Radio game—WHOZIT.
Enthusiasm is running at the highest level. Everybody's doing it. It's the greatest craze that ever struck Radio in the history of popular broadcasting. These are few of the expressions in letters that have been received in the Radio Digest editorial rooms.

No effort has been made to check the

exact number of Whoziteers playing at each station. The task would be almost too great to attempt. But figures from the centers where the stations are located indicate that there are many thousands who have cut out and pasted together their first pair of Whozits. These were published in the mid-November Radio Digest.

Many Valuable Prizes

Many Valuable Prizes

Now we have another forty-eight Whozits in the first December issue—two Whozits from each of the twenty-four broadcasting stations. At the top of this page will be found a complete list of the stations broadcasting the Game of Whozit and the time of day when they may be heard presenting the Whozit game.

Here is the chance many Radio listeners have been waiting for. Radio Digest offers \$26,000 in prizes for the listeners who score the highest in playing the eight games of Whozit. The rules and conditions are published in full on page 18. One thousand dollars in prizes goes to the listeners of each of the Whozit stations. Besides that there are two grand prizes Besides that there are two grand prizes of \$1,000 each. The leading prize at each station is \$500 in gold. Whozit winners may find here just the little capital required to start the payment on a home or to begin a business enterprise. It is to be gained by a careful and consistent playing of the game, and the game is not

How Listeners Play Game

Just a word of explanation to those who may not have heard the air announcements or read previous announcements in Radio Digest:
In each of eight consecutive issues of

In each of eight consecutive issues of Radio Digest, beginning with the November 15 issue, there will appear forty-eight Whozit pictures, sixteen to a page and two Whozits to a station. In all there will be sixteen Whozits from each station. The listener will take a copy of Radio Digest and tune in his nearest Whozit station at the Whozit hour. (See schedule of Whozit broadcasts above.)

He will then be told to turn to a certain

He will then be told to turn to a certain page and in a certain location find a specially described pair of eyes, a style of hair, turn of mouth or cut of a chin. He will compare these descriptions with features shown in the segments. Each Whozit will be found to be made up of the features of two or more persons joined in

tures of two or more persons joined in four segments.

By following the instructions of the broadcaster he will be able to separate the segments and reassemble them so that all four segments belong to the same individual. That's the game. Play it and win one of the many valuable prizes.

Stations Give Free Help to All Each station will furnish information by letter or telephone to those who were unable to listen in during the broadcast hour. This is to assist those who are seek-

hour. This is to assist those who are seeking the special \$1,000 grand prizes by solving the most Whozit pictures from all stations in the game. Five facts must also be named about each Whozit artist.

How many Whoziteers checked 100 per cent in identifying their first two Whozits? That would be an interesting thing to know. But it will remain a secret until all the Whozits have been solved. The main thing now is for every listener to begin checking and putting to one side to begin checking and putting to one side the identified Whozits from each issue toward a prize at the finish.

How Stations Make Whozit Interesting Various methods of presenting the "Whozitation," where the artist is described over the air, have been performed but of the interesting is the club idea. Whozit club is organized with the Whoziteers at one end of the "lodge room" (at their sets) and the studio staff at the other end (in the studio). The chief potentate sits in the middle and the Whozitating neophytes who are about to be initiated are led around the room to the sound of barbarous music until finally they are halted in front of the Great whozit who puts them through a category of questions preparing them for full-fledged membership.

Of course these questions and answers

WHOZIT SCHEDULE DECEMBER 1-15

Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific
12 n. WHT (399 WMAK (, 10 xcept Sundays	9	CKY (384.	8:30 4) Monday 5.6) Tuesda	7:30 , Wednesday. y, Thursday.	6:30
	5:45 (526) Daily,	4:45	3:45	10 WHK (27)	9 (6) Monday	8 ys, Wednesda	7
7	6	5	4	WSOE (24	1.8) Monda 9:15	8:15	7:15
WOC (483 7:15 WMAK (6:15 6:15 265.6) Daily,	5:15	4:15	KOA (322.		2. 11	7:15
7:30	6:30	5:30	4:30		9:30 9.7) Thursd		7:30
WMCA (3 7:50 WJAX (3 8 KVOO (33 WHT (39)	6:50 36.9) Daily 7 74.8) Daily e 9.8) Daily e	s, Saturday, 5:50 except Thursd 6 except Sundays x Sun., Mon. Dec. 1; Sun.	4:50 ays. 5	11 KMOX (28 KTHS (37 WHK (27) WHT (399	10 30.2) Daily. 4.8) Daily. 2.6) Tuesda .8) Daily ea 2.3) Daily ea	9	8
8:30 WPG (299	7:30	6:30 nd 13.	5:30	11:30 KJR (384.4 WMAK (2	10:30 Daily. 265.6) Tueso		8:30
9	5.6) Mon., V 8	Ved., Fri.	5:45 6	12 m. WHT (399	11	10 ccept Monday.	9
KPRC (29	6.9) Daily	y, Saturday. except Friday	§ a = 10	12:05 a.m. WHK (272	11:05 2.6) Saturda	10:05 vs.	9:05
WJR (516 WPG (299	.9) Monday, .8) December	eept Mondays. Wednesday. er 3 and 10. Ved., Fri., Sat		1 KVOO (37	12	11 Thurs., Sat.	10
9:15		7:15	6:15	1:15 KFWB (2	12:15	11:15	10:15
		81.0					

include enough personal description (not counting the comedy) to permit the listen-ing Whoziteer to check off the segments so that he may reassemble them to count on his score for one of the big prizes for the most accurate and best assembled sets. Club Idea Is Popular

The Whozit Club idea was first reported by R. E. Stewart, director of WMAK, Buffalo, N. Y. His letter describing the plan stated that WMAK expected to have 1,000 members by January 1. Each member receives an illustrated membership card entitling him to all the rights and privileges of the Whozit Club and declares him to be in "good and regular sitting." It might be suggested that such a card bear the portrait of the Great Whozit.

the portrait of the Great Whozit.
Listeners are also organizing to play
the Game of Whozit. They have their
meetings at homes of members, going
first to one home and then to another on the certain nights when the local station broadcasts its Whozit Hour. Together they follow the instructions that come

over the air and compete to see which shall assemble his pair of Whozits first. The first letter outlining this plan came from Miss Fern Nelson of Omaha, who listens to WOAW.

November 15 Copies Available

All specific information concerning the All specific information concerning the game may be found in the rules published on page 18. For the benefit of those who missed out by not getting the first Whozit gallery in the November 15 Radio Digest, it may be possible to get copies from the local news dealer. If his supply is exhausted there are a few extra copies of this November 15 issue obtainable from Radio Digest, 510 N. Dearborn st., Chicago, Ill.

But whether or not you have the first issue, do not fail to play the game with the issue now in your hands. Whether you go after a prize or not you will find it highly amusing and instructive, and acquaints listeners with their favorite artists and announcers.

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Radio Digest, Illustrated, Volume XIX, Number 4, published Chicago, Illinois, December 1, 1926. Published semi-monthly on the first and fifteenth of each month by Radio Digest Publishing Co. (Incorporated), 510 N. Dearborn Street, Chicago, Illinois. Subscription rates yearly, Three Dollars; Foreign Postage One Dollar additional; single copies Fifteen Cents. Entered as second class matter May 3, 1926, at the post office at Chicago, Illinois, under the Act of March 3 1879. Title Reg. U. S. Patent Office and Dominion of Canada. Copyright 1926 by Radio Digest Publishing Co. All rights reserved.

	Lady Listeners Love Lester, by W. O. Wiseman
1	How to Eliminate Interference, by Evans E. Plummer
1	Second Section of Whozit Pictures
1	"Goody Goody Girl," by Merlin Moore Taylor, Continued
1	How to Build Bruno Regenatrol, by Joseph Calcaterra
1	The Newest in Accessories
1	Woman's Page: Woman's Index to Programs.
1	The Reader's View
1	Editorials; Indi-Gest; Condensed by Dielectric
1	Directory of Radiophone Broadcasting Stations, by Wave Lengths
1	Advance Programs for the Larger Stations, December 1-14
- 1	

Looking Ahead

Course, There Will Be the Third Section of Whozits next issue. The game is being adopted nation wide as a winter pastime. Start it now!

Mr. Calcaterra Will Give Actual Constructional Data on Regenatrol. It will pay you to make this set.

Then There Will Be More New Accessories pictured and described next issue. Another feature which will appear December 15 or soon thereafter is an illustrated page on WHK, of Cleveland. Cleveland fans, watch for this.

No, the "Evening at Home Table" Has Not Been Discontinued. It will be back soon. And when Congress gives Radio an adequate control law, the regular broadcasting directory will be resumed.

Special articles about broadcasting stations and artists, with photographs, and NON-RADIO fiction 5,000, 10,000 and 30,000 words in length are desired. No manuscripts accepted unless typewritten and prepaid, or returned without return postage being inclosed. All manuscripts are sent at owner's risk.

Newsstands Don't Always Have One Left

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YOU WANT IT!

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

By Marcella

Norman Brokenshire Located; Ted Nel-son; Julius Walter; Sen Kaney AWOL; Eddie Loftus; Jerry Sullivan AWOL; Eddie Lottus; Jerry Sunivan in Person; Walter Newell; M. C. Bennett; Goldy and Dusty's Real Names; John Patt at WJR; "Eighty Pound" Charlie Schultz.

A TTENTION all ye faithful and persistent inquirers regarding the whereabouts of one Norman Bro-

kenshire, I bring ye glad tidings. The lost has been found. So kick the fatted calves and set the merry dials. Margaret Santry, writing from WPCH, Park Central Ho-



WPCH, Park Central Hotel, New York, N. Y says: "Mr. Brokenshire has severed his connections with the Arrow Amusement company and is now a full time member of our staff (formerly WFBH). However, he is planning at this time the establishment of an Artists Booking Bureau which will be conducted in connection with this station. Norman has also lately ventured into the song-writing racket." Horrors! That word "racket" sounds like something criminal! But, anyway, the first song is entitled "Believe, Beloved, in Me." Besides many others I know this will be welcome news to Frances of Poughkeepsie, Mary of Allentown, Ruby of Burlington Mary of Allentown, Ruby of Burlington and Dee of Canaan. Our latest informa-tion is that WPCH rides the 272.6 wave. The man with the pipe is Norm.

I wish I could print all of Dee's letter, it's so droll and girlish. She says that Norman is almost the "onliest man" who ever inspired her to verse although she is not especially an admirer. This is the

"My, ain't that mouth got words—
A loose vo-cab-u-lar-y!
Little words that mean a lot,
Big one's that are tommy-rot,
Middlin' sized ones that are not In any dik-shun-ary!"

And while she asks about Norman it happens that she inquires in the same letter for Alvin Hauser, formerly program director at WFBH. Maybe Miss Santry will send me that information too.

Betcha can't guess who is the new and proud associate director of WMCA, Hotel McAlpin, New York City? Yep, Ted Nelson. I just knew Ted would get there because he's that kind of a fel-



he's that kind of a fellow. Ted doesn't dominate the mike but he has a voice—and that isn't all. He's a go-getter. After he graduated from

After he graduated from Columbia in 1919 he had notions of becoming an M. D. but the urge was in him to perform public service in a big way. He started out on the city staff of the New York American. Thus he was swept into the channel of Radio broadcasting and became associated with WMCA almost at its inception. From one promotion to another he finally achieved his present status. Now, this is the interesting part for the readers of my column: Ted is a handsome, alert, progressive youngster—never been married and says he's never going to be. But, we've all heard that talk before. He has black curly hair and moustache, dresses like a dandy, carries a stick, can dance divinely and prefers blondes. One of these days some fair listener is going to walk right up and tune Ted Nelson into Mendelssohn's Big Parade and—I'll tell you all about it right here.

Yes, Sh-hhh- whisper, please. You were right, Mr. and Mrs. Leslie P. Mann of Le Mars, Ia. I heard him at WEBH, just as you did. And—but don't you breathe a word of this—he's there all right. He's broadcasting but he says he doesn't want it to get out in the papers that he's there. Mum's the word. Mum's the word.

Here is a picture of Julius Walter, KGW staff pianist, and I know this will please

staff planist, and I know this will please Ruth immensely who lives in the same town with him at Portland, Ore., and she's never even seen him although he is her favorite Radio artist. Julius is slightly girl shy although he secretly adores them one and all. He is single and twenty-four years



one and all. He is single and twenty-four years old. He is dark with blue eyes and is of Bohemian lineage. He has been with the KGW station eighteen months, directs orchestras and trios and they tell me his favorite hobbies are "the ivories and his Moon (meaning his sport car)." There are various ways of taking that "Moon," Ruth, as the little flower said to the bee.

Dear Jack at Denver: Your "Old Timer" friend at KYW was none other than that (Continued on page 17)

INTERFERENCE DISGUSTS PEOPLE

QUEEN MARIE MAKES ADDRESS OVER WCCO

HER FIRST STUDIO BROAD-CAST MADE IN ST. PAUL

Regal Visitor Honors Twin City Sta-tion—Registers Her Surprise at Luxurious Studio Equipment

MINNEAPOLIS.—Queen Marie of Rumania made her first studio broadcast on October 31, when she talked to the Northwest from the studios of the Gold Medal station, WCCO, in the Union Depot, St. Paul. It was the only public speech she made during her stay in the Twin Cities. The Queen was prepared for what might be termed her official Radio debut in the United States for she had written her speech. After brief instructions from the studio attendants, she sat down before the microphone and began as follows:

"I love America. I am glad to come to the great American Northwest and greet men and women interested in agriculture and its allied industries. Roumania is largely a farming country and my people meet the same problems you of the Northwest meet.

Interested Greatly in Agriculture

west meet.
Interested Greatly in Agriculture

Interested Greatly in Agriculture
"One of the reasons for my desire to see
your country was to find out first hand
how you are meeting these agricultural
problems and how you have built up your
remarkable transportation system, which
I have heard so much about, and how you
have developed your flour mills and other
industrial enterprises kindred to farming."

naustrial enterprises kindred to farming."

At the conclusion of her talk the members of her party, including Mayor "Larry-Ho" Hodgson of Saint Paul, and others, made ready to leave for the state capitol, but the Queen wanted to talk about Radio. "You know," she said to H. A. Bellows, director of WCCO, "that is the first time I was inside the studio of a broadcasting station. While I have broadcast many times before, it has always been, I believe, by what you call remote control; in other words, it was at a banquet or some other function at which the microphone was simply placed in front of me. I had no idea that the studios of a broadcasting station were as luxuriously equipped as this. Radio is certainly a wonderful thing."

The only places which Queen Marie officially visited in Saint Paul and Min-

thing."

The only places which Queen Marie officially visited in Saint Paul and Minneapolis were the capitol in Saint Paul, the Art Institute in Minneapolis and the Gold Medal Radio station, WCCO.

Light Five Candles on KYW's Birthday Cake

Old Timers Repeat Acts for Anniversary Program

CHICAGO.—A "wow" of a program was broadcast Armistice night from the Con-gress studio of Westinghouse Station KYW, when that station burned five can-

KYW, when that station burned five candles on its birthday cake.

The program was made up of artists from all three KYW studios. Many of the old timers of KYW were on the air. The listeners were reminded of the old Victrola days when Walter Evans, Wilson J. Wetherbee, Harold A. Fall and others used to do their bits.

Eddy and Fannie Cavanaugh, the Gaelic Twins, sang an old comedy sketch that they first put on KYW five years ago. Art Linick, comedian; Uncle Bob, bedtime story teller; the Original Harmony Girls—Edith Carpenter and Grace Ingram; the Niellson String Trio, the Apollo Male Quartet, Bobby Brown and his overseas Uke, Ray Hibbler, Louise Vernet, Lucille Long, Lewis Meehan and Arthur Wellington contributed to the success of the evening.

KHQ LINKED TO EIGHT STATIONS FOR PARTY

Spokane Celebrates Anniversary With Great Program

SPOKANE, WASH .-- A recent celebration commemorating the first anniversary of the establishment of Station KHQ, here, consisted of twelve hours of con-

here, consisted of twelve hours of continuous broadcast through nine stations. KHQ had a special tieup for the celebration by direct wire with eight other broadcasting stations. These were KFOA, Seattle; KGW, Portland; KSL, Salt Lake City, Utah; KLZ, Denver, Colo.; KFKX, Hastings, Neb.; WHO at Des Moines, Iowa; WBBM, Chicago, and KOWW, Walla Walla, Wash.

LATE "WHOZITEERS" CAN GET LAST ISSUE

THOSE readers of Radio Digest who were unable, because of the large demand for copies of the last issue, to obtain one, may have one mailed to their home address by sendmailed to their home address by sending fifteen cents in stamps or currency to the offices of this publication at 510 N. Dearborn St., Chicago. The beginning of the "Game of Whozit" with the last issue, the second November number, caused a shortage of copies, but a limited supply is still available. Persons subscribing for one year (\$3) may have their subscriptions started with the second November number.

WHOLE TOWN SENDS KOA TRUCK OF MAIL

ENVER.—Mail from a whole town for KOA! Fort Collins wrote it, a truck delivered it, and a special office force answered it—a sea of letters deciding what football game the General Electric station would broadcast. Several weeks ago KOA announced that listeners should decide which contest would be broadcast. A wide-awake paper in Fort Collins, alive to the publicity it offered the town, published a front page appeal for every citizen to write KOA asking that the Colorado Aggies-Utah Aggies clash be put on the air. It was.

AL SMITH'S DAUGHTER GOES ON AIR



Mrs. John Warner (Emily Smith), wife of Major John Warner of the New York State Police and daughter of Governor Alfred E. Smith, made her Radio debut recently at WGY, the eastern station of the General Electric Co. Mrs. Warner spoke on behalf of the State Charities Aid Association and explained what the association is doing to provide homes of proper environment for orphans. Like her famous father, she has the power of holding her audience's attention.

Whozit Correction!

The names of both WMAK, Buffalo, Whozit artists published in last issue on The name of the station manw.M.A. The name of the station manager, given beneath the bottom panel of pictures on page 7 as "A. T. Erisman" should have read A. J. Erisman.

Again, the name of the woman artist, given below the second panel of pictures on page 7 as "Grace Sande" should have read Grace Sandel.

These two errors, if turned in by readers solving the WMAK series of Whozits, will not be counted as incorrect inasmuch as this publication made the original error. The correction is given herewith merely in the interests of ac-

WCFL PREPARES FOR OFFICAL DEDICATION

Many Notables to Be Present Saturday, Dec. 11

CHICAGO.—WCFL, owned and operated by the Chicago Federation of Labor, and the only station in the United States built, owned and operated by its listeners who pay one dollar a year for this entertainment, is about to celebrate its official

opening dedication ceremonies.

This notable occasion will take place on Saturday, December 11, at the Ashland auditorium, here, and the dedication speech will be made by William Green, president of the American Federation of Labor. He will be assisted by Frank Morrison, secretary of the A. F. of L.

Other speakers to be heard are Governor

FANS TIRE OF **BOTHERSOME** RADIO NOISES

Interference Survey Brings Censure of Inferior Broadcasters

Seek Immediate Remedy

(See Article on Page 7)

That the majority of listeners of this country and Canada are sick and tired of the congested, noisy condition of the of the congested, noisy condition of the ether, is brought to light in a preliminary study of the many thousands of survey report blanks and accompanying letters returned by Radio fans in the National Survey of Radio Interference, now being conducted by Radio Digest. The listeners have about lost patience with Radio. Many are unwilling to invest more money or time in it. Few dare recommend Radio now to their friends. Almost unanimously the survey shows that listeners had better reception before than since the new station-licensing, power-increasing and wave-changing orgy brought about by the break-down of the 1912 Radio law.

By an overwhelming majority the survey blanks censure those broadcasters which have taken advantage of the present lack of government control by adopting wave lengths conflicting with those

which have taken advantage of the present lack of government control by adopting wave lengths conflicting with those of pioneering, established stations which formerly had become known for their high quality program presentations.

Perhaps It's Dissatisfied Minority

In analyzing the survey, the fact that over five million receivers are now in use has been taken into account. Not even one hundred thousand report blanks have been filled in by listeners. Perhaps the blanks are coming from a dissatisfied minority, but at any event, the survey indicates most abominable conditions.

Statistics typical of the entire United States and Canada will be available before the survey is completed, for daily newspapers in nearly every city of both countries have joined hands in the Radio Digest national interference survey. By the help of the daily papers a possible return of over a million survey reports is forecast.

If you are one of those listeners who

return of over a million survey reports is forecast.

If you are one of those listeners who have failed to report, send a stamped self-addressed envelope to Radio Digest with the request that one or several of the survey blanks be sent to you. These are free of charge. The aid of local Radio clubs and electrical societies is sought in this campaign. Radio dealers are also helping by distributing the survey blanks among their customers.

What Some Listeners Say

Interesting and significant comments are made by listeners on their blanks and in letters. From Hibbing, Minn., comes this:

"I would like to see the suspension of all new stations and all stations that have adopted new wave lengths without any regard to stations already using them."

And a reader from St. Joseph, Mich.,

And a reader from St. Joseph, Mich., remarks:

"Personally, I have spent all the money on Radio I will, until I see evidence of government control. I have an expensive set but I am having plenty of trouble, and so is everyone else I know."

Then read this from Lexington, Ky.:

"With all the A-I stations on the air, it seems a pity that another station can 'wildcat' in on their wave lengths and not only ruin programs from good stations, but fail to get its program, more often of a mediocre nature, over either."

Before signing off, here is an excerpt from a final letter from Deep River, Conn.:

"I invited friends in the other evening who were going to invest in a Radio. When they heard a sample of what was on the air and how difficult it was to get good programs clean and clear of heterogood programs clean and clear of hetero-dyning, they decided they would wait before buying,

Len Small, of Illinois, Mayor William Dever, of Chicago, John H. Walker and V. A. Olander of the Illinois State Federation of Labor, and John Fitzpatrick and Edward N. Nockels of the Chicago Fed-eration of Labor.

Mr. Nockels promoted and organized WCFL and is now its general manager.

The new Balkite Combination supplies all radio



power automatically from the light socket



Balkite "B"

Eliminates "B" batteries and supplies "B" current from the light socket. Three models. Balkite "B"-W at \$27.50 for sets of 5 tubes or less requiring 67 to 90 volts. Balkite "B"-X for sets of 8 tubes or less including power tubes—\$42. Balkite "B"-Y for any radio set—\$69. (In Canada: "B"-W \$39; "B"-X \$59.50; "B"-Y \$96.)



The New Balkite Charger

MODEL J. Has a low trickle charge rate and a high rate for rapid charging. Can thus be used either as a trickle or as a high rate charger. Noiseless. Special model for 25-40 cycles. Price \$19.50. West of Rockies \$20. (In Canada \$27.50.)



Balkite Trickle Charger \$10 MODEL K. Can be left on continuous or trickle charge thus automatically keeping the battery at full power. Converts your "A battery into a light socket "A' power supply. Rate about .5 ampere. Price \$10. West of Rockies \$10.50. (In Canada \$15.)

All Balkite Radio Power Units operate from 110-120 volt AC current with models for both 60 and 50 cycles. Also special model of the Balkite Charger for 25-40 cycles.

set from the light socket. Merely or renew, is a permanent piece of by adding the new Balkite Com- equipment, and is built to conbination Radio Power Unit. Once form with the standards of the connected to your "A" battery and Underwriters' Laboratories. It is set and plugged into the light noiseless in operation. It will serve socket, it supplies automatic power any set now using either 4 or 6to both circuits. You need not volt "A" batteries and requiring even turn it off and on for it is not more than 30 milliamperes at controlled by the filament switch 135 volts of "B" current. This inalready on your set and is entirely cludes practically all sets of 8 automatic in operation. When- tubes or less, including power ever you turn on your set you will tubes. It operates from 110-120 find it always ready to operate volt AC current with models for

with full even silent power. It will give you a constant quality of reception to be secured in no other way.

Balkite Combination can be installed in a few minutes, either near the set or in a remote location. Small and compact, it occupies very little space. Like all Balkite Radio Power Units it

Hear WALTER DAMROSCH

and the

NEW YORK SYMPHONY

in your own home over any one of 13 stations

Every other Saturday night a symphony concert. On alternate Saturdays one of Mr. Damrosch's popular piano recitals on the great Wagner Music Dramas. Over stations: WEAF, WEEI, WGR, WFI, WCAE, WSAI, WTAM, WWJ, WGN, WCCO, KSD, WDAF, WOC.

Balkite Hour 9 P. M. Eastern (8 P. M. Central) Standard Time.

Now you can operate your radio has no tubes, nothing to replace

both 60 and 50 cycles.

Add Balkite Combination to your radio set and convert it into a light socket receiver. Know the pleasure and convenience of owning a set always ready to operate at full power. Price \$59.50. [\$83 in Canada.] Ask your dealer. Fansteel Products Co., Inc., North Chicago, Ill.

FAN STEEL Radio Power Units

EDGAR W. ENGLE U.S. REISSUE PATENT NO. 16,438, DATED OCT. 12, 1926 THE BALKITE LINE OF ELECTROLYTIC DEVICES IS PROTECTED BY

Lady Listeners Love Lester

By W. O. WISEMAN

I thank you for your nice letter and all the kind things you have said about our station

and staff.

WOAW is always glad to hear from its listeners. It is the only way we have of measuring the success or failure of our

I shall be glad to hear from you any time in the future when you particularly enjoy our programs.

Sincerely yours,
(Signed) LESTER PALMER,
Director WOAW
P. S. If you will listen in at...p. m.,...,
you will hear a selection dedicated to you.

HAT, dear ladies, is a love letter! It's a love letter from Lester Palmer, WOAW's chief announcer and program

It's a nice polite love letter. It says much

and little.

It's a convenient love letter.

The way it's dictated is this—

Mr. Palmer turns to his stenographer and says: "Send her reply No. 1."

Now, girls, if you write a second love letter to the voice on the air, Mr. Palmer turns to his stenographer and orders: "Send her reply

By this unique method "Les" Palmer believes he has solved a problem that has troubled many an announcer—married or single. Most every Radio announcer gets mash notes.

And then again, dear ladies, if you are persistent enough in your admiration of L. P., the mysterious voice, you may go clear through his category of form letters and get a real personal letter from Mr. Palmer

Many are the girls who become infatuated with L. P.

This secret came to light recently when friends raided his desk and found a handful of the "mash notes" he has received. Really, girls, Mr. Palmer is a very modest and even bashful man.

Attached to each letter was a carbon of L. P.'s reply (careful young lawyer that he is). No chance for any maiden fair to sue him for breach

The friends compared the letters and discovered that the replies were nearly all alike. And the steno let out the secret of the "form letter"

Meanwhile, L. P. has acquired a padlock for his private files. What his reaction will be when he sees these letters in print—well, we'll give him a few days to cool off before we show him!

Here s just a sample of what L. P.'s friends stole before he procured

the padlock:

I have been enjoying your program this afternoon. I don't mind telling you I'm downright lonesome. I would rather hear you announce, L. P.,

GIRLS and Married Ladies
All Take a Shine to "Judge" Palmer Who Announces at WOAW, Omaha. He Answers with Form Letters.

than anyone else on the air, in fact, the prince of my dreams, seen through the film of fancy, seems to have adopted your voice and line. However, I'm reputed to be quite—sensible, and it's always best to live up to one's reputation, and since that particular quality is the only one of the many unattainable qualifications of the master of my fancies, being desperately in love with you over the Radio isn't going to hurt me in the least. I like both your songs, "Truly I Do", and "Won't You Believe in Me".

Sincerely yours,

The above letter brought no present with it, according to records in L. P.'s files. But one of the fair married ladies who sent L. P. a love note enclosed a lock of

Another embroidered a silk handkerchief with his initials, "L. P." in the corner. Still another sent him five pounds of cheese, which, according to her letter, she made with her own fair hands.

Made with her own fair hands.

A letter containing Spanish phrases, taken from L. P.'s files, told of a cake she had baked for the announcer, and how she would like to make all his cakes.

WOAW's Sunday morning church service was where another of these one-sided

romances began, as indicated in the following epistle from Iowa: Dear Lester: As I've heard your voice many, many times

over the Radio, I have decided to write and tell you I'm in love with you.

I saw your photo in the "Third Anniversary Bulletin" you sent me. As it announces you to be a "confirmed bachelor" I might as well tell you I loved you before I saw it and I love

you just as much since.

I always listen to the Sunday morning church service from WOAW. I enjoy it immensely as I sing in the choir of our church and I am interested in church music. I'm opening my heart to you, Lester, and I certainly would be

delighted to hear from you.

Every night in the choir loft (my mother makes me go)

I keep wishing I was home listening to you over our Radio.

Yours forever and lovingly,

(Signed) FLOSSIE.

Sincerely, GLORIA. Well, ladies, have you received your form letter yet?



Two views of the charming Lester Palmer at WOAW, whose voice over WOAW lures the hearts of fair listeners and brings him many "mash" notes.

Better to he through a new to the new to the through a new to the new to the through a new to the through a new to the new to th

Make Your Old B Eliminator a Super B Supply



Your present B Eliminator can be vastly improved by connecting a Mershon Condenser across the output voltage terminals. You will then get a wonderful tone quality from your radio receiver as the very large capacity of the Mershon (30 mfds) will act as a reservoir to STORE energy to be on tap to instantaneously supply the heavy drains of plate current required by loud or long sustained notes. No doubt, you have noticed that although your B eliminator gives no AC hum you do not get that perfect reproduction of tones that was possible using new B batteries.

To simply filter out the light socket current hum is but part of the job. Eliminators must have STORAGE capacity to prevent "chopping off" the loud or sustained notes. Using a Mershon Condenser for this storage capacity gives the quality of expensive storage batteries and does the work electrically rather than chemically. This in turn means there is no deterioration, adding of water, no elements to occasionally clean, no parts to be replaced, in other words a more SERVICEABLE device is at hand, as well as one providing amazing tone quality.

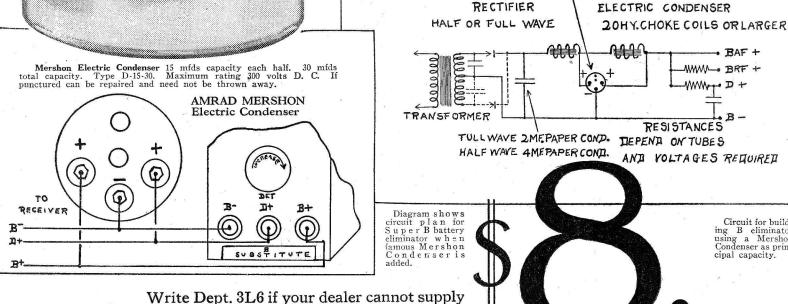
A famous Mershon added to your eliminator or used as the principal capacity of any B eliminator enables your set to reproduce notes from bass to treble with astounding accuracy.

The AMRAD CORPORATION Medford Hillside, Mass.

AMRAD MERSHON

· BAF +

Circuit for build-ing B eliminator using a Mershon Condenser as prin-cipal capacity.



Battery type and light socket operated NEUTRODYNES

How to Gliminate Interference

AN interfering stations be separated? Can two stations on closely adjacent wave lengths be separated? Can a receiver be made more selective so as to accomplish these desirable separations?

The answer is, "Yes." Two stations, so long as they are not on the same identical wave length, can be separated. Even when two stations overlap their carrier wave side bands (phrases novices need not worry about) a real selective receiver can affect a partially successful and sometimes completely satisfactory separation.

times completely satisfactory separation. Receivers not built sufficiently selective to do these things can be made amply selective by the addition of special tuned radio frequency stages or filter devices, such as wave traps. The broadcast listener of today, beset upon every side by interstation interference, by power increases in populous vicinities, and by congestion of practically every known kind in the ether channels, is indeed in need of the most selective receiver he can procure. the most selective receiver he can procure.

Ways of Improving Selectivity

Again I call your attention to the fact that it is not necessary to have an ex-pensive multi-tube receiver in order to gain that much desired selectivity or ability to separate many of the crowded together stations. Merely by providing your receiver with a few simple and inex-pensive accessories, or perhaps improving your antenna system, the receiver you have been using may do the trick. At any event, the suggestions to be given herewith are worthy of a trial.

A brief resume of the various methods of increasing the selectivity of a receiver includes the use of short outdoor or in-door aerials, better ground connections, a stage of balanced and tuned radio frequency, wave traps (or high frequency by-pass circuits), good variable conden-sers, vernier controls, low loss inductances, shielded sets and a great deal of

Patience in tuning a set is a remarkable aid to selectivity that is often overlooked by the beginning Radiophan.

Poor aerials and grounds mean a path of high resistance for the incoming Radio

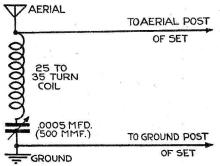


Figure 3 signals, with an increased loss of selectivity. In general it may be said that the lower the resistance of an antenna circuit (aerial and ground), the correspondingly higher will be the selectivity

of that circuit.

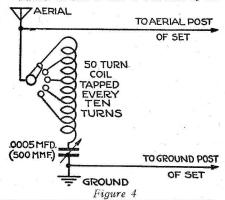
Short aerials mean low resistance aerials. It is often wise, when selectivity is desired, to use an aerial not over sixty of seventy-five feet long, including the ground lead and lead-in in this length. The ground connection is very impor-

tant. This should be clamped or soldered to a cold water pipe which has been scraped or filed clean at the point of connection. The Ekko ground clamp is very

The aerial lead should be insulated well from contact with the house or window sill at the point where it is brought into the house. Porcelain tube, or other effective incultare should be used. the house. Porcelain tube, or of fective insulators should be used.

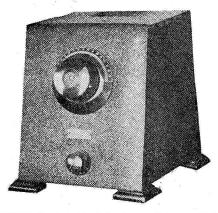
For the separation of local or nearby stations, without interference, the writer has used a short indoor aerial with much success. It might be well to have one of these available for use or experiment.

Penetrola One of Best Aids Earlier in this article it was said by the



PHERE'S Lots of It on the Air, But possible in tuning to eliminate an interfering station. These Suggestions Will Really Help You

To use the trap, after having connected it as shown and placed it at least two feet away from the receiver's cabinet, set the dials of your receiver where the desired station is heard, but is interfered with by



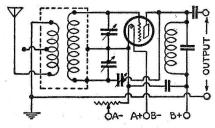


Figure 1, left, shows the Penetrola, a device which is of much help in making any receiver selective enough to tune out interfering stations. Above is figure 2, the Penetrola hook-up. The dotted line indicates shielding around coils.

connected in series across the aerial and ground binding posts of the receiving set, and should be placed several feet away from the cabinet of the set so as not to be inductively coupled with the receiving

The efficiency of this arrangement is almost entirely dependent on the grade of apparatus used, so that it is advisable

to use the best obtainable condenser and

The coil can be made by the Radio fan

who cares to dabble in such things. This is done by winding in a single layer 25 turns of number 24 dcc. wire on a 3-inch

diameter or 35 turns of the same size wire on a 2-inch diameter paraffined cardboard, hard rubber or bakelite tube.

To make the trap even more effective,

writer that a special stage of tuned and balanced radio frequency could be applied to one's receiver to give it the required selectivity. One of the best, if not the very best devices on the market for this purpose is the Penetrola, made by the Walbert Mfg. Co., 937A Wrightwood Ave., Chicago. The Penetrola, used ahead of any receiver, is a revelation of surprises in Radio reception.

Not alone does the Penetrola make separation of interfering stations possible, but at the same time the unit ends the merciless blooping noises which your receiver may be sending out on the air without your knowledge. Penetrola also filters out the bloops of neighbors' receivers to a remarkable degree.

The Penetrola unit is pictured in figure 1. Its appearance is such that it may be placed side by side with the best of rereceivers without seeming out of place. It may be had in either black crystalline or wood finishes. The Penetrola circuit, for those of you who are more technically inclined, is shown in figure 2.

Can Be Used on Any Set

Penetrola is built around the Isofarad circuit which is one of the balanced bridge arrangements which has proven very successful. It is made in such a way that it can be used with any receiver; non-regenerative, regenerative, tuned radio frequency, neutrodyne or super-heterodyne. It will increase the selectivity of any receiver and make it possible to tune in distant stations loudly and clearly in spite of local interference.

It will stabilize a set and make a ticklish one easier to handle. It is presented in this article also because it acts as a uni-directional or one-way repeater, allowing energy from the antenna circuit to be applied to the set proper, but not permitting energy from the circuit to be radiated in the form of squeals over a wide area.

Penetrola may be had either as a completed unit or in kit form ready to build. The essential parts are contained in the kit and include a twin variable condenser, canned coil, output choke coil, balancing condenser, socket, brackets and vernier dial. Full size drilling templates and directions for assembly are also furnished.

The operation and connection of Penetrola will not be discussed here, as these are explained in the directions supplied with the units or kits.

Wave Trap Usually Sure Cure

The wave trap, sometimes called high frequency by-pass or filter, about to be described, is one of the surest of methods of separating and eliminating one of two closely tuning stations, be they both dis-stant or one distant and the other nearby. A wave trap consists essentially of a coil of wire (inductance) tuned either by switch taps (inductively) or by a variable switch taps (inductively) or by a variable condenser (capacitatively), which is placed in series or parallel with the coil. The device may either be placed in series with the receiver in the aerial lead, or in parallel with the receiver across the aerial and ground posts of the set.

One of the most efficient of these is shown in figure 3. It is connected in parsnown in figure 3. It is connected in parallel with the receiver and is therefore known as the parallel type. The theory is that the wave trap circuit, when tuned to the wave length of the station not desired, will by-pass the signals from this station into the ground.

Efficiency Depends on Parts Used

The parts required for the trap are but two: a good low loss type variable condenser of .0005 mfd. (500 mmfd.) capacity and a 35-turn honeycomb coil, or equiva-lent low loss coil inductance. The two are

the undesired station. Next, adjust the variable condenser of the wave trap until the interference has been reduced to a minimum, at the same time readjusting the receiver so that the desired station comes in as strong as it is possible to

A little practice will soon surprise the most skeptical listener. In logging or recording dial settings so as to come back to a station when desired, it will now be necessary to include the reading of the wave trap dial along with the others.

Other Aids to Selectivity

Low loss variable condensers and inductances, if not used in your receiver, should materially improve the selectivity if substituted for the less efficient variable condensers and inductances.

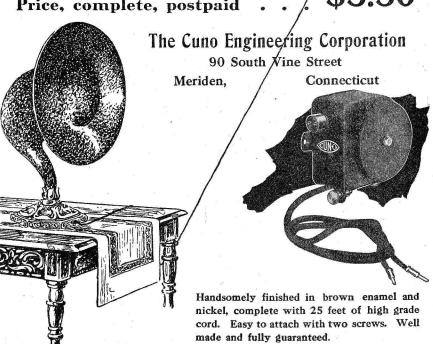
Super sensitive sets, such as the superheterodyne or five tube Radio frequency designs, should have their cabinets (or coils inside) well shielded so as not to pick up interfering stations through the ability of the coils to act as effective aerials. Sometimes it is found good to shunt (place in parallel) heavy capacity (0.5 to 2 mfd.) fixed condensers across the A and B battery leads to the receiver, especially where these leads are over one foot in length. This prevents energy, so picked up, from going on through the receiver.

Of course, after all of the above remedies have been tried, there still remains that impossible problem—separation of two stations on the same identical wave length. This problem, until some new invention may solve it, remains for Con-gress to handle by passing legislation not allowing two stations from broadcasting on the same wave length at the same time. Meanwhile, write your Congressman and tell him that it cannot be done any other way. Perhaps he'll get the idea after a few thousand letters pile up on his desk.

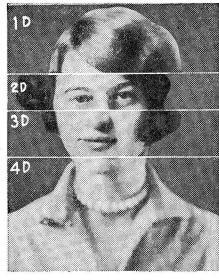


Loud Speaker Extension Cord

You'll want one of these real conveniences. With the self-rewinding reel, you can place your loud speaker where you want it; when not in use, keeps cord out of way and protects it. Button controls ratchet. If your dealer can't supply you, order direct. Price, complete, postpaid



CUT OUT AND ASSEMBLE THESE WHOZIT PICTURES

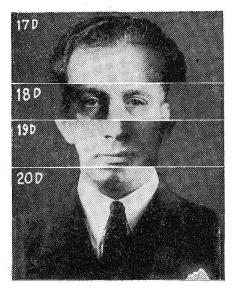


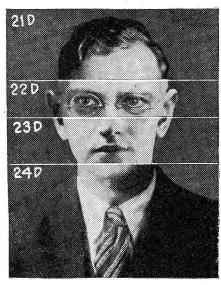


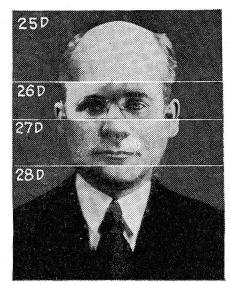


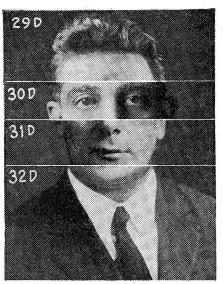


The following artists are in above panel: Ann Walsh, KMOX; Eva Thompson Jones, WSM; Elza Bloedle, WSOE; Johanna Grosse, WLW.



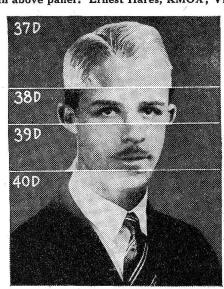


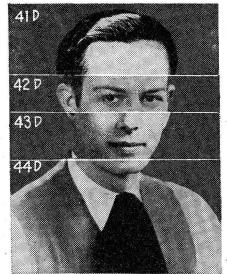


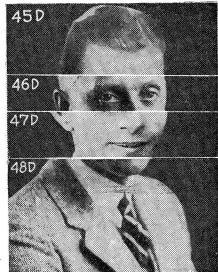


The following artists are in above panel: Ernest Hares, KMOX; Vito Pellittieri, WSM; B. M. Havens, WSOE; Rev. Jesse Halsey, WLW.

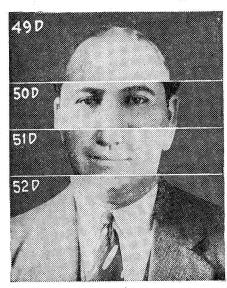


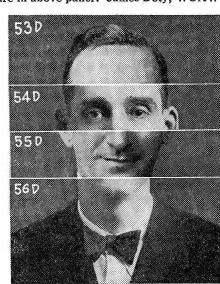


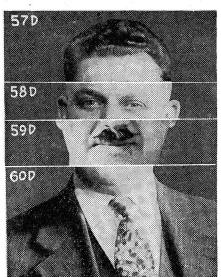


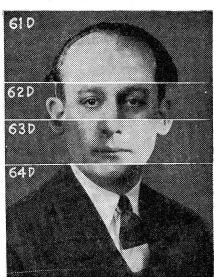


The following artists are in above panel: James Doty, WOAW; Hyman Shrier, WOAW; Eber Grubb, KOA; Stanley Hall, KOA.



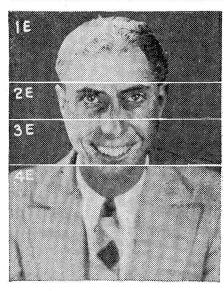


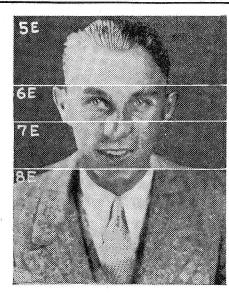




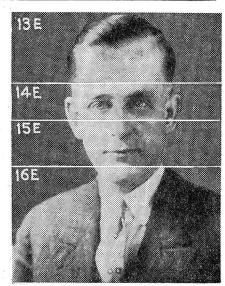
The following artists are in above panel: G. C. Arnoux, KTHS; Lon Chassy, KTHS; Harry Taylor, WHB; Don Anchors, WHB.

PLAY WHOZIT AND WIN \$26,000 PRIZE AWARDS

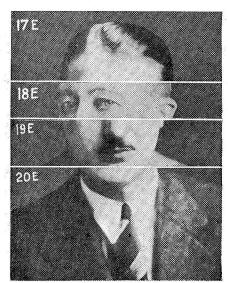


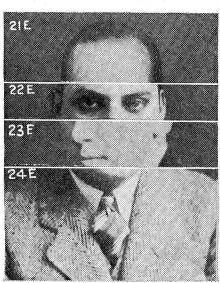


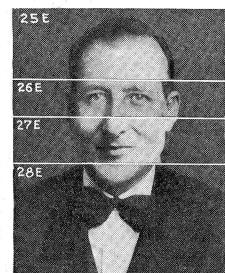


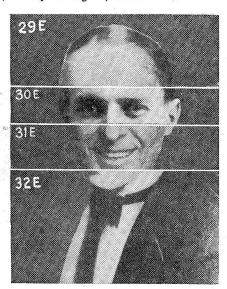


The following artists are in above panel: Ray Kellogg, KFWB; Bill Hatch, KFWB; Clyde McArdle, WNAC; Jimmy Gallagher, WNAC.

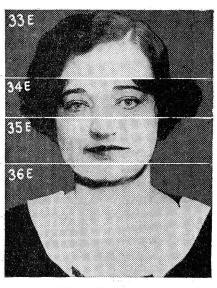






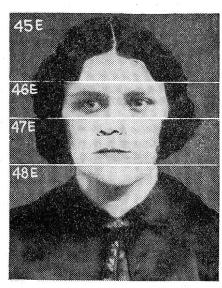


The following artists are in above panel: Jim Forshey, WOOD; Sid Goldman, WOOD; Alfred P. Daniel, KPRC; Ernie Golden, WMCA.



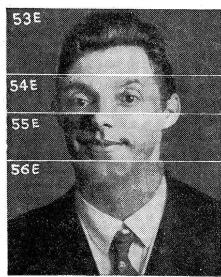




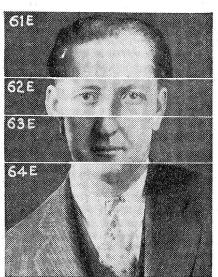


The following artists are in above panel: Virginia Willrich, KPRC; Helen A. Morris, WMCA; Gertrude Arnold, WHK; Regina Haller, WHK.









The following artists are in above panel: J. W. Way, WPG; L. Powell Evans, WPG; Bob Miller, WMC; Clarence Jackson, WMC.

GOODY GOODY GIRL

TESPAIRING and Alone, Lois Finds Herself Helpless Behind Steel Bars Until Raymond Comes—Then She Discovers that She Has Been Painted a Scheming Crook.

HISKED suddenly and unexpectedly out of the uneventful atmosphere of the little town of Paradise, Lois Sylvester found herself in a strange whirl of roaring night life in Chicago. Not dreaming of her impending fate as she trudged along the country road to occur the transfer. country road to escape the tyranny of an uncompromising step father she had bituncompromising step father she had bitterly resented the advances of Herbie Coles, a neighbor boy, who offered her a lift in his car in exchange for a kiss. Later, however, when she had met Raymond Lancaster, wealthy youth, aboard the Chicago train and had been taken into the care of Mrs. Gayton, also aboard the same train she met Herbie again. As the same train, she met Herbie again. As the guest of Mrs. Gayton she went to the races and made a successful bet on a horse. At the same moment Herbie, who sat beside her, lost everything. At the request of Mrs. Gayton she started back to the city with Herbie who seemed bound on a mysterious mission that required speed. a mysterious mission that required speed. They were overtaken by a motorcycle policeman and thrown into a suburban village jail. Lois put in a call for Lancaster who had promised to come to her rescue at any time should she need him. While she was telephoning Herbie slipped out of the door and escaped with the car, leaving her alone. The police were interested in her reference to Victor Jermin as a friend of Mrs. Gayton's and found a a friend of Mrs. Gayton's and found a great deal of amusement from the chief's allusion that perhaps Victor was now using "grease instead of soft soap." But the meaning of the expression was lost on Lois. With Herbie gone she now waited developments over the telephone.

CHAPTER X

"I Love You"

HE walrus-mustached chief indi-cated a chair. "Sit down. No," as Lois glanced at the barred door and questioned him with her eyes, guess we won't have to lock you up. got to make out your arrest slip and fill in the bonds, ready when someone comes to put up the money. Ah," as the telephone began ringing, "this might be one of your friends now." friends now.

He was wrong. It was not Lancaster, but someone whom he addressed as "captain" and as they talked the shaggy eyebrows and the walrus-mustaches wagged and webbled in unison and his tones.

brows and the walrus-mustaches wagged and wobbled in unison and his tones became surcharged with mixed excitement and indignation.

"What's that?" he cried into the mouthpiece. "They're figuring on running through here? Other road's got too hot? Of all the nerve! You bet we'll take a hand. The cross-roads? In half an hour? O. K. I'll round up the boys and be there."

He slammed the receiver on its hook and

He slammed the receiver on its hook and whirled to the motorcycle man. "Go find Joe and Tom. We got business to tend to. The highway police-

His subordinate already had departed. Evidently the chief's share in the conversation over the wire, meaning nothing to Lois, required no explanation for him.

Walrus-mustache turned to the girl. "So! You're just a decoy, eh? This speeding stuff was all framed to get the boys inside and keep me busy while your friends did their stuff! You—"

"What are you talking about?" cried Lois. "I don't understand."

HE chief opened a drawer of the desk and extracted a heavy iron ring with four huge keys attached.

If our huge keys attached.

"Stalling won't get you anywhere, young woman," he said grimly. "Come on."

"You're going to lock me up, after all?
What have I done?" demanded the girl.

"You'll have no chance to tip off your gang that I'm hep to them," retorted the chief. He put a hand on her arm, forced her not ungently to her feet and propelled her toward the barred door. Then, still her toward the barred door. Then, still holding to her, he unlocked it and motioned to her to enter.

Lois threw a timorous glance across the threshold. Other barred doors—gloomy, forbidding, sinister in the half-light of a

forbidding, sinister in the half-light of a single incandescent in the ceiling—gaped evilly at her. She shrank back in dismay. "Please don't put me in there," she begged. "Let me sit out here with you." "I won't be here. I'm going—some place, with the boys," said the chief. "Go on in there, young woman." "But if somebody calls up: about honds

But if somebody calls up; about bonds,

By MERLIN MOORE JAYLOR

"Investigation? Of what?"
Walrus-mustache made an irritated gesture. "I'm not going to stand here arguing with you. Of course, if you want to come clean, tell me the truth—."
"I've nothing to tell."
"All right. In you go. I'll be decent. I won't put you in a cell. I'll give you the run of the place, seeing you're alone."
He gave her a little push and clanged the door to. Her eyes made a quick circuit of the place. Three cells with sheet iron

"You can't get bonds now. You're held for investigation."

"Investigation? Of what?"

Walrus-mustache made an irritated gesture. "I'm not going to stand here argu-

Suddenly the air was rent by a shrill, insistent ringing of the telephone bell. She started to her feet, then sank back again. It was Lancaster, she guessed, calling the number his mother had taken. Getting no answer, he doubtless would hang up and go to bed while she—. Oh, well, it didn't matter. The chief had said she couldn't get bonds anyhow.

to return right now, I'd soon be occupying one cell in there and you another. Oh, well, I've got my lucky rabbit's foot with me. There. Come on out."

She came, breathing deeply, and rewarded him with a grateful look as she sank into a chair beside the desk. Langaster leghed the deservations and the latest and the lates

caster locked the door and tossed the keys

caster locked the door and tossed the keys back into the drawer.

"Come on. Let's get away while we can," he urged. "I've got a car outside. Somebody's liable to come any minute."

"Should I really run away?" she asked.

"Unless you prefer being kept a prisoner here or somewhere else for no telling keys lore.

oner here or somewhere else for no telling how long, having your picture in the papers, long write-ups—"
"But I haven't done anything."
"The chief thinks you have. He'll tell the newspapers. It will mean that you'll be a marked woman forever after. Come on while the way's clear."
She sighed. "All right, if you think best. By the way, what would be a fair fine for speeding sixty miles an hour?"
"Oh, say ten dollars. Good Lord!" He stared as she opened her purse and took out a bill. "What are you doing?"
"I'm going to leave ten dollars with a note saying I plead guilty to speeding."
"I thought what's-his-name—Coles?—was driving?"
"I assumed responsibility. We were

"I assumed responsibility. We were speeding and I wouldn't feel right—"
"Oh, all right," he broke in with an air of resignation. "Only hurry."

HE found pencil and paper and indited a short note, put note and bill into an envelope and propped the envelope up against an ink-well.

"Will you hurry?" begged Lancaster from the doorway. 'The road's clear just this minute, but—"

"Coming," she replied and joined him. A moment later the coupe in which he

A moment later the coupe in which he had arrived had been turned and they

A moment later the coupe in which he had arrived had been turned and they were headed toward Chicago. Suddenly Lancaster began to laugh.

"I'll bet when the chief comes back, finds you flown and the door locked he'll tear his hair out by the roots trying to figure how it was done. And when he finds that note—oh, my."

"Of course, he won't know about you," she said, joining in his merriment. Abruptly her laughter broke off. "By the way, how did you happen to find me?"

"Quite easily. When I called the number you left and got no answer I searched the suburban telephone directory until I found it. Then I drove out to the station and—you know the rest."

"I don't know how you learned who called. I didn't give my name."

"Something told me it was you. I couldn't have slept until I found out what had happened."

"I'm always being a lot of trouble to you. On each of the three times we've met, you—"

"Have derived pleasure from being of service to you." Suddenly he drew up to

you. On each of the three times we've met, you—"

"Have derived pleasure from being of service to you." Suddenly he drew up at the side of the road and stopped the car. "Lois, do you remember what I said the first time we met, that day on the train, just a moment before Mrs. Gayton knocked—"

OIS thought she knew what was coming—an apology for losing his head, for trying to make love to her. She didn't want him to do that. It would embarrass them both.

barrass them both.

"Yes. I remember," she said. "Can't we forget it? You admitted you were mad. Let it go at that."

"I said I was mad—about you," he corrected. "I still am. I said I loved you then. I do now. I—"

"Please." She laid a hand on his arm pleadingly. "I think you had better drive on."

on."

"No." He took her roughly in his arms, drew her to him along the seat and freed one hand to tip her face to his and kiss her. What Mrs. Gayton had said—"men are wolves; the best of them will pounce if they have an emportunity"—flashed. they have an opportunity"—flashed through her mind. Lancaster had done just that—pounced. to release herself.

"You're hurting me," she panced, twist-

"You're hurting me," she panced, twisting her lips away from him. "You're hurting me and I'm not thrilled at all."
"Hurting you? Of course, I'm hurting you." He spoke savagely. "I want to hurt you. There are moments when I could murder you—when I remember how you played me for a sucker, making me think you were an innocent little country

(Continued on page 20)

Directory Is Back

HOUSANDS of readers of Radio Digest have won-dered why the Directory of the Radiophone Broadcasting Stations, heretofore appearing serially continuously on the next to last page, was omitted during the past three issues. Perhaps mention should have been made of the reason. Letters of complaint surged into the publication's offices.

The reason this directory has been omitted is because the station data is changing so rapidly as to make the material published almost useless before it reaches the reader. This deplorable state of affairs is only another very good reason why congress must act immediately to provide some means of controlling the licensing and wave length allocation of broadcasting stations.

To answer the demand for the Directory, however, Radio Digest has reinstated at least a part of it on page 23 of this issue. No guaranty of its accuracy is made, and the challenge offer of one dollar for corrections made by readers is withdrawn until further notice when broadcasting conditions have become more stabilized. The information given was checked very carefully, but there will be errors.—THE EDITOR.

sides and barred fronts stood against the back wall. Their top, of bars also, did not come within three feet of the ceiling. She could see they were empty, as he had said, but the fact that she was the sole prisoner frightened, rather than reassured, her she turned her back on the cells and ner. She turned her back on the cells and pressed her face close to the bars on the door that separated her from the welllighted office.

Walrus-mustache was examining a heavy revolver, holding it close to his eyes and whirling the cylinder. Then he jammed it into a holster under his coat, picked up a cap from the table and vanished through the door into the night.

WHERE was he going? What had he been told in that telephone been told in that telephone message to excite him and make him turn upon her with accusations? It was all quite a mystery to the girl he had left clinging to the barred door and after a bit Lois refused to indulge in further fruitless conjecturing and turned for a detailed inspection of the cell-room.

The three cages were identical. Each boasted two iron bunks swinging on chains from the iron wall at the back, one bunk being above the other. Each bunk had a small pad running its length and on each was a folded blanket and a small pillow that crackled to the touch, indicating that its ms a stationary washstand and toilet. The whole place offended her nostrils with a sharp odor of soap and strong disinfect-

She went back to the door into the office She went back to the door into the onice and treated her lungs to deep breaths of the fresher air to be obtained there. Weariness began to steal over her and she glanced over her shoulder toward the cells. After a bit she went to the middle one—because it permitted her to see into the office—and contemplated the lower bunk. She could not bring herself to lie down upon it, but she gingerly picked up,

HE bell quit ringing but after an interval started up again, quit again and a third time sounded its shrill call. was glad when eventually whoever was trying to get the station gave up. Presently the half-darkness of the cell-room, the faint sounds of whining tires upon the highway outside, her own weariness, combined to make her sleepy. She put her arms across her knees and dropped

her head upon them.

"Hello, hello, hello."

She awoke with a start, the repeated hellos in her ears. For a confused moment she thought someone was using the

ment she thought someone was using the telephone, then a man came to the barred door and shouted "hello" again.

"Hello," she replied, got to her feet and went toward the door. Then she had recognized the other and with a sobby little cry of "Raymond" thrust her hands through the bars to clutch at his coat.

"Lois! My God! You're locked in there. What have you done?" He took her hands in his own and somehow she felt soothed and strengthened.

She began to pour out her story, her

She began to pour out her story, her hands still in his.

"Wait!" he interrupted once. "It was when Jermin's name was mentioned that he said your bonds would be two hundred and fifty dollars?"

"Yes And he and the metrocycle rece

and fifty dollars?"

"Yes. And he and the motorcycle man laughed and something was said about Mr. Jermin handling grease instead of soft soap. Then the telephone rang

"I see," said Lancaster when she had

finished.

"Well, I don't and if you'll explain it—"

"The first thing is to see about getting you out of here."

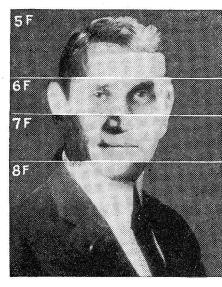
"I'd be satisfied if I could just sit down

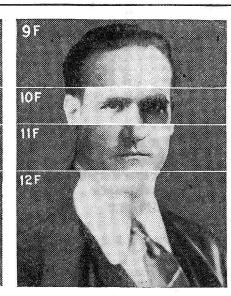
out there in the office. Say, go over and see if he didn't leave the keys in that top, right-hand drawer?"

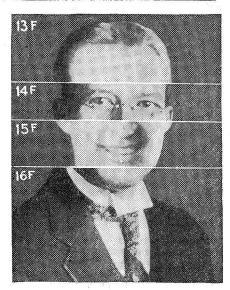
Lancaster followed directions and came back with the keys in his hand. "Jailbreaking is a serious offense," he said nervously. "If the chief should happen

START NOW PLAYING GREAT GAME OF WHOZIT



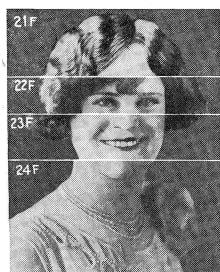


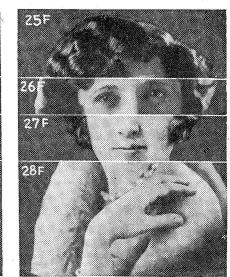




The following artists are in above panel: Erwin Swindell, WOC; Gilson V. Willets, WOC; Pat Barnes, WHT; Joseph Ball, WMAK.

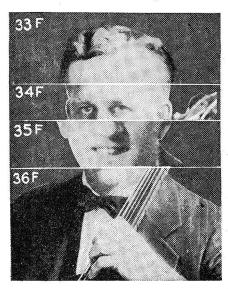


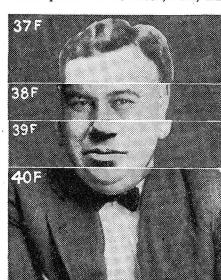


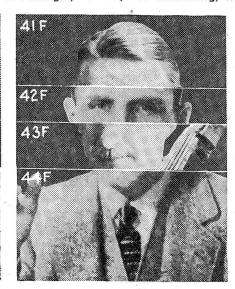




The following artists are in above panel: Cecile Baron, KJR; Hazel Reisinger, KVOO; Eva Rautenberg, WMAK; Helen Rauh, WHT.





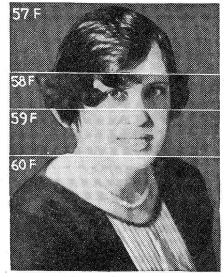




The following artists are in above panel: D. R. P. Coates, CKY; George Kirchner, KJR; H. S. G. Fraser, CKY; Ed. McConnell, WJAX.









The following artists are in above panel: Charlotte Myers, WJR; Big Sister, KVOO; Mary Tudor, WJR; Grace McConnell, WJAX.

Put the decision up to your ears, and you'll put other speakers out of your mind!



A MERE facial likeness would not proclaim another Caruso! Neither can mere semblance in shape provide the counterpart of a Farrand Speaker. To rely on your eye is to court confusion; to decide with your ears is to unhesitatingly choose a Farrand. For tone quality is something to be heard, not seen. Hear. Compare. Listen—and then you'll see. Your dealer willgladlydemonstrate the Farrand Speaker —in his store or at your home. Find out for yourself TODAY what a half-million listeners discover every night!



FARRAND MFG. CO., Inc. LONG ISLAND CITY, N.Y.



Layerbilt construction makes

this the most economical

of "B" batteries

IMPROVEMENT on top of improvement has been the history of Eveready Radio Batteries. Here, in the radically different Eveready Layerbilt, is the "B" battery which tops them all. The ability of this battery to give you unrivaled service and economy is due to its unique internal design. Instead of the usual assembly of round cells, it is built of flat layers of current-producing materials pressed firmly together. This construction makes use of the spaces now wasted between the round-type cells and avoids the usual soldered wire connections. Eveready Layerbilt is every inch a battery. This exclusive Eveready Battery development packs more active chemicals in a given space and enables them to produce more current and give longer life.

This HEAVY-DUTY EVER-EADY LAYERBILT BATTERY gives twice the service of the smaller Light-Duty batteries and greatly reduces your "B" battery operating cost.

Use Eveready Layerbilts on any set, and get not only this extra service, but also—the greatest "B" power operating economy—the utmost in "B" power dependability—D. C. (direct current) in its purest form, which is so necessary for pure tone quality.

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9 P. M., Eastern Standard Time,
through the following stations:

WEAF-New York WJAR-Providence WEEI-Boston WTAC-Worcester WFI-Philadelphia WGA-Buffalo WCAE-Pittsburgh WSAI-Cincinnati

NTAM—Cleveland
NWJ—Detroit
NWG—Chicago
NOC—Davenport
NCCO { Minneapolis
St. Paul
SSD—St. Louis
VRC—Washington



-they last longer

A5

C7

B+AMP.

PINK

How to Build Bruno Regenatrol **NX 500 Y C**5 RFC T 5 T4 V5 T2 **T**3 V2 C8 G 000000000 00000 00000 /VC1

By Joseph Calcaterra $Part\ I$

A+ A-B-C+ RED GREEN

C1

OT so long ago a receiver with less than two dozen controls was less than two dozen controls was considered "inefficient." At that time, "soft" detector tubes required critical adjustment of plate and filament voltage; no detector unit was complete without some form of variation between primary and secondary coils; tens and units taps were the rage for varying the inductance of a coil, and the number of tuning controls such as variable condensers and variometers required for the detector circuit alone would be for the detector circuit alone would be enough to equip a number of present-day receivers.

The front panel presented the appearance of a highly complicated power house switchboard as contrasted with the simple, clean and well-balanced panels of today.

Many a battle has been waged in the interest of simpler control and the present trend towards the elimination of needless controls is gaining more and more

The Single Control Problem

In designing a single control receiver it is well to keep in mind that the requirements for nicety of adjustment must be met in the matter of oscillation control, compensation for tuning condenser inequalities and volume control, but these adjustments should be minor ones which have very little effect on the actual tuning

qualities and volume control, but these adjustments should be minor ones which have very little effect on the actual tuning of the receiver to a desired station. These auxiliary controls should be incorporated merely as a means of getting the desired shade of volume and freedom from distortion without complicating the operation of the receiver.

Any fan who has experimented with tuned radio frequency circuits knows how difficult it is to keep three tuning condensers in step with one another in tuning in stations all the way up and down the wave length range of the receiver. It is usually easy enough to keep the condensers in step for the detector stage and the radio frequency stage which precedes it in a two-stage R. F. and detector circuit, but the difference in the elements which enter into the aerial system of the receiver makes it practically impossible to synchronize the tuning of the first stage condensers with the tuning of the other two condensers. The expedients usually resorted to in such cases are to use auxiliary midget condensers across the first stage tuning condenser or to use auxiliary midget condensers across the first stage tuning condenser or to include an extra control for the first stage, making the tuning of that stage independent of the other two tuning cir-cuits. This, of course, takes the receiver out of the class of single control circuits.

How Solved in Bruno Regenatrol

A glance at the wiring diagram shown in figure 1 of the Bruno Regenetrol cir-cuit will show how this difficulty has been cuit will snow now this difficulty has been solved. The circuit is essentially a "Diamond of the Air" circuit with a stage of untuned radio frequency added to it. This untuned stage by its very broadness eliminates the necessity of an additional tuning control for the first stage of radio frequency applies time and complete time. frequency amplification and permits tun-ing of the second stage and the detector stage by the dual condensers of the Bruno

Figure 1

A2-

VOLT.

or both drums at a time.

These two condenser drums for only real tuning controls and per use of the receiver as a single or control receiver.

While the first attention of the control receiver.

1 Jewell, type 135 C portable voltmeter

OPTIONAL

While the first stage of radio fr

Unitune unit. The unique construction of the condenser units of this instrument permits the movement of both condensers at once by moving the drum controls which are attached to the condensers. These drums may be moved independently or simultaneously by pressure on either or both drums at a time of the drum controls. This reduction of efficiency in the first radio frequency stage is counterbalanced by the gain due to the use of regendrum the condenser at a time of the drums are at a time of the condenser at time of the condenser units of this instrument at timed stage, it permits the use of the actual amplification is not quite as efficient as a tuned stage, it permits the use of the actual amplification of tuning controls. This reduction of efficient as a tuned stage, it permits the use of the actual amplification of tuning controls. This reduction of efficient as a tuned stage, it permits the use of the actual amplification of tuning controls. This reduction of efficiency in the distance of the actual amplification of tuning controls. The condenser is the condenser at the con

B+45

YELLOW

C-15 STAGE

BLACK

tion

C6

ation in radio ect which has tention since ts made their

first bow. A number of different methods of oscillation control, some independent and others automatic, have been evolved. One of the first methods used to control the tendency of tuned circuits to oscillate was the use of a potentiometer or C battery to control the bias on the grid of the radio frequency amplifier tubes.

A better means of controlling oscilla-

C-2MD STAGE

BROWN

A better means of controlling oscillations, however, consists in connecting a variable high resistance of the order of 200,000 ohms in the plate circuits of the radio frequency tubes, between the B terminals of the transformers and the positive terminal of the B battery. The adjustment of this variable resistor serves to adjust the voltage of the B battery on the plates of the tube. Thus it controls oscillation by decreasing or increasing the plate voltage and consequently decreasing or increasing the element is increased or decreased respectively. The tendency of a circuit to oscillate as the effective resistance of the element is increased or decreased respectively. The tendency of a circuit to oscillate increases as the plate voltage is increased. By a proper adjustment of the plate resistance, the voltage may be adjusted to a point which will keep the circuit at its maximum efficiency, just below the oscillation point, for any given wave length or station frequency. The variable high resistance shown as I 2 in the wiring diagram accomplishes this purpose.

Arrangement of Regeneration purpose.

Arrangement of Regeneration

Regeneration in the detector circuit is obtained and controlled by the tickler coil T of the tuning unit T3. The adjustment of resistance R2 and tickler T control regeneration in the radio frequency and detector circuits, thus permitting maximum tuning efficiency without critical controls.

and detector circuits, thus permitting maximum tuning efficiency without critical controls.

An 85-millihenry choke coil, RFC, prevents radio frequency current from flowing through the windings of the audio transformer T4 and diverts it into the tickler coil T to produce regeneration in the detector circuit.

The tickler coil is so arranged that it may be disconnected from the circuit when extreme selectivity and sensitivity is not required, as is the case when listening in to local stations, thus eliminating the additional control.

A switch, S2, is provided for connecting and disconnecting the tickler. The tickler coil is connected into the circuit when the switch is in the "ON" position and disconnected when the switch is in the "OFF" position.

"OFF" position.
Two stages of high quality, transformer-coupled audio frequency amplification using first-class transformers completes the general layout of the receiver.

Tube Control Layout Separate Amperites are provided in each tube lead. An additional control of the filaments of the detector and radio frequency tube filaments is provided in the form of one rheostat, R1.

On first consideration this rheostat will seem extravaeant and unpresserve but

On first consideration this rheostat will seem extravagant and unnecessary, but on further thought you will concede the advisability of such an arrangement. In the first place the filaments of tubes do not age or become exhausted uniformly, so that it often happens that the filament of one tube requires a somewhat higher of one tube requires a somewhat higher voltage for efficient operation than another tube which may be in better con-(Continued on page 37)

LIST OF PARTS

	D A S	
1 Bruno "T K" Unitune @ \$20.00	Bruno Radio Corp.,	***
1 Bruno Light Switch @ 75 cents	Long Island City, N. Y. Bruno Radio Corp.	\$20.00
1 D D 11 D 1 0 0125	Long Island City, N. Y.	.75
1 Pr. Bruno Adjustable Brackets @ \$1.25	Bruno Radio Corp., Long Island City, N. Y.	1.25
1 Samson, type HW-A3, 3 to 1 ratio	Hong Island City, IV. I.	1.25
Audio Transformer @ \$5.00	Samson Electric Co., Canton, Mass.	5.00
1 Samson, type HW-A3, 2 to 1 ratio Audio Transformer @ \$5.00	Samson Electric Co., Canton, Mass.	5.00
1 Samson, 85 millihenry R.F. Choke coil		
@ \$1.50 1 Carter, No. M6, 6-ohm midget rheostat	Samson Electric Co., Canton, Mass.	1.50
@ 50 cents	Carter Radio Co., Chicago, Ill.	.50
1 Carter "Imp" battery switch @ 65 cents	Carter Radio Co., Chicago, Ill.	.65
1 Carter No. 1 open circuit "short" jack @ 25 cents	Carter Radio Co., Chicago, Ill.	.25
2 Carter No. 10 tip jacks @ 10 cents	Carter Radio Co., Chicago, Ill.	.20
5 Benjamin No. 9044, UX sockets @ 50 cents	Benjamin Elec. Mfg. Co., Chicago, Ill.	2.50
1 Centralab, No. 200M, 0-200,000 ohm	Central Radio Laboratories,	2.00
Radiohm @ \$2.00 1 Lignole, No. 1-D, 7"x21" front panel	Milwaukee, Wis.	2.00
@ \$6.94	The Lignole Corp., Chicago, Ill.	6,94
1 Formica, 5"x20"x3/16" subpanel	Formica Insulation Co., Cincinnati,	
4 Amperites, No. 1 A, mounted @ \$1.10	Ohio Radiall Co., New York City, N. Y.	2.34 4.40
1 Amperite, No. 1 A or No. 112 (depend-	11001011 000, 1100 1010 000, 21. 1.	
ing on tube used in last audio stage) @ \$1.10	Radiall Co., New York City, N. Y.	1.10
3 Tobe, 1 mfd. precision condensers @	Tobe Deutschmann Co.,	1.10
\$1.25	Cambridge, Mass.	3.75
1 Acme, Type R3, R.F. Transformer @ \$3.00	Acme Apparatus Co., Cambridge, Mass.	3.00
1 Durham, 2-megohm Grid Lead @ 50	International Resistance Co.,	
cents 1 Jones, Type PM, 4-ft. Multiplug @	Philadelphia, Pa.	.50
\$3.00 Type S	Howard B. Jones, Chicago, Ill.	3.00
2 Electrad, .0005 mfd. fixed condensers @		
30 cents 2 Electrad, Type S, .006 mfd. fixed con-	Electrad, Inc., New York City, N.Y.	.60
densers "@ 75 cents	Electrad, Inc., New York City, N. Y.	1.50
1 Electrad, Type GS, .00025 mfd. grid condenser @ 40 cents	Electrad, Inc., New York City, N. Y.	.40
2 Binding posts marked "Ant." and	H. H. Eby Mfg. Co.,	
"Grnd." respectively 10 lengths Acme Celatsite Wire with black	Philadelphia, Pa.	.30
covering covering	Acme Wire Co., New Haven, Conn.	1.00
1 package Kester Radio Solder	Chicago Solder Co., Chicago, Ill.	.25
1 Corbett Type TS, 7"x21", 10" deep	Corbett Cabinet Mfg. Co., St. Marys, Pa.	13.00
Miscellaneous screws, nuts, soldering la		1.00
I as a second	r Silvadi usrumum	

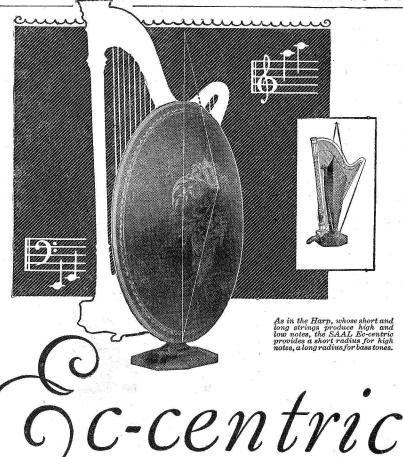
Jewell Electric Inst. Co., Chicgao, Ill. 10.00

ndensers	actual amplifying character
controls	tube and the simplification of
densers.	trols. This reduction of efficient
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	eration in the detector.
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r double	frequency circuits is a subje-
	been given considerable att
requency	tuned radio frequency circuit
	\

B+90

BLUE

A3



- the new scientific SAAL EC-CENTRIC CONE whose balanced tone color is the sensation in radio today

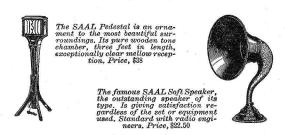
Your receiving set may be getting all of the best that's on the air—but are you getting it? You cannot know the capabilities of your radio set, in volume, clarity, beauty of tone till you give it the advantage of the Saal Ec-centric.

On the principle of the harp, whose short strings produce the high treble notes, whose long strings give forth the deep base tones, the Saal-Ec-centric, with its "center" actually off-center, provides a short vibrating radius for the high notes, a long radius for the rich low tones.

These exact relative proportions of vibrating area, definitely fixed by scientific principles, are now provided for the first time in the Saal Eccentric Cone. All rumble or "barrel tone" is eliminated. True balanced tone from soprano, flute and violin to pipe organ or 'cello. A demonstration will convince you.

Hear the Saal Ec-centric at your dealer's, or write us to direct you where it can be heard.

The Saal Ec-centric comes in two models: 20-inch, \$25; 14 inch (Junior), \$15. Slightly more west of Rockies.



WORLD FAMOUS MAKERS OF HORNS—CONES—PEDESTALS



Juality Lays Always

DADARA DABARA DABARA

BUYING a radio receiver is investing in pleasure, entertainment, information. You get what you pay for. If you want true radio happiness that will endure, then you'll choose a Synchrophase.

For Synchrophase reception is unusually superior because of several Grebe developments: Colortone, Binocular Coils, S-L-F Condensers, Low-Wave Extension Circuits, etc.

If you want to know why they combine to produce such reception as, perhaps, you've never realized was possible,

Send for Booklet RD

A. H. Grebe & Co., Inc. 109 West 57th Street, New York Factory: Richmond Hill, N. Y.

Western Branch: 443 So. San Pedro St., Los Angeles, Cal.

This Company owns and operates

stations WAHG and WBOQ: also



low-wave rebroadcasting stations, Mobile WGMU and Marine WRMU. Good words gain

you honor in the market place; but good deeds gain you friends among It is performance

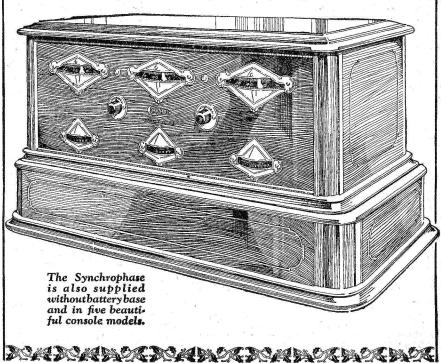
that gains the Synchrophase praise and friendship from its







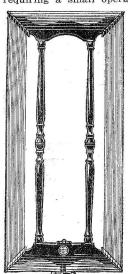
All Grebe apparatus is covered by patents granted and pending.



ewest in Accessories

Bodine Deluxe Loop

HE new Bodine DeLuxe loop aerial, shown herewith, is a beautiful piece aerial. demand for an efficient, attractive loop requiring a small operating space. The



frame is con-structed of solid walnut hand rubbed to a beautiful finish. The whole harmonizes with the most

with the most artistic home furnishings.

The wire winding consists of a cable of fine copper wires stranded with larger phosphorse wires which have been hardened to prevent to prevent stretching, and covered with a silk braid. Bakelite spreaders mounted on each arm of the loop sup-port the wires. All contacts

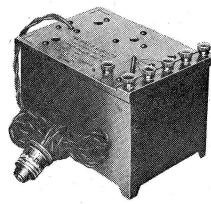
with the winding are well insulated with bakelite.

A special low capacity 3-contact jack is mounted on Bakelite in the base, permitting continuous rotation of the loop without twisting or disturbing the connecting wires leading to the receiver. If desired this jack may be removed from the base and mounted in the cover of the set or cabinet so that there are no exposed con-

necting wires.
All models have the center tap, required by so many super-heterodyne and other loop receivers. The turning radius of the De Luxe loop is but six inches, and the height is 26 inches. Directional selectivity of this loop aerial is very pronounced and enables separation often times of several stations operating on the same or close wave lengths. The De Luxe loop is made in two winding capacities; loop is made in two winding capacities; one for standard loop sets which employ variable condensers of .0005 mfd. capacity, and the other for tuned radio frequency and other sets employing variable condensers of .00035 mfd. capacity.

Rollo B Eliminator

POR any receiver using up to and including six tubes, the new Roll-O chemical, full wave rectifying B power unit has been brought on the market by the Roll-O Radio Company, of Cincinnati. This B eliminator, shown below is provided with taps for voltages of 22 ½. 45, 67 ½ and 90.



The Roll-O unit is built solidly and compactly. Its size is $6\frac{1}{2}$ by $4\frac{5}{8}$ by $4\frac{1}{4}$ inches. The device is contained in a well finished metal case with a Bakelite top.

Roll-O B power is intended to be operated from 100 to 120-volt alternating current supplied from the house lighting circuit.

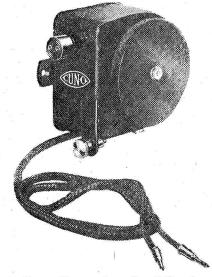
Helpful Radio Book

NEW and very helpful book, entitled A "The Gateway to Better Radio," and distributed by the American Mechanical Laboratories of Brooklyn, N. Y., has been reviewed and found to contain many good suggestions for the set builder or listener who wishes to add refinements

or listener who wishes to add refinements to his receiver.

Among the subjects discussed and amply illustrated with understandable diagrams are: How to eliminate distortion, increasing volume, resistance amplification, improving the super-heterodyne, and how to make battery eliminators.

The price of the book, containing 32 pages well illustrated, is 25 cents.



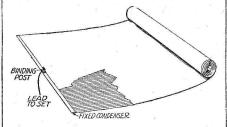
Cuno Extension Cord Reel

EW and something often desired but never at hand is the Cuno Radio Reel, which is pictured above. Handsomely finished in brown enamel and nickel, the reel is self-winding and contains a length of 25 feet of high grade extension and tension cord.

A button controls the self-winding A button controls the self-winding ratchet. If desired the reel may be attached to wall or set cabinet with two screws. The long length of cord is just the thing for making it possible to put the one loud speaker, or a second speaker in the kitchen, laundry, on the front porch, in the dining room or bedroom, without disturbing or moving the receiver

Effarsee Inside Aerial

HE Effarsee antenna marks an attempt to produce a really efficient inside aerial for the listener whose set is not equipped to employ a loop type aerial. It can be hung or draped anywhere indoors or outdoors, and even placed under rugs or back of curtains and pictures. At the same time the Effarsee antenna gives one greater selectivity and less static in-terference. It may be employed as a coun-

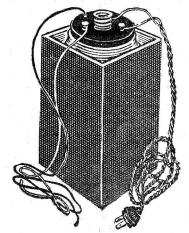


terpoise or additional ground, or when rolled up tight and connected to the reg-ular aerial lead-in the Effarsee acts quite effectively as a static filter. Another rec-ommended use for Effarsee is as a wave

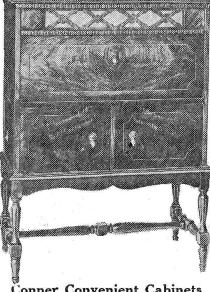
The Effarsee antenna is made by the Fishwick Radio Company, of Cincinnati, and is sold in two sizes, 3 by 10 feet and 3 by 6 feet. Where space permits, the larger model should be installed as it gives greater signal strength.

R. B. Specialty A-B Charger

A N INEXPENSIVE charger for either A or B batteries, shown below, has been developed by the R. B. Specialty Company for those listeners who feel they cannot afford the higher priced charging devices.



It is of the chemical rectifying type and is equipped with leads to connect to the batteries to be charged, and a lamp cord and plug to fit into the house lighting



Conner Convenient Cabinets

THE exposed or "hay wire" Radio set is the despair of every tidy house-keeper but Conner Convenient Cabinets, made by the Conner Radio Cabinet company, New Albany, Ind., assemble every detail of your receiving set, including betteries, eliminators, speakers, and tools, in a scientifically convenient arrangement and enclose everything in a beautiful piece of period furniture.

The cabinet above is the Renaissance.

The cabinet above is the Renaissance. It is also manufactured in Sheraton and Jacobean styles. A choice of Moire mahogany or American walnut finish is given. In all three styles the receiver slips right into the section below the grilled top. The cabinet is already wired and a few connections need only be made. Storger bettery charger hydrometer and Storage battery, charger, hydrometer and silica, or sand, amalgamated with certain water supply fit into a handy drawer pulling out from the left side. A switch solution in which they are immersed are enables charging of the battery without decomposed by the charging action.

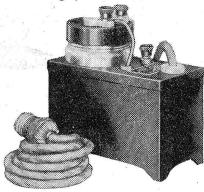
its removal. The loud speaker horn built into the lid of the cabinet is provided with rubber connection for any unit.

A spacious compartment on the right

A spacious compartment on the right lower side accommodates the largest size B battery equipment manufactured, and immediately below this compartment is a divided drawer for storing tools, parts, phones and other accessories. The cabinet is 35 inches wide, 45 inches high and 18 inches deep.

Silite Trickle Charger

ASED upon a new discovery in rectifying elements made by Clarence E. Ogden, president of the Kodel Radio Corporation, in Cincinnati, that company has recently brought out the new Silite Trickle charger, shown below.

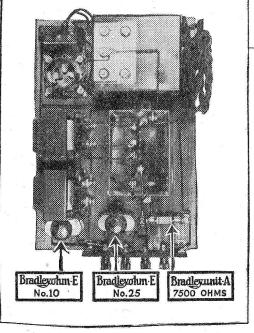


The unit shown has a charging rate of .6 of an ampere. The Kodel organization is also manufacturing another model Silite charger which has a tap for the .6 ampere trickle charging rate and, as well, a tap for a "booster" or recharging rate of 3 amperes.

amperes.
The Silite chargers incorporate the famous new metallic glass electrode known as Silitex, which is made from silica, or sand, amalgamated with certain

6







Bradleyohm · E

An oversize, variable resistor for plate voltage control in B-eliminators. Ask your dealer for Bradleyohm E in the check-



Bradleyunit-A

The solid, molded, fixed resistor with silver-plated end caps. Contains no glass. Not affected by temperature, moisture or age.

What a whale of a difference a few Bradleyohms make -in a B-Eliminator!

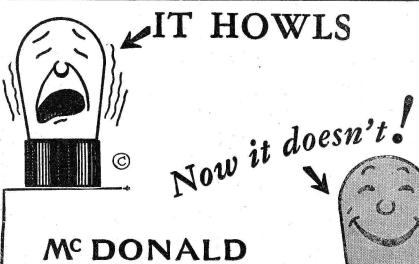
THE leading manufacturers of B-eliminators have adopted Bradleyohm-E as standard equipment for voltage control in their Beliminators. Leading radio authorities also recommend Bradleyohm-E for use with every form of B-eliminator kit.

Be sure that Bradleyohm-E and Bradleyunit-A are standard equipment in your Beliminator kit. You will then enjoy perfect voltage control.

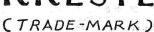
Send for folder entitled "How to Build a Beliminator" describing seven popular hookups.

ALLEN-BRADLEY CO. 290 Greenfield Ave. Milwaukee, Wis.

Use <u>Alle</u>n-Bra<u>dle</u>y Perfect Radio Devices



RRESTER



Slip one of these live rubber jackets over each troublemaking tube and the Howl stops.

"It Stops that Howl!"

Remember the name! You can get it for every size tube. It sells for 75c each. Just ask your dealer, or write.

Sole Selling Agents for the U.S. A.

SPARTAN ELECTRIC CORPORATION 350 West 34th Street, New York City

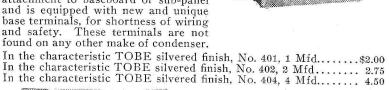
Manufactured in the U.S. A., by the SCIENTIFIC PRODUCTS CANADA, LTD.

"It Stops that Howl!"



The NEW TOBE 400-Volt Condenser

This is a new line of TOBE High-Voltage Condensers, for 400 volts continuous operating voltage. The advent of the Raytheon BH Tube has made necessary condensers for higher working voltages than those formerly employed, in cases where the B-Eliminator Transformers deliver voltages in excess of 300 volts. The TOBE 400-volt Condenser is of the shortpath type, is cased in a substantial metal container with heavy lugs, for attachment to baseboard or sub-panel and is equipped with new and unique base terminals, for shortness of wiring and safety. These terminals are not found on any other make of condenser.





The TOBE Veritas Hi-Current Resistor

CONDENSER

A special and unexcelled resistor, capable of radiating 4 to 5 watts continuously without change or deterioration. Unexcelled for use in B-Eliminators and for transmitting grid leaks. Made to be soldered directly into the circuits without the use of clips, although of standard length, so that standard mounts may be used if desired.

Prices:	
2,000, 2,500, 3,000, 5,000, 7,500 and 10,000 ohms\$1.10	each
50,000 ohms	each
.1 meg	each
14, 1/2 and 1 meg	each

Tobe Deutschmann Co.

Engineers, Manufacturers and Importers of Technical Apparatus CAMBRIDGE **MASSACHUSETTS**



Interference Penetrate locals

Double your stations by adding Penetrola to your own receiver

Penetrola is the proved radio "booster." When attached to your present radio set, it increases range and volume many fold. It penetrates both distance and interference and gives far greater selectivity.

Penetrola will double and treble the number of stations you can get consistently, provided your set is a fairly good one. The addition of Penetrola will transform it into a powerful up-to-date receiver, giving you vastly greater radio enjoyment than you now get.

Penetrola also increases the clarity and quality of your reception. It makes operation near the oscillation point unnecessary. It stops your set from radiating and "blooping." It stabilizes reception.

Penetrola is not a wave trap. It is the first stage of amplification in the most advanced radio circuit known

today - the Walbert Isofarad. Penetrola makes this new record-holding circuit available to those who already own a radio set.

West of Rockies

Easily attached to any type of set between the aerial and the receiver, Penetrola selects and amplifies signals before they reach the set. In effect it brings the station you want closer to your receiver and rejects all others.

Penetrola can be added to your set in a few minutes. It requires no extra batteries, and only the addition of a standard radio tube. It is a permanent investment, for it will operate with the set you now own or any you may buy in the future. It will add more in performance than many times its cost in a new set. No matter how fine a set you may own, Penetrola will improve it.

Add Penetrola to your set now. Practically all dealers have it. If however you are unable to obtain it, write to us direct. Satisfaction is guaranteed or your money will be refunded.

Penetrola is manufactured by the makers of the Walbert Isofarad Receiver—the most advanced radio receiver on the market. If you do not already own a radio receiver, let us tell you about the Isofarad with Penetrola built-in.

Walbert Manufacturing Company, 911 Wrightwood Ave., Chicago Walbert of Canada, Ltd., London, Ontario

If your dealer can't supply you Mail the Coupon

Wal	bert	Manufac	turing	Compan	
011	TV7:		A	Chiana	

Gentlemen: for \$35 for which please send me one Walbert Penetrola. If at the end of 7 days it does not perform to my entire satisfaction I will return it and you will refund my money.

Send Penetrola at once

☐ Send complete information about the record-holding Walbert Isofarad receiver and money-back guarantee of performance.

BETTY GIVES DANDY FRUIT CAKE RECIPE

MISS CROCKER TELLS HOW SOUTHERNERS MAKE IT

Culinary Expert Divulges Secrets of Famous Holiday Pastry—Tells of Quaint Superstitions

By Betty Crocker

It doesn't seem possible that it is already time to think about fruit cake, does it? But if your cake is to have time to mellow and be at its best by the Holi-

day season, now is the time to make it.

In the South there is an old tradition that every member of the family must assist in making the fruit cake. The bowl of batter is carried around the house by of batter is carried around the house by the black mammy for each member of the family to stir good luck into it. If stir-ring the cake brings good luck, I should think that slicing citron and cracking nuts would be even more lucky. Slightly warm the citron, candied orange or candied lemon peel in a double boiler to soften be-fore trying to cut if m.

The goodness of a fruit cake depends largely on the quality of the ingredients you put into it. Making fruit cake is not just a question of adding fruit and nuts to any good cake mixture. Just the right proportion of sugar, shortening, flour and other ingredients is necessary to hold the heavy fruit and nuts. Also the character of the mixture is affected by the kind and quantity of fruits and nuts added. This is

quantity of fruits and nuts added. This is because of their sugar and fat content.

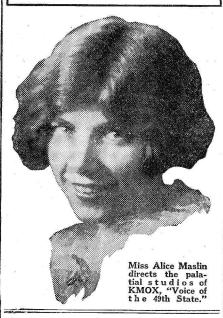
White or Southern Fruit Cake
The recipe for White Fruit Cake that I shall give you seems to have originated in the South, and is therefore often called a Southern Fruit Cake. It contains a greater variety of fruits than the dark cake. This is the kitchen-tested recipe for White or Southern Fruit Cake: White or Southern Fruit Cake: 1 cup shortening

- 2 cups sugar 4 cups flour 2 tsp. baking powder
- ½ tsp. salt 1 cup water

1 lb. seeded white raisins
½ lb. each of citron, candied cherries, candied pineapple, candied orange peel and candied lemon peel
1 large cocoanut grated, or 1½ cups
1 lb. blanched almonds
8 egg whites

1 lb. blanched almonds
8 egg whites
Cream the shortening and add the sugar
gradually. Sift flour once before measuring. Sift baking powder and salt with half
the flour. Add alternately to creamed mixture with the liquid. Add the remaining
flour to the prepared fruit, cocoanut and
nuts. Stir floured fruits into the cake mixture. Fold in the well-beaten egg whites.

SHE DIRECTS STUDIO FOR KMOX, ST. LOUIS



Bake in small loaf or round cake tins, lined with heavy greased paper. Bake 2½ hours in a very slow oven, 250° to 300° F. This amount will make four cakes. If you buy dried fruits of any kind in bulk be sure to wash them in cold water and then dry them thoroughly before using. Seedless raisins should always be washed. It is not necessary to wash the seeded raisins.

Reeping Fruit Moist

washed. It is not necessary to wash the seeded raisins.

Reeping Fruit Moist

Package citron, candied lemon or orange peel may be purchased already cut up in many stores. The moist shredded cocoanut which comes in cans may be used instead of the fresh cocoanut, but do not use the dry shredded cocoanut for it will make your cake too dry. If the fruit seems quite dry, sprinkle several tablespoons of some light colored fruit juice such as pineapple, peach or pear juice on it after it has been cut up and allow it to stand several hours or over night. The fruit will absorb the juice and produce a moist cake. However, be sure to shake the fruit free from any excess juice before dredging with flour or the fruits may settle in the batter while baking.

Use Small Pans

SHORT WAVES

- By Marcella

(Continued from page 2) (Continued from page 2)
peerless ether pioneer, Mr. Sen Kaney.
Mr. Kaney has since been reported as
gone from KYW. Lee Sims is on WBBM
daily, except Sunday and Monday, during
the hours from 8 to 12 p. m. Too bad
about those low wave scrambles but something is bound to be done about it soon.
Fill out one of the Radio Digest blanks
Mr. Plummer is working on for a survey.
The Mexican stations are on Mountain
Time.

D. B. Greenway, Green Lake, Wis. I am told at KYW that Sen Kaney jumped into his big Lincoln car with his beloved wife and trekked to St. Louis—A.W.O.L., unbeknownst and unawares to KYW. Sobs mean nothing to the Old Timer.

Let this alleviate your anxiety, "Lady Anxious." Eddie Loftus is reported as the assistant staff pianist of WHFC, Hotel Flanders, Chicago. He is heart-whole and fancy free, stands five feet seven, weighs 150 pounds, has blue eyes and black hair. He loves his Radio and, and—well you might write him L. A. might write him, L. A.

"Caw! Caw! Caw!" That's Jerry Sullivan, the announcer who put the CAW in Chi-CAW-go. For some weeks he has

Chi-CAW-go. For some been back with that same old call but Jerry is perched on a new antenna these days. Jerry and his "Caw" are making the WSBC station stand out like a traffic lamp in the fog. He seems to be quite happy and at home in his new quarters. He's

another one of those announcers whose photogravures by Radio Digest have been popular. They are obtainable at ten cents

This will interest Wild Rose. Walter Newell at KOA, Denver, is married, thirty-five, good looking, brown eyes and a most affable grin. He is still with KOA and you doubtless will hear him often during the autumn and winter.

John Nelson Hendrix, you old sinner,

moist cake. However, be sure to shake the fruit free from any excess juice before dredging with flour or the fruits may settle in the batter while baking.

Use Small Pans

Fruit cake packs and slices to best advantage if small loaf pans are used. Line the pans carefully with thoroughly greased heavy paper. Do not use the thin wax paper. The paper lining makes the cake bake more evenly and also makes it easier to remove from the pan. It should be peeled from the cake will hot.

The baking of the cake is very important. The temperature of the oven must be low, not over 300° F., all through the baking, or the cake will become too brown on the outside before it is baked in the center. If a small pan of hot water is placed in the oven during the baking, it will help produce a cake which is soft and mellow.

LAST ISSUES SCARCE BUT FEW ARE LEFT

HOSE readers of Radio Digest who were unable, because of the large demand for copies of the last issue, to obtain one, may have one mailed to their home address by sending fifteen cents in stamps or currency to the offices of this publication at 510 N. Dearborn St., Chicago. The beginning of the "Game of Whozit" with the last issue, the second November number, caused a shortage of copies, but a limited supply is still available. Persons subscribing for one year (\$3) may have their subscriptions started with the second November number. THOSE readers of Radio Digest who

bet you are married and just a trifler. And don't you dare do what you said in your letter.

"Lonesome" at Kenosha: Myron C. Bennett, chief announcer at WCLO, Camp Lake, Wis., is single, twenty-four years old, has small moustache dark and waxed. And he conducts an orchestra.

Miss Susy A. Dickinson of Newtonville, Mass., writes, "When Goldy and Dusty were in Boston the Boston Sunday Post published Goldy's real name as Harvey Hindermyer and Dusty as Earl Tucker-

When Leo Fitzpatrick picked up his mike and hiked, shaking the dust of Kansas City from shoes and accumulating assas City from shoes and accumulating assorted motor fumes at Detroit where he settled down at WJR, he missed something. He looked around and his shadow was not there. So he sent for his former assistant, John Patt, of the Star studio. Quicker'n scat John Patt took his hat, soon was at WJR—and that's that. This was especially convenient for Leo because Corley W. Kirby had already accepted an invitation to join the WGHP announcing staff in Autoville. Now, everybody's happy.

You see, it's like this, Mrs. O. N. H.—when they announce Charlie Schultz at WBBM as the "eighty pound tenor," they belittle him considerably because his actual weight is 300 pounds. He's leaning heavily toward the altar, apparently, as they say he is "almost but not quite married." He has brown eyes and black hair. You are right about Jean Sargent. She was but she isn't now—she's an intelligent and interesting woman. None of the folks at WHT know anything about that log book.

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

WOMAN'S PROGRAM INDEX (Daily Unless Indicated)

Household Economics, Women's Hour, Etc.

		3 -			
	Eastern 9:30	Central a.m. 8:30 (352.7m-850kc),	Mour 7:	itain 30	Pacific 6:30
	WIP (S	08.2m-590kc), I (340.7m-880kc)	Menu, Tu , Homema	es, Thur akers' clu	s, Sat. ıb, Tues.
	KDKA Tues.	9:15 (309,8m-970ko Fri.	8:), Hom	15 emakers'	7:15 chats,
	10:30	9:30 (374.8m-800kc)	8:3 Mothers	30 hour.	7:30
	10:40		8:4	40	7:40 Mon,
	Wed,	Fri. 9:45	8:4	15	7:45
	KDKA Fri;	(309.1m-970kc), WEEI (348.6m M (389.4m-7701	Betty Cro 2860kc),	ocker, Mo Mon, W	on, Wed, ed, Fri;
	WBCN	M (389.4m-7701 (266m-1130ke),	Home se	Wed, F	ri. ogram.
	10:55 KSAC	9:55 (340.7m-880kc),	Housewi	55 ves'half	7:55 hour.
	11	10			0
	1111113	(285m-1050kc), 270.1m-1110kc), s, Fri.			
		428.3m-700kc),			
		10:10 (293.9m-1020kc)		akers' ho	
	11:15 WCAE	10:15 (461.3m-650kc)	, Women	at home	8:15
	KFAB Wed	10:30 (340.7m-880kc), Fri.; Dec. 3,	U. of Ne	ebr. hour	8:30 . Mon.,
	Elizal	beth Rutherford	9:3		8:45
8	KYW (535.4m-560kc),	Table tal	k.	0.45
	WCCO Betty	(491.4m-720kc) Crocker, Mon, (526m-570kc),	, WDAF Wed, F	(365.6m ri.	8:45 -820kc),
	WNYC	(526m-570kc),	Home eco	nomics,	Wed. 9
	WEBH	(370,2m-810kc)	. Prudeno	e Penny	
	12:15	147.5m-670kc), p.m. 11:15	10:1	15	9:15
	KMOX hints.	(280.2m-10/08	c), Cool	king, h	ousehold
	12:30	11:30 302.8m-990kc),	Home ma	30 nagemen	9:30
	12:40	11:40	10:4	10	9:40
	12:45	(545.1m-550kc), 11:45	10:4		9:45
	WNYC	12	11		10
	KGW (491.5m-610kc), (245.8m-1220kc)	Househol	d helps.	on
	1:30	12:30	11:3	30	10:30 hristmas
	KFDY Daint	(306m-978kc), ies.''		1970 1981	
	1:45	336.9m-890kc), 1 12:45	11:4	45	10:45
	KPO (4	128.3m-700kc), 1	Betty Cro	cker, Mo	n, Wed,
	200				

Eastern Central Mountain Pacific 2:05 p.m. 1:05 Prudence Penny, WJZ (454.3m-660kc), Daily menu, ex Sat. 2:15 Solution 1:15 Prudence Penny, Experimental Pacific 1:15 Prudence Penny, ex Sat. 2:15 Prudence Prudence Penny, ex Sat. 2:15 Prudence Pruden Fri. WSOB (246m-1220kc), Cooking chats, Mon. WIP (508.2m-590kc), Market hints for housewives, menus, Mon, Tues, Fri. WJZ (454.3m-660kc), Your daily menu. 3:15 2:15 WHO (526m-570kc), Recipes, household hints, Tues. Tues. 2:45
KFNF (461.3m-650kc), Ladies' hour, Mon, Tues, Thurs, Fri. 3
WP (508.2m-590kc), Market hints for house-wives, Tues. 2
WOS (483.6m-620kc), Aunt Jane. WOS (447.5m-670kc), Home economics. 3:30
KMOX (280.2m-1070kc), Housewives' hour. WEAF (491.5m-670kc), WEEI, WLIT, WRC, Dennisoneralt, Tues, WLS (344.6m-870kc), Housewives' hour. WLS (344.6m-870kc), Housewives' hour. WLS (344.6m-870kc), Housewives' hour. WLS (344.6m-870kc), Housewives' hour. WLS (344.6m-870kc), Housewives' marines. Thurs, Fri. WOS (440.9m-680kc), Mon, Thurs, 5:15
KYW (535.4m-560kc), Meat talk, John Cutting, Mon. WMAO (447.5m-670kc). Mothers in council. Mon. WMAQ (447.5m-670kc), Mothers in council, Wed.
6:30 5:30

KOA (322.4m-930kc), Question box, culinary hints, Tues, Thurs, Fri.
WLW (422.3m-710kc), Cooking school, Wed.
7 6 KGO (361.2m-830kc), Hints for housekeepers,

"Aunt Sammy"

Central Mountain 8 Pacific Eastern Central Mountain Pacific 10 a.m., 10 a.m., 25 MGBS (315.6m-950kc) Mon. 10:30 9:30 WCSH (277.6m-1080kc), WHO (526m-570kc), 10:50 9:50 WMC (499.7m-600kc), Mon, Thurs. 11 10 WEAO (293.9m-1020kc).

Eastern 12 n.	Central	Mountain 10	Pacific
WAMD (243		10 mp	
WRVA (256		Ved.	
1 p.m.	12	, Mon, Wed,	T. 10
1:10	12:10	11:10	10:10
KPO (428,3r		11410	10.10
1:15	12:15	11:15	10:15
KFOA (454,		44.00	40.00
1:30 KFAU (280.	12:30	11:30	10:30
1:45	12:45	11:45	10:45
WDAF (365.			20125
2	1 .	12	11
KOIL (305.9	m-980kc).	•	12
KMA (461.3	m-650kc) · K	SL (299.8m-1	
3:30	2:30	1:30	12:30
WHK (272.6	m-950kc).	e v	2
WOC (483.6	3	2	1
WUC (483.6	m-620kc).	3	2
WOS (440.9)	m-680kc).	•	4
6	5	4	3
KFXF (249.	9m-1200kc),	Tues, Thurs,	Fri.
WDBO (239. 8:30	7:30	6:30	5:30
		Wed, Thurs.	0.00
Section of the section of	POR - STATION OF	Water of the same	

Women's Clubs

Eastern Central Mountain Pacific 11 a.m. 10 9 8 8 8 8 10 11 a.m. 10 9 9 8 8 10 11 a.m. 10 9 9 130 8:30 11:30 9:30 8:30 12 n. 11 12 n. 11 10 9 12 n. 11 10 9 12 n. 12 n. 11 10 9 12 n. 13 10 9 1:05 12:

Fashions and Sewing

Eastern Central Mountain Pacific
11:30 a.m. 10:30 9:30 8:30
KFAB (340.7m-880kc), Dec. 1, "Good Taste for
the Heavy Woman."
12:30 10:30 9:30
WOJ (447.5m-670kc), Style talk.
1:35 11:35 10:35
KPO (428.3m-700kc), Fashion critic, Fri.
2 11
WGBS (315.6m-950kc), Excella dressmaking
lessons.
2:15 1:15 12:15 lessons, 2:15 1:15 WJZ (454.2m-660kc), Fashions, 5 4 WOS (440.9m-680kc), Fancy work. 11:15

Eastern Central Mountain Pacific 6:45 p.m. 5:45 4:45 3:45 KOA (322.4m-930kc), Fashion review, Tues, Thurs, Fri. 7:55 Thurs, Fri. 7:55 6:55 5:55 4:55 WPG (299.8m-1000kc), Fashion flashes, Tues. 8:30 7:30 6:30 Fashion flashes, Tues. 8:30 KUOA (299.8m-1000kc), Dec. 6, "Let Your Needle Help Santa Claus." 8:45 7:45 6:45 WCCO (416.4m-720kc), Jeanne Gray.

Health and Beauty

Eastern Central Mountain Pacific 10:45 a.m. 9:45 8:45 7:45 WTAM (389.4m-770kc), Tues. 11 WGM (389.4m-770kc), Good health and training. WGJ (447.5m-670kc), Health talks. 12:45 p. m. 11:45 10:45 WTAG (545.1m-550kc), Marjorie Woodman, Mon, Thurs. 12:45 WGM (306m-978kc), Dec. 1, "Eat and Grow Thin," Dec. 8, "Eat and Grow Fat." 2 Thin," Dec. 8, "Eat and Grow Fat."

5 4 8.30 WOS (440.9m-680kc), Health talks, Tues.
8:30 7:30 6:30 5:30
WEAO (293.9m-1020kc).

Garden Talks

Eastern Central Mountain Pacific 11:20 p.m. 12:20 11:20 11:20 10:2

Child Care; Training

Eastern Central Mountain Pacific 7:55
KSAC (340,7m-880kc), Myrtle Gunselman.

11 10
9 8 Methods of Child Training, Dr. Lovissa Wagoner, Fri. 4.
4. p.m.
WEEI (348,6m-860kc), Dec. 7, "Selecting Children's Books for Gifts;" Dec. 14, Parental discipline.
8:30 7:30 6:30 5:30
KUOA (299,8m-1000kc), Dec. 9, "Faulty Diets and Dental Bills."

Interior Decorating

Eastern Central Mountain Pacific
5:15 p.m. 4:15 3:15 2:15
WBBM (226m-1330kc), "Redecorating the Old
House," Leone Grandland, Mon. "Decorating the New House," Charlotte Voge, Thurs.
8:30 7:30 6:30 5:30
KUOA (299.8m-1000kc) Dec. 9, "Livable Living Rooms."

COMPLETE RULES OF GAME OF "WHOZIT"

1. Radio Digest will sponsor a national game to be called the game of Whozit, which will be participated in by the following Radio broadcasting stations: WHT, Chicago; WMCA, New York; WNAC, Boston; KJR, Seattle; WMAK, Buffalo; WHK, Cleveland; WPG, Atlantic City; WLW, Cincinnati; WJR, Detroit, WOOD, Grand Rapids, Mich.; WSOE, Milwaukee; KYHS, Hot Springs, Ark; KMOX, St. Louis, Mo.; WOC, Davenport; WHR, Kansas City; WOAW, Omla; KOA, Denver; KFWB, Los Angeles; KPRC, Houston, Tex.; KVOO, Bristow, Okla; WJAX, Jacksonville, Fla.

Houston, Tex.; KVOO, Bristow, Okla.; WJAX, Jacksonville, Fla.

2. \$26,000 in prizes will be distributed to the successful contestants, as follows: Twenty-four first prizes \$500 in gold for each of the twenty-four stations; twenty-four \$300 merchandise orders for second prizes, and twenty-four \$200 in merchandise orders for third prizes. Grand prizes of \$1,000 in gold will be awarded to the individual judged to be the national DX (long distance) "Whozit" champion who has submitted the neatest work, identification and the nearest correct solution of the entire 384 portraits from all stations participating, and \$1,000 in gold for the individual who shall be judged to have submitted the neatest work entered in all of the twenty-four participating stations. The twenty-four station prizes will be divided and awarded on the following basis: 1st prize, \$500 in gold to the individual whose set of sixteen completed portraits is most nearly correct in the assembly of segments, identification of artists, and of the neatest work workmanship; 2nd prize, \$300 in merchandise order to the individual whose completed sets are second best in order of correctness, identification and neatness; and 3rd prize, \$200 in merchandise order to the individual whose completed sets are second best in order of correctness, identification and neatness; and 3rd prize, \$200 in merchandise order to the individual whose completed sets are third best in order of correctness, identification and neatness.

3. A board of judges at Radio Digest, 510 N Dearborn st., Chicago, Ill., will pass on all the work submitted and award the prizes for all stations and the grand prizes. Its decisions will be final.

4. Everybody will be eligible to compete except employes (and their families) of Radio Digest or of any

4. Everybody will be eligible to compete except employes (and their families) of Radio Digest or of any of the participating stations, included in Rule 1.

5. The game of Whozit will be free. It will not be necessary to be a subscriber to Radio Digest. Tracings of the pictures may be made at offices of Radio Digest in Chicago or New York or from the files in public libraries, or at the offices of participating broadcasting stations. These with proper identifications may be submitted for the published pictures. All general information helpful to the solution of the game may

Make the Whole **Wiring System** Your Aerial

No more danger of death or serious injury from a fall when putting up an outside aerial. No more high poles and wires to draw lightning into your home. No more expensive, unsatisfactory "inside aerials," plugs or taps.

Just wrap one of the ingenious new Roll-O" Spirials," around the telephone cord or any electric light wire, and use the entire wiring system of your house as your aerial.

Reduce Static

using the wiring system of your house this way allows a very large proportion of the static to escape into the ground, while it picks up the radio signals perfectly. Radio experts who have tried this simple little device have been amazed by its clarity of reception and freedom from interference. Works entirely by induction. No cutting, splicing, soldering, no damage to fixtures or taping wires. Takes up no room. Easily removed and re-attached if you want to move your set.

Satisfaction Guaranteed

ast pin a dollar bill to your order, which will led at once. Nothing else to pay for the led at once. The pin and pin

THE ROLL-O RADIO CO. Dept. Q-10,

SIGNED to OUTLAS World Storage A Battery

NEW

LOW

PRICES

6-Volt, 100-Amperes \$10.00 6-Wolt, 120-Amperes \$12.00

6-Volt, 140-Ampere \$13.00

Auto Batteries
6 - Volt, 11 - Plate
\$10.00
6 - Volt, 13 - Plate
\$12.00
12 - Volt, 7 - Plate
\$14.50

Set your radio dials at 288.3 meters for the World Storage Bat-tery Station WSBC. Variety—new talent— always interesting.

Two-Year Guarantee in Writing

Famous the world over for reliable, enduring performance. Solid Rubber Case lasting protection against acid or leakage.

Approved and Listed as Standard by Leading **Authorities**

including Radio News Laboratories, Popular Sci. Inst. Standards, Pop. Radio Laboratories, Radio Broadcast Laboratories, Radio in the Home and Lefax, Inc.

Send No Money

Just state number wanted and we will ship same day order is received, by express C.O.D. Pay expressman after examining batteries. 5% discount for cash with order. Remember, you save 50% on World Batteries—so send your order today.

WORLD BATTERY COMPANY Dept. 48 1219 S. Wabash Ave., Chicago, Ill.

be obtained from any of the offices of the broadcasting stations participating.

stations participating.

6. Conditions of the game: Beginning with the issue of November 15 and for eight consecutive issues Radio Digest will publish a series of forty-eight composite portraits in each number. These forty-eight portraits will comprise two representations each from the twenty-four broadcasting stations that participate. Each photograph will be intersected with white lines showing the forehead of one artist, the eyes of another, the nose and mouth of a third and the chin and neck of a fourth. Each segment of each composite photograph will bear a number. It will be necessary for each contestant to separate the various segments and reassemble them on a mount so that they are correctly aligned to complete the portrait of one of the original Radio artists of whom it was taken. Only complete sets are to be submitted. Each portrait must be identified in ten or more words; giving at least five facts about the original artist photographed.

7. Artists (or their representatives) whose frag-

least five facts about the original artist photographed.

7. Artists (or their representatives) whose fragmentary portraits appear on the "Whozit' pages of Radio Digest are to describe themselves by way of broadcasts from their home station when their respective pictures are published in Radio Digest. Such information as they give over the air is to be made available at the station in the event the listening contestant has failed to hear the individual when he broadcast.

8. In case of tie, prizes of identical value with those tied for will be awarded each tying contestant.

9. The contest will end at midnight, March 15, 1927. All sets submitted must be complete and must be mailed post paid to Whozit Contest Editor, Radio Digest, 510 North Dearborn St., Chicago, Ill., and must bear postmark not later than midnight of March 15, 1927.

New Stations

New stations licensed by the department of commerce last month include: WARS, Brooklyn, N. Y., 295m-1016kc; WKBZ, Ludington, Mich., 256.3m-1170kc; KRAC, Shreveport, La., 220m-1363kc; WKBW, Buffalo, N. Y., 362.5m-827kc; KRLD, Dallas, Texas, 357.1m-839.6kc; WKBY, Danville, Pa., portable, 220m-1363kc; KGDA, Dell Rapids, S. D., 254.1m-1180kc; KHOG, Huntington, Ind., 241.8m-1240kc; KRSC, Seattle, Wash., 499.7m-1240kc; KCGU, Lakewood, N. J., 350.6m-855.2kc; WICC, Bridgeport, Conn., 285m-1652kc; WLBC, Muncie, Ind., 223.7m-1340kc; WLBE, Brooklyn, N. Y., 230.6m-1300kc; WFBE, Cincinnati, Ohio, 232.4m-1290kc; WOMT, Manitowoc, Wis., 254.1m-1180kc; KGDI, Seattle, Wash., 416.4m-720kc; KGDI, Cresco, Iowa, 202.6m-1480kc.

The following stations changed wave by a new Cincinnati station.

lengths: WJBY from 270.1m-1110kc to 260m-1153kc; KNRC from 208.2m-1440kc to 238m-1260kc; KFEC from 247.8m-1210kc to 252m-1190kc; KGCC from 234.2m-1280kc to 239.9m-1250kc; KFUT from 260.7m-1150kc to 263m-1140kc; WCAM from 236.1m-1270kc to 336.9m-890kc; KFPY from 273m-1098kc to 272.6m-1100kc.

WKBT is the new call of the First Baptist Church station at New Orleans, La. The old letters were WBBS.

KDYL, Salt Lake City, Utah, is now owned by the Intermountain Broadcasting Corp.; WCAO, Baltimore, Md., by the Monumental Radio, Inc.; KFON, Long Beach, Calif., by Echophone Radio Shop; WCLS, Joliet, Ill., by WCLS, Inc.

WFBE, Seymour, Ind., is marked delete. This call will be used in the near future

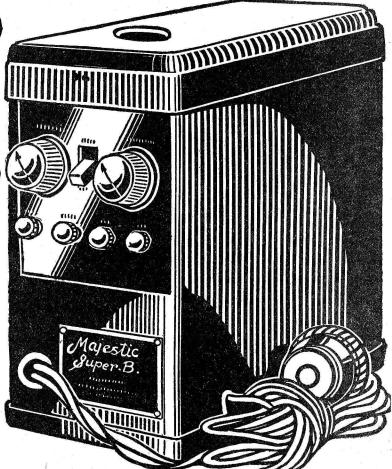
No More "B" Batteries

on Your Radio

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

1-Year Guaranteed Majestic" Eliminator





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

Cabinet finished in rich black crystal enamel. Dimensions: 10% inches deep by 5½ inches wide by 9 inches high. Weight: 20 pounds net; 25 pounds packed. Bakelite Panel. Complete with extension cord and attachment plug. One RAYTHEON tube with G-G-H protective packing. Packed in individual padded wire-bound wood cases.

1-Year Guarantee

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

\$500 a Month, If Satisfied After Trial

Only \$1,00 with the coupon brings the Majestic "B" Eliminator to your home on trial. Try it out thoroughly before you pay another penny. See how it improves reception. See how much more convenpenny. See now it improves reception, see now much more convenient than using batteries. Judge for yourself how it will save you mone, and make your radio set more enjoyable. Then, if not satisfied, send it back at our expense and we'll refund your \$1.00 plus all transportation charges. If you decide to keep the Majestic "B' Eliminator, start paying only \$5.00 a mon'h until you have paid the total price of only \$35.00. That's the price others ask for spot cash. We give you the lowest cash price on easy monthly payments you will never feel.

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

Straus&Schram, Pept. Chicago, Ill.

STRAUS & SCHRAM, Dept. R4419 Chicago

Enclosed find \$1.00. Ship special advertised Majestic "B" Battery I liminator. I am to have 30 days free trial. If I keep it, I will pay you \$5.00 monthly. If not satisfied, I am to return it within 30 days and you are to refund my money and any express charges I paid.

Majestic "B" Battery Eliminator, No. Y8789A, \$35.

Name			 	
			 90 DO 4 C	 W
Street, R. F. D. or Box No.				
or Rue Mo				
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Shipping Point				
Point			 -	 -

Post Office.

Married Nationality or Single.

The Reader's View

New Year's Resolutions for Stations

Here are a few things I wish every station would do. The smaller stations, or rather the stations with the smaller calibre personnel behind them, are the worst offenders. Come on broadcasters, turn over a new leaf! Let's:

1. Not heterodyne. Keep away from waves of powerful stations with good

2. Give better programs, or cut the period on the air down and concentrate on quality instead of meaningless quan-

3. Begin and quit on time.
4. Announce call letters plainly. Give letters, town and state at close of each

Have a full silent night each week. 6. Divide time with all other stations on the same wave length.

7. Give more early morning programs.
8. Stick to one wave length so people will know where to find you.

9. Announce special programs several weeks ahead, especially in Radio Digest. With the above resolutions carried out.

I feel that broadcast listening would be a far more likeable pastime.—Friend of Better Reception.

Answer to P. B. G.; Against "Chain" In answer to P. B. G., of Mt. Pleasant, Iowa, who has it "in" for the "wave jump-ers" and said that he cannot get WEAF



Not Affected by Atmospheric Changes

Durham Resistors are Metallized and specially insulated, thus insuring permanence of resistance under all operating conditions. Maintain their resistance standard because impervious to atmospheric influences. 500 ohms to 10 megohms. Get the new Durham Mounting-upright, saves space.

INTERNATIONAL RESISTANCE COMPANY





Harmonicas Make a Happy Christmas

Everyone delights in receiving a musical instrument that he can play; and anyone can play a Hohner Harmonica.

If you want to give happiness with your gifts at Christmas-time give Hohner Harmonicas—a happy thought!

Leading dealers everywhere carry the complete line of Hohner Harmonicas-50c. and up.

The Free Instruction Book, containing favorite musical selections arranged for the harmonica, is available at dealers or direct. M. Hohner, Inc., Dept. 233, 114 East 16th St., New York.



and other stations, I ask, what good it ares to receive WEAF, WCAE, WGN, WOC, etc., when all of WEAF's programs are broadcast through the "chain"? All one needs is a crystal set to get the chain

one needs is a crystal set to get the chain program from the nearest chain station. I wonder if it did not seem unfair to him when 250 to 300 stations were crowded between 200 and 275 meters, while there were barely 100 stations in the great expanse of wave bands from 275 to 545? Since the 100 chosen stations would not divide time with the better newcomers the divide time with the better newcomers, the latter were certainly justified in "jumping" their waves.

He also called the man from Muscatine. Iowa, wild for saying the chain could be broadcast on one wave length without interference. It is peculiar, then, that a patent should have been granted for just such an invention. For the control of Radio to be placed in the hands of one man or company would certainly be disastrous.—V. U., Rock Island, Ill.

Dislikes WJAZ Sunday Jazz I must compliment you on remarks re

WJAZ. Last Sunday they sent over the air

the cheapest of jazz while church services were on the air. Come, Chicago, elevate your quality or make room for others. You are known as Jazz Town.—L. E. W., Brantford, Orange Charles ford, Ont., Canada.

How Many Ekko Stamps Have You? I imagine it would be interesting for your readers who are collecting Radio stamps to learn who has the largest number of proof of reception stamps, not duplicated thus for

duplicated, thus far.

I have 262 verified reception stamps to date, including four from California, one from Mexico, two from Cuba, ten from Canada, and twenty-two from Chicago.—Robert Klein, 218 N. 6th St., Allentown, Pa.

Interference in New York City

Have read with interest your editorial on interfering stations. New York City at present has several "bad cases." The at present has several "bad cases." The worst one, I think, is WMSG, the Madisca Square Garden. This station deliberately jumps the wave length while broadcasting. I was listening about two weeks ago on a Saturday night at 10 wilelest to be benefit for the contribution of the several ways. o'clock to a beautiful concert from WLW, reception tests.—Editor's Note.)

Cincinnati. About six times wit twenty minutes WMSG broke right in.

twenty minutes WMSG broke right in.

Other offensive stations are WFBH and WHN. WFBH, when broadcasting covers a wave band of about 70 to 80 meters; WHN even more. Then WFBH prolongs their programs always about 10 to 15 minutes. The latest pirate of the air is WNJ, Newark, which increased their wave length recently to 352 meters. That station keeps on blaring all night. How can anybody get distance? I have one of the best sets made, but I can't.

On Thursday and Friday night, October 14 and 15, WHN was on the air sending out nothing but power waves from 250 up to 465 meters. On the night of October 20 WFBH and WHN sent out an after midnight program. After signing off, one of these stations kept its carrier wave on the air all night, and you could hear the generator hum from 238 to 526 meters.

air all night, and you could hear the generator hum from 238 to 526 meters. What -L. H., New York, N. Y.

(The reader whose opinion is quoted above is one who won a prize for excel-lent reception during the 1926 international

Sign off to sweet dreams



You enjoy radio like a gentleman—if you can get the best out of your set and forget all worry and bother. That's your happy frame of mind when you keep your batteries full of pep with a Rectigon. The most absent-minded dial twister snaps on a Rectigon without a qualm. What if you do tune in while you're still charging your battery? There's no harm done, not the slightest. What if the current does go wrong in the dead of night? Your batteries will not be discharged with a Rectigon attached.

when you keep power in your set with

No noise as it charges—not a bit of fuss. Not even a murmur that would disturb the mildest



No acids, no chemicals-no moving parts—nothing to spill or burn. No muss, no worry. You'll have no spoiled rugs, no ruined clothing.



Saves its cost in short order-Count the dollars spent in a few trips to the service station and you'll hotfoot it for a Rectigon, for the good it does your pocketbook as well as your batteries.



Snaps on in an instant-Just plug into the light socket, snap on the terminals. Saves service station bother. Spares interruptions caused by absent

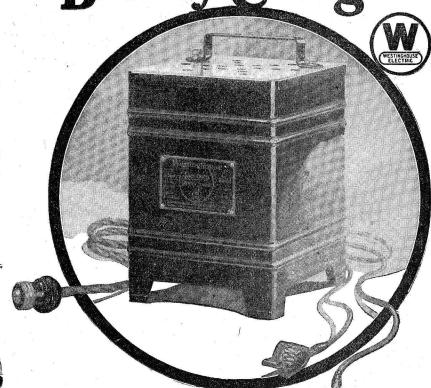


Charges both "A" and "B" batteries - Keeps both packed with power. Bulb packed for "B" battery charging and it is en-closed, like all other parts, in metal, safe from accident. (Rectigon charges automobile



No Storage Battery Radio is Complete Without a Rectigon

The Westinghouse ©, 1926, W. E. & M. Co. Rectigon **Battery Charger**



THE RECTIGON is a superb Westinghouse product. Things you can't see, like extra heavy insulation, things you can see, like the durably enameled case—all are of highest quality.

instruments, and Micarta panels and tubes.

WESTINGHOUSE ELECTRIC & MANUFACTURING CO. Tune in on KDKA KYW - WBZ - KFKX

Westinghouse also manufactures a complete line of radio

"GOODY GOODY GIRL"

(Continued from page 10)

girl running away from a cruel step-father—. Oh, you fooled me fast enough. I give you credit for that. When I learned

I give you credit for that. When I learned the truth—"
"When you learned the truth?"
"Oh, yes, my eyes were opened. I was told all about you. It gave me an awful jolt. Did you think I came out here tonight to get you out because I was one of that infernal crew you're mixed up with? Guess again. I came—I came—oh, damn it all, I can't lie to you. I came because. God help me. I do love you; love cause, God help me, I do love you you, no matter who or what you are."

E released her suddenly, threw his arms across the steering wheel and let his head drop upon them. To her consternation his body became wracked with sobs. She had never seen a man weep before. She bit her lips be-cause she did not know just what to do.

cause she did not know just what to do. Then, impulsively, she patted his shoulder.

"Keep your hands off me or, by God, there's no telling what I'll do," he said hoarsely. His head came up with a jerk and he stepped violently on the starter.

"Wait a minute," she commanded.

"There's something wrong about all this. You speak as if I were something despited by the there were the starter.

able. You say that when your eyes were opened to me, it gave you a jolt. Just who or what am I supposed to be, other than what I told you?"

'Oh, drop the goody-goody girl role," he said harshly. "I know the truth. Becker told me."

"Becker? What does he know about

me?"
"Stop fencing! I know that you're a

'Crook!"

"Crook!"

"What else would you call a girl who uses her looks to entrap men, get them into compromising situations, blackmail them, bleed them for money—no, don't interrupt. I'm going to show you that I do know the truth. Becker told me how Mrs. Gayton recognized you on the train, cuessed you were out to fleece me and guessed you were out to fleece me and came to my rescue; of how she took a liking to you and persuaded you to go in with Jermin instead, how you had become a decoy and fixer—"
"Oh, this is monstrous! When did Neil

Becker tell you this?"

and Mrs. Gayton had gone. He stopped behind to warn me; said that for all the bad blood between us he gouldn't see me teleping. couldn't see me taken in . . . I'd have given anything if it had been anyone but him . . . Great God, how I suffered! The girl I'd fallen in love with mixed up

in a bootlegging gang—"
"What! Me? A bootlegger?"
"Why don't you stop pretending? You very well know that Victor Jermin's one of the biggest bootleggers in the country, that he runs the stuff in by the dozens of trucks at a time, that—"

"Oh! You think, then, I'm involved in business like that? You think—"
"How can I do otherwise when I've seen what I've seen in the last few weeks?"
"Yet you love me?"
"How there had "

"Heaven help me, I do."

Were you preparing, a few minutes ago, ask me to marry you?"

He did not reply.
"Were you?" she persisted.
'No," he admitted in a low tone, "I was

not. I didn't think married or not married would make any difference with—with—"
"With a girl like me? Well, it does, and since you're saving yourself for someone like that little pink-and-gold girl you were with at the reserved."

with at the races today—"
"That's my sister," he said fiercely.
"You keep your tongue off her. You're not fit even to mention her."
"Very well," she agreed calmly. "Now

drive on."

The miles rolled behind them in silence. Once he essayed to speak to her, was instantly rebuffed. In front of the apartment house where Mrs. Gayton lived she

got out and without a word started for

the door.
"Let's part friends," he called out. "Say good night, at least.

She whirled and faced him.
"Good night—and good bye," she said.

And now Lois was in a seething, boiling She would find out what it all meant She enters the door and finds the man she most wanted to see—Neil Becker. This is one of the most thrilling moments of her succession of adventures and you will want to read about it in the mid-De-cember Radio Digest.

Harmless Alarm Clock Gift Is Guaranteed Not to Wake

HAVANA, Cuba.—Are you an especially good friend of PWX? If so you have probgood friend of PWX? If so you have probably received of late a very peculiar gift. Unwrapping the package, you would take forth what portended to be a cardboard alarm clock, but quite heavier than the usual sleep disturber.

Then you would realize that the clock represented the tick of the clock which is a symbol of PWX on the air. Next you would note that the pseudo clock was a box, and upon opening it you would lock

box, and upon opening it you would look upon candy—not in the sense of the word Americans, especially Northerners, are accustomed to think of candy, but in the

Customed to think of candy, but in the Cuban definition.

The candy is made of tropical fruits and Cuban cane sugar. Many people think it unpalatable; others like it as a novelty. The gift at least is original.

REDUCE BRITISH TUBE PRICES 36CTS. TO \$1.08

But "Bottles" Remain Most Expensive Radio Item

LONDON.—Reductions in the price of Radio tubes are being made throughout Great Britain. It is in the higher-priced tubes that the cuts have been made. They tubes that the cuts have been made. vary from 36 cents to \$1.08.

The general opinion is that the new prices will not do very much to make Radio more popular than it already is, as the tube still remains the most expensive item in the working of a set.

"There has been a regrouping and standardization of the better makes of tubes said an official of the Valve Manufactur-ers' association in an interview. "There have been a number of reductions during the past few years, but new types of tubes are centinually being produced."

Why are some groups of entertainers called an orchestra while others are called serenaders? Some people are under the impression that "serenaders" is just a fancy name for an every-day orchestra, but we learn from the broadcast stations that such is not the case. An orchestra is merely a group composed of musicians, not all of whom are experienced enough to play individual solo selections, whereas in a group of serenaders, each individual musician is an experienced soloist and can be called upon at any time to perform without his fellow artists.



A Centralab
Radiohm is
used in the
popular
Bruno
Circuit, as
well as the
Infradyne,
Henry Henry Lyford, Varion, and many others

er reception with most any radio circuit. It holds perfectly the sensitive regenerative position which immediately precedes the oscillation point.

Dependable, noiseless in adjustment, and full resistance variation with a single turn of the knob. Resistance values re-main exact for life of set. \$2.00 for any resistance.

SWITCH TYPE

RadiohM



Has an "A" battery switch, also controlled by the knob, giving a double purpose control. Is variable from zero to 500,000 ohms. Also furnished in Modulator, for tone volume control in all audio circuits.

CENTRAL RADIO LABORATORIES

12 Keefe Ave., Milwaukee, Wis. Makers of a full line of variable resistances for 59 makers of leading standard sets.





__a radio speaker of dignified beauty matched only by its rare tonal capabilities. Ideal for power tube operation, the new Meistersinger can also be used as a Wall Model by detaching base. The exclusive driving mechanism and free edge cone, 16" in diameter, is protected by a solid mahogany frame and metal base with dolphin motif.

Such quality heralds the Meistersinger as a value without precedent among cone speakers—a most



TUNNEY'S WIN STILL **NEWS TO MOUNTIES**

WESTINGHOUSE STATIONS SEND ARCTIC MESSAGES

Have Friends at North Pole? KYW, WBZ, KDKA, or KFKX Will Send Greetings

PITTSBURGH, Pa.—A Radio program of the last two months' news and messages for isolated inhabitants of the Arctic circle, was broadcast November 13 from KYW, Chicago, as the first of a series of Arctic and Sub-Arctic transmissions from the four stations of the West sions from the four stations of the West-inghouse Electric and Manufacturing Co. Listeners heard KYW inform residents

of trading posts and detachments of Royal Canadian Mounted Police, that Gene Tunney had dethroned Jack Dempsey as heavyweight boxing champion; that vio-lent hurricanes had taken heavy toll of life and property in Florida and the West

and that Lord Willingdon, new governor-general of Canada, had reached the Dominion to take up his duties. No mail or news has entered the Arctic region since the first boats after the spring thaw.
"Mounties" Await "News"
All the Mounted Police stations in Cana-

dian Northwest Territories; trading posts in Baffinland and Hudson Bay, and Dr. Morten P. Porsild, Danish government scientist at Godhaven, Greenland, have been provided with the schedule of broad-

been provided with the schedule of broadcasts, whose future dates appear below.
Several short-wave receiving sets have
been placed in remote Arctic settlements
for reception of the special 63-meter
broadcasts from KDKA, Pittsburgh, in addition to its 309-meter program.
Station KFKX began its Arctic programs November 19, and was followed by
KDKA the next night. WBZ started November 27. The broadcasts will follow at
intervals of about one month, ending
March 5. The schedule follows:
KDKA, Pittsburgh, Pa., 309 meters (also
n 63 meters both voice and telegraph), 10
p. m. Eastern Standard Time, December

m. Eastern Standard Time, December 5, 1926; January 15, 1927; February 26,

WBZ, Springfield, Mass., 333 meters,

10 p. m. Eastern Standard Time, January 1, 1927; January 22, 1927; March 5, 1927.

KFKX, Hastings, Neb., 286 meters, 10 m. Eastern Standard Time, December 1926; January 14, 1927; February 25,

KYW, Chicago, Ill., 536 meters, 10 p. m. Central Standard Time December 18, 1926; January 8, 1927; February 19, 1927. Do not send messages direct to stations.

All communications must be sent to G. A. Wendt, Canadian Westinghouse Co., Ltd., P. O. Box 390, Montreal, P. Q., Canada.

WRR, Dallas, Moves Studio

DALLAS, Texas.—WRR, municipal station of the City of Dallas, has recently removed its studio to the Jefferson hotel, Dallas' leading hostelry. The studio is located on the roof garden, "Paradise." The Jefferson hotel is owned and managed by Cheles Mangled, well known in botal by Charles Mangold, well known in hotel

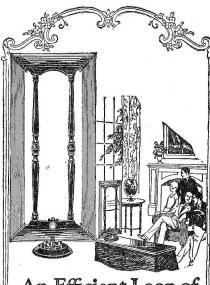
Firm Quits Selling Bloopers

CHICAGO.-War on the Radio blooper has gained an ally in what is one of the largest retailers of Radio sets in the world

NOVEMBER 15 ISSUE IS STILL AVAILABLE

HOSE readers of Radio Digest who were unable, because of the large demand for copies of the last issue, to obtain one, may have one mailed to their home address by sending fifteen cents in stamps or currency to the offices of this publication at 510 to the offices of this publication at 510 N. Dearborn St., Chicago. The beginning of the "Game of Whozit" with the last issue, the second November number, caused a shortage of copies, but a limited supply is still available. Persons subscribing for one year (\$3) may have their subscriptions started with the second November number.

Montgomery Ward & Co. Announcement has been made by the big mail-order house that it has entirely discontinued the sale of all blooper Radio sets.



An Efficient Loop of Surpassing Beauty

The Bodine De Luxe Loop fulfills perfectly the long felt need for a compact beautiful loop—outstandingly efficient.

The symmetrical frame of solid walnut, handrubbed to a beautiful finish, black bakelite mountings, and attractive silk covered windings combine in producing a loop of outstanding beauty.

Despite its compact size the De Luxe Loop brings in stations with amazing power. Sharper selectivity due to directional tuning improves tone quality.

Designed for standard loop sets but can be used effectively with most aerial sets. Write for free illustrated booklet that tells how. Price, Bodine De Luxe Loop, all models, \$12.00.

Bodine Folding Loop

Exceptionally directional, re-markably efficient. Because of the Basket-weave method of winding the Bodine Folding Loop brings in the long distance stations. Sliding sleeves

conceal the hinges of the English Mahogany frame in operation. Folded it fits a box only $3\frac{1}{2}$ " x 6" x 18". Ideal for camping too! Holds shape under long service. Price, Bodine Folding Loop, \$8.50 to \$10.00.

Bodine Twin-Eight R. F. Transformers



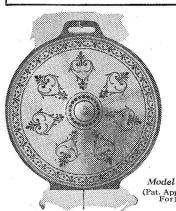
Greater amplification, less interference with other parts, sharper selectivity, are features of these improved coils that amaze manufacturers and set builders alike.

set builders alike,
No type of torodialor doughnut coilcan compare with Twin-Eights. Improves all tuned
radio frequency hookups. Compact and small,
easy to install. The boon of amateur set builders. Write for hookup of the Bodine TwinEight Receiver which uses Twin-Eight Coils.
Buy Twin-Eight Coils from your dealer today.
Price \$2.00 per coil, three matched coils \$6.00.

Mail the Coupon



Windsor Wall or Table Type Cone Speaker Amazes Radio World



Model 210 (Pat. Applied

The latest model Windsor Cone Loudspeaker has astonished the world of radio. In convenience, quality of reception, and extremely low price, it far surpasses anything yet offered. The cone is 22 inches in diameter and is mounted on a sounding board which, in turn is supported by an easel book. in turn, is supported by an easel back. It can be hung up on the wall, as in the picture above, or stood upon any flat surface as shown in the picture below. It contains the famous Windsor loudspeaker unit noted for the extreme clarity and fidelity of reproduction.



Model 302 (Shown below) With Moulded Composition Horn Loud-speaker and 18-inch Cone Loudspeaker.



is combined both the Windsor Moulded Composition Horn Loudspeaker and the 18-inch Windsor Cone Loudspeaker. The top is 30 in. x 17 in. and stands 29 in. high. Plenty of battery and equipment space is provided by large shelf in rear.

Price, finished in Mahogany or Walnut

(West of Rockies, \$55) hogany or Walnut (West of Rockies, \$55)

Note to Dealers: Write or wire today for details of the highly profitable Windsor line.

Model 100

with Moulded Composition Horn Loudspeaker or 16-inch Cone Loudspeaker

(Pat. Nov. 18, 1924)

To the right is shown the newest Windsor Loudspeaker Console. It is equipped with a 22-inch Cone Loudspeaker and cabinet suitable for 7-in. radio panels up to 26 inches in length. Battery shelf provides ample space for all equipment. Beautifully finished in either Walnut or Mahogany. Price (without receiving set).. (West of Rockies, \$52.00)

Electrical Department

WINDSOR FURNITURE COMPANY

CHICAGO, ILLINOIS

Los Angeles Branch-917 Maple Avenue



Consoles in the Radio World Today

The quality of radio reception made possible by

Windsor Cone and Horn Loudspeakers and

Loudspeaker Consoles so far surpasses any-

thing heard heretofore that it amazes and de-

lights every radio enthusiast. The Windsor Line is so complete that everyone can find in it

a loudspeaker, loudspeaker table, or loudspeak-

er console exactly to fit their particular needs.

(Pat. Applied For)

Model 1000

Rear view at left shows large compartment with ample space for batteries, battery charger, or battery eliminator, which are entirely concealed from view. Back is open

for ventilation of batteries.

Radio Digesi

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

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Frankly, Is It Good Business?

WE HAVE just thought up an original idea. If we were in the bootblacking or banana peddling business, we would put it into effect immediately, but not being engaged in either of these two or similar occupations, we suppose we must wait.

The idea is this: We would start a broadcasting

station. Of course the idea is not strictly original, but inasmuch as there are only about seven hundred other business concerns operating broadcasting stations at this time, you can see that the idea is almost

original.

Sarcastic? Not us! We really would start a broadcasting station, and after we got it started we would
try to find why we ever started it. Of coure, we
couldn't sell bananas or polish shoes by Radio, but
then we might drum up a little business—and, "Business is business." Maybe we could give wonderful
educational talks on the use and abuse of banana
skins when spread upon the sidewalks, or perhaps we
might tell our eager listeners how to tie their broken
shoe strings together until they could reach our
store to buy new ones. store to buy new ones.

People who buy Radio sets probably don't know all there is to know about bananas or blacking boots. They no doubt would welcome our coming on the air just in time to blast out a splendid rendition of light opera from a genuine, honest-to-goodness broadcasting station several hundred miles away that is really trying to entertain the invisible audience and give them the best in music and service.

Yes they would-NOT! Hearken ye wave-choosing stations that have nothing to offer the five million or more members of the great fraternity of broadcast listeners! Hearken, stop and think once again before you turn your 500-watt congestion manufacturing machines loose on the ether to do no good but much harm.

For some day, be it through an act of congress (if congress ever acts) or be it through a violent revolution of Radio fans, a lot of broadcasting stations operated unwisely by banana peddlers, bootblacks and similar business concerns are going to find themand similar dusiness concerns are going to find themselves debarred from using the ether. And by the same token, these same business concerns will find that instead of building "good will," their broadcasting activities will have done nothing more than made enemies of a once faithful group of customers.

Why There Is "Congestion"

A GOOD friend asked us the other day why it was not possible to separate two stations broadcasting simultaneously on the same wave length. His question brought to light a fact we had overlooked, which is that the majority of present day listeners know little, if anything, about Radio technicalities.

To stop other listeners from believing that it is practically possible to separate two stations broad-casting at the same time on the same, or very close wave lengths, we are going to give our answer to that question.

Suppose two railroad trains were running toward one another on a single track. Unless they stopped, there would be a wreck when the two trains met. Now suppose both trains were very, very long and were being pushed instead of pulled by their respective locomotives. After the first crash of coaches, the scaches of the two trains would continue to crash the coaches of the two trains would continue to crash with one another or with the wreck of the preceding coaches.

In Radio, when two stations, either broadcasting or code, use the same or closely adjacent wave lengths at the same time, the Radio wave trains of each station are, of necessity, running toward one another continuously and always crashing with the wave trains of the other station. They cannot do other-wise. You hear the wreck. It is a whistling, howl-ing sound like the blowing of a high wind. What is worse, you cannot tune out that continuous objectionable sound with any receiver made. The set or device that will totally and effectively separate two stations on the same wave length has not yet been invented.

RADIO INDI-GEST

Setting-Up-and-Down Exercises

Leading Broadcaster to Revolutionize Industry

Future Youths of America to Develop into Nation of Acrobats

By Perry Charles, Announcer of WPAP

MOST noted professor, whose name we cannot divulge at this present moment of writing, has been temporarily engaged by Station WPAP to present a series of setting-up-and-down exercises. Of course, he really hasn't, but it makes a good story.

All that is necessary is for the listener to tune in on WPAP at 3:45 any morning and begin immediately the short cut to health or death as the case may be.

A simple albeit sweet little thing, cheerfully called "The Jolly Periscope," is lesson A. (See illustrations as we go rambling along.) This is most heartily recommended to those preferring a quick exit up the aisle to those that dread the long awaited inevitable toot of Gabriel's saxophone.







-The Jolly Periscope C—The R B—The Allay Oop C-The Reverse

We will now cheerfully spring into lesson B. It's "The Allay-oop." We cannot insult the intelligence of our vast reading public by going into details on this most simple of exercises. The professor has called this "merely a tuning up exercise, one designated to take the kinks out of muscles and hair and is applicable to all ages." May you rest in peace.

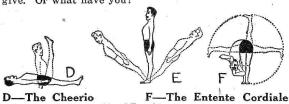
"The Reverse English" is lesson C. This is specifically to be used only when the occasion to which it is applicable arises.

is applicable arises.

For instance, you are walking rapidly down Broadway when suddenly someone calls you, thus:
"Hey, Skunkton," or Fuesel or whatever your name "Hey, Skunkton," of Fuesel of Whatever your name is. Instead of turning the entire body around, looking wild-eyed in the direction of the call, losing time and temper, all that is necessary is to "Reverse English," keeping right on walking and losing no time.

No one has ever thought this up before and right now

I would like to claim any credit that you might like to Or what have you?



E-The Zoom-a "The Entente Cordiale" is a surprise exercise for your dentist. See F. How many times have we dreaded going to the chair? The dentist's chair, naturally, we mean. How many times, with the limbs akimbo, shaking and trembling, a taste in the mouth like a feed and animal store and a feeling that the mind has left the

body.

After you have mastered this "Entente Cordiale," you skip gaily into his office and immediately do your stuff. Imagine the joy of your dentist! There you are sitting pretty, just right for the "works."

Sorry, but "The Cheerio" and "The Moom-a" are two new steps in the Blackbottom and shouldn't really be listed as an exercise, but merely as two new steps.

Tune us in again tomorrow morning at 3:45. Good night, kiddies!

Radiotics

Silvery tubes of makes assorted Catch the message from the air, And, if they by chance are "shorted," Cost you just four bucks a pair.

Then the amplifier unit Causes many fans to curse: When you turn the knob to tune it You just make bad matters worse.

For static noises so appalling A resemblance long I've sought, And I find they sound like falling Water on a stove that's hot.

Batteries, first with care selected, Like some folks of whom you've read, Live their lives by all neglected But are fussed o'er when they're dead. **GEORGE**

Before signing off, George adds, "Having noted that 'Barbara' is of the opinion that 'George' does not wear socks, I would say in reply that he wears articles which he spolls 'Sox.' They are of the bachelor variety. You know the kind—open at both ends; put 'em on from either end. He sometimes calls them his 'Radio Sox' as they broadcast seven day programs on a two-foot wave length. Station call RENU."

Living Up to Its Name

Dear Indi: Third item of Dielectric in the Second October number speaks of Jazz from WJAZ. What could you expect from such a name?

H. B. C.

The Three Whoziteers



Condensed BY DIELECTRIC

"Whozit" said they met with interference when attempting to tune in WGN? Is it possible that any one anywhere finds interference from broadcasting stations shifting their waves or jumping their power by two, three or five times—except the poor Radio reviewer? In order to "get by" some stations, whose programs are readily picked up for review, and listen in to others more remote or having less power output, it is necessary to set an alarm, get some sleep, then invent some way to be pleasant when you return to the receiver partially awake. More often than not you find at such times that features other than dance music have come and gone. So another night trap is set with much the same result. However, by diligently setting one's mind to the task of ignoring heterodynes, blurred music and injudicious expressions it is possible to grasp enough of a program to make some expression about its worth.

The anniversary program put on by Station KDKA, Pittsburgh, was not only entertaining, it was educational from the standpoint of Radio history. Those of us who recall the first broadcasting from this world's pioneer can fairly value the tremendous improvements in broadcasting since that memorable day. Comparing the transmission from this, or any other station, years back to what was heard that other station, years back to what was heard that evening should make us grateful to the engineering skill effecting the change. The quality of musical sound and spoken word are now nearly perfect and so evidenced as speakers reviewed the high lights in KDKA's history and the orchestra rendered its part in the celebration. Especially enjoyable was the singing of a mixed quartet singing of a mixed quartet

Out in Omaha, they have access to musical talent worthy a place on any program. Also Station WOAW, located there, has the privilege of broadcasting concerts from one of the finest organs in the country and Mr. Thornton knows his instrument. Then, too, we have recently listened to both male and female vocalists in whose singing all might take pleasure. The work of a chorus was particularly praiseworthy for its musical intelligence and vocal attainment. Too many choruses are unbalanced; exclusion of the other two choirs. This fault was entirely absent. A very lovely rendition of that old favorite, "Believe Me If All Those Endearing Young Charms," sympathetically played as a harp solo, added much to the evening's broadcast.

Stars of the screen, opera, musical and stage world stars of the screen, opera, musical and stage world appear with fair frequency before our mikes, but so great an actress and unique a figure as Julia Marlowe finds entrance to broadcasting studios at rare intervals. Her "Juliet," enlivened by the introduction of trumpet, male quartet and tenor "Romeo," was no more a masterpiece than her delineation of "Katharina," the chastened shrew. More modern poetry showed her equal in versatility as in classic reading of Shakespeare's dramas. We beg for a rehearing.

With the coming of so many leading symphony orchestras on the air it is possible to become hypercritical of all others. We trust that will not follow. By dint of the ignoring process outlined above I was able to sit listening with keen enjoyment to an orchestra playing choice selections broadcast by Station KOA, Denver. The violins were notable for their precision and flexible bowing, and the ensemble was above reproach. The director led his players as would an organist familiar with each stop and its peculiar effect. More of such playing heard nightly would be well.

Radiophone Broadcasting Stations

Listed by Wave Lengths-Dec. 1, 1926

Wave length	Frequency (kilocycles)	Power (watts)		Wave length	Frequency (kilocycles)	Power (watts)	Call Location	Wave length	Frequency (kilocycles)	Power (watts)	Call signal	Location	Wave length	Frequency (kilocycles)	Power (watts)	Call signal	Location	Wave length	Frequency (kilocycles)	Power (watts)	Call signal	Location
UNI		WAVE I	STATIONS ENTHS	238	1,260	125	KFBS Trinidad, Colo. KFCB Phoenix, Ariz. KFWU Pineville, La. KFYJ Houston, Tex.	260.7	1,150	500 100	KSEL	Okla, C., Okla, Sioux City, Ia. Pocat'lo, Idaho	299.8	1,000	750	WPG	S. Lk. Cy., Utah Fayet'vl., Ark. At'ntic Cy., N.J.	4,4941,5,4 ***	630	3,300 750 500	WBAF WFA WTIC	Ft.W'th, Tex. A Dallas, Tex. Hartf'd, Conn.
202,6	1,480	50 KGB 10 WEI 10 WIB	B B. B'r Lk., Cal. Y Shelby, Nebr. IS Chicago, Ill. Elizabeth, N. J.	15 A		250 200 10	WBBP P't'sk'y, Mich. WHBN St. Ptsbg., Fla.			1,000 100 50	WARC WARC WDAY	Santa Ana, C. Haverf'd, Pa. Md.Hlse,Mass. Fargo, N. D.	300 302.8	999.4 990	100 1,000 1,000	WRES	Anch'ge, Alsk. Wollaston, M. Oakland, Cal. Chicago, Ill.	483.6 485.1 491.5	618	5,000 500 500 1,000	WSUI	Davenport, Ia. I Iowa City, Ia. R Pr'v'dnce,R.I. Portland, Ore.
	1,470 1,460	500 WAI	BB Harrisb'g, Pa. D Venice, Cal. D Logan, Utah L Br'klyn, N. Y.	220.0	1.250	3,500 200 10 10	WHT Chicago, Ill. WKBA Chicago, Ill. WRAW Reading, Pa. KFHL Oskaloosa, Ia.			250 500 500 500	WKAI WMAZ WSKO	I N. Plfd., N. J. F M'lw'kee, Ws. Z Macon, Ga. Bay C., Mich.	305.9	980	4,000 500	WMSC	Elgin, III. N. Y., N. Y. Br'k'gs, S. D. C'ncil Bluff, Ia.	499.7	1	500 5,000 500	WCFI WEAL KFRU KRSC	Chicago, Ill. F N Y., N. Y. J Columbia, Mo. Seattle Wash
206.8	1,450	50 WPI 50 KGT 50 WAI	T San F'nco, Cal. W Wooster, O.	239.9	1,230	10 100 5000	KFLX Galv'st'n, Tex. KFUM Col. Spgs., Col. KFVE St. Louis, Mo. KFVI, Houston, Tex.	263	1,140	100 100 15	WTAF	Boston, Mass. Norfolk, Va. Lambtv., N. J. Portland, Ore.	309.1		1,000 10,000	KOMO KDKA WKBO	Seattle, Wash. Pttsb'gh, Pa. J'sey Cy., N.J.	508.2	590		WCSI	H Portland, Me. Memphis, Tenn. 3 Ft. W'th, Tex. Oakland, Cal.
209.7	1,430	30 WCI 30 WIB	A Joliet, III. BR Prov'ce, R. I. H N. Bfd., Mass. BA Chicago, III.			250 100 15 100	KGCG Newark, Ark. KGCI San Ant., Tex. KZM Oakland. Calif.	203	1,140	100 10 50 5	KFUT KGCM KTBR	SaltLk.CtyU. San Ant., Tex. Portland, Ore. Houston, Tex.	312.3 312.6 315		1,000 1,000 500 500	KWK	Shrevep't, La. H Shrevep't, La. N. Y., N. Y. Chicago, Ill.	516.9	580		WIP	Philadelphia, Pa. Philadelphia, Pa. Detroit, Mich.
210 211.1	1,428 1,420	50 KGC 250 KFV	N C'nc'rdia, Kan. VO Avalon, Cal. U Lewisb'g, Pa.			100 50 500 100	WABI Bangor, Me. WCAT Rp. City, S.D. WDBO Wtr. Pk., Fla. WGBI Scranton, Pa.			500 50 250 1,500	WAAI WABI WCAI	M Newark, N. J. Toledo, Ohio Canton, N. Y.	315.6	950 250	500 500 500	KFDM KFW	So. Bend, Ind. I Beaum't, Tex. M Oakland, Cal.	526	570	5,000 250 5,000 1,000	WHO	Pontiac, Mich. G N. Y., N. Y. Des Moines, Ia. C N. Y., N. Y.
	1,410 1,400	100 KFV 100 WM	VV Portland, Ore. AL Wash., D. C.	240	1,249	500 20 10	WOAX Trenton, N. J. WSMH Ow'sso, Mich. WTRC N. York, N.Y. KGCX Vida, Mont.			100 500 500	WDG	San Ant., Tex. N. Orlns., La. G Amarillo, Tex. Mnpls., Minn. Savannah, Ga.	319	940	1,000 500 5,000 1,000	WAH	Pasadena, Cal. G R'm'd H.,N.Y. B'rn Spgs., M. Portland, Ore. Buffalo, N. Y.	535 535.4	560	750	KFBI KYW WHA	W Omaha, Neb. Sac'mto, Cal. Chicago, Ill. Madison, Wis.
-		10 KFY	VF St. Louis, Mo. R Okla, C., Okla. Y F'staff, Ariz, F Oxnard, Calif. S Joliet, Ill.	241.8		50 10	KXRO Seattle, Wash. KFFP Moberly, Mo. KFPM Gr'nville. Tex.	265	1,131	100 250	WRAN	Y Yel. Sps., O. N. Y., N. Y. P. B. Cr'k, Mich.	322.4	930	750 500 5,000 2,000	WSM	Buffalo, N. Y. B N. Olns., La. Denver, Colo. Y N. Y., N. Y.	545.1 555.2		500 500 500	KFUC KSD WTA	O St. Louis, Mo. St. Louis, Mo. G W'cster, Mass. B Chicago, Ill.
215 215.7	1,395 1,390	50 KFC 50 KFC	M Prescott, Ariz. W Seattle, Wash. J Colorado			50 50 50 250	KFXH El Paso, Tex. WABY Phila., Pa. WCBH Oxford, Miss. WCBS U. S. (Ptb.)	265.3	1,130	500 500 100 1,000	WCAH	M Chicago, III. H Columbus, O. Wmgtn., Del. R Chicago, III.	325.9	920		WCAY WKRO WSAI	M'w'kee, Wis. Cincinnati, O. Cincinnati, O.	C			STA	TIONS BY
		50 WBI	M Prescott, Ariz. 3Z (Portable) 3L Chicago, III. 3M Chicago, III.	242	1,239	100 1,000 250	WEBC Superior, Wis. WHOG H't'g't'n. Ind. WOOD G. Rps., Mich. WCBS Prov. R. I.	207.5	1.100	500 1,000 100	WGHI WMA WTAE	B Cl'rw't'r, Fla. K L'ckp't, N.Y. B Fall R., Mass. Oak, Neb.	329.5 331 333.1	910 905.3 900	10,000 50 100 500	KGCE	, Chicago, Ill. Okla. Cty, Ok. York, Neb. San Jose, Calif. Muscatine, Ia.	247.8	1,210	75 5 25 5	CHCO	C Thorold, Ont. O Huntsv'le, Ont. Kitchener, Ont. C Cobalt, Ont.
		10 WIF	BW Phila., Pa. J (Portable) M (Portable) G Chgo, (Ptble.) M N'b'gh, N. Y.	242 243.8		50 100 500	KFVR Denver, Colo. KGAR Tucson, Ariz. KUOM Missoula, Mt.	267.7	1,120	500 50 10	KFH KFRC WBB	Wichita, Kan. S. Fran., Cal. Chlstn., S. C.	336.9	890	500 2,000 500 500	WBZ	' Muscatine, Ia. Spr'gf'd, Mass. A Boston, Mass. K N'thf'd, Minn.	267.7	1,120	71/4	CKPC CFJC CFMC	C Preston, Ont. Kamloops, B. C. Kingston, Ont. Kingston, Ont.
217 3	1,380	100 WPI 150 WR	RC H'rrisb'g, Pa. ST, Bay Sh., N. Y. F San Jose, Cal.			5,000 100 100 500	WAMD Mppls., Minn. WATT Mass. (Pt.) WEBR Buffalo, N. Y. WGBB Freep't, N. Y.			50 700 250 100	WEB	I El Paso, Tex. W Beloit, Wis. I Indupls., Ind. I C. Rpds., Ia.			1,000 500 1,000	KNX WCAI WJAX	Los Angls., Cal. , N'thf'd, Minn. (J'ksn'vl., Fla.	201.1	1,030	50 50	CJOC Alta	C Sum'sd, P.E.I. S. Lethbridge.
	1,370	5,000 WFI	K Chicago, Ill. K Chicago, Ill.			100 100 50	WNAX Y'nkt'n, S. D. WRAM Galesb'g, Ill. WSAZ Pomeroy, O.			100 500 500 100		N. Orlns., La. K Knxv., Tenn. K Phila., Pa. K Chicago, Ill.	340.7	880	500 500 500	WKAC WMC	Lincoln, Neb. Manhat'n, Ks. Q S. Juan, P. R. A N. Y., N. Y.	231.1	1,030	1,000 50 500	CJCI CJCQ CJOR	Toronto, Out. King, Ont. Sea Island, B.C.
		50 WIE	W Ol'mpia, Wsh. BU And'rs'n, Ind. I Flushing, N. Y. I Red B'k, N. J.	244 245.8	1,229 1,220	100 50 15	WKBF Indnpls., Ind. KDYL S. L. Cy, Utah KFJI Astoria, Ore. KFJY Ft. Dodge, Ia.	268 270.1	1,119 1,110	100 500 100	KGU	C N. Hvn., Con. Honolulu, Hwii. Decatur, Ill. Sisiht, Wis.	344.6	870 862	5,000 50	WLS KGBX	Zion, III. Chicago, III. St. J's'ph, Mo. State Col.,N.M.	-296.9	1,010	500 500	UNRV	Toronto, Ont. Toronto, Ont. Vancouver, B.C. Brantford, Ont. Prescott, Ont.
220	1,363	KRA WK	S Buffalo, N. Y. C Sh'veport, La. BY Dnle, Pa. (pt.) U Oakland, Cal.			500 5,000	WABX Mt.Cms., Mich. WBAL B'ltim'e, Md. WCAZ Carthage, Ill. WIBR Steubenv'le, O.		39	500 100 1,500 500	WDBE WGH WGST	Atlanta, Ga. P Detroit, Mich.	348.6 350.6	860 855.2	1,000 500 500	KWSC WEEL	P'llm'n, Wsh. Boston, Mass. U L'kw'd, N. J.	312.3	3 960	50	CJRM CFCY CHW	M'se Jw, Sask. Charlotn.,P.E.I. C Regina, Sask. Regina, Sask.
220.4	1,360	100 WIE 50 WK 500 WQ	W L'g'nsp't, Ind. BI Chicago, Ill. AA P'kesb'g, Pa.			50 500 500	WQAE Spr'gfield, Vt. WRR Dallas, Tex. WSOE M'w'kee, Wis.			500 30 100 750	WJBV WKBI WOI	W N.Orleans,La. E W'bst'r, Mass. Ames, Iowa	351 352.7	854 850	500 1,000	WJAI WWJ	Tex'k'na, Tex. Waco, Tex. Detroit, Mich.	200.4		500 500 1,000	CKSH CNRA CNRI	I Hyacinthe,P.Q. A Moncton, Can. R Regina, Sask.
222	1,350	50 WBI 100 WBI 20 WH	Q Manila, P. I. BW Norfolk, Va. ES Tak. Pk., Md. BD B'll'f'nt'ne, O.	247.8	1,210	100 100 100 250	KFIF Portland, Ore. KFJB Marsh'lt'n, Ia. KFOX Omaha, Nebr. KFRB Beeville, Tex.	272.6	1,100	200 500 100 100	WTAY	Hamilton, Ohio W Cl. Sta., Tex. Phoenix, Ariz. Sp'k'ne, Wash.	360			WEW WKB	Dallas, Tex. St. Louis, Mo. N Youngst'n, O.	322.4		500 500 500	CNRA CFCT CFQC	Halifax, N. S. Moncton, N. B. Victoria, B. C. Saskat'n, Sask.
		100 WH 50 WIB 20 WIB	BF Rock Isl., Ill. G Elkins Pk., Pa. U Poynette, Wis. L Everett, Wash.			10 50 50 100	KFYR Bism'rck, N.D. KWG Stockton, Calif. WBRC B'm'gh'm, Ala. WCSO Springfield, O.			100 100 100 100	KFFY	Phoenix, Ariz. Sp'k'ne, Wash. F, du L., Wis. Greeley, Colo. Sp'k'ne, Wash. Anita. Iowa	361.2	830	5,000 500	WHN WKB WPA	Oakland, Calif. N. Y., N. Y. S Galesburg, III. P Cliffside, N.Y.			500 500 500 250	CJSC	Toronto, Ont. C Saskat'n, Sask.
223.7	1,340	10 KFC	P Iowa City, Ia. R Ogden, Utah S C. Gir'd'u, Mo. MS N. Be'n, N. J. AV L'c'nia, N. H.			10 1,000 100 100	WGAL Lancaster, Pa. WIOD Miami, Fla. WMAY St. Louis, Mo. WSAV Houston, Tex.			250 250 500 10	WBAA WDAI WEB.	Anita, Iowa A. W. Laf., Ind. Tampa, Fla. J. N. Y., N. Y. M. St. Cl'd, Minn.	362.5 365	827 821.4	500 250	WKB WNB	O Cliffside, N.Y. W Buffalo, N.Y. H New Bdfd, M. L Tilton, N. H.	340.7	7 880	5	CNRS	W Brktn.Jc.,Ont. S Saskat'n Sask. Hamilton, Ont. C Quebec, Que. V St. Joseph, Q.
V		10 WN 100 WR	AF Laporte, Ind.	249.9	1,200	100 500 250	KFVY Albuq., N. M. KFWI S'nFr'sco, Cal. KLS Oakland, Calif.			1,000 250 500 500	WHK	Cleveland, O. St. Louis, Mo. H. N. Y., N. Y. Urbana, Ill.	365.6	820	1,000 500 25	WDA: WHB WRA	F Kans. C., Mo. Kans. C., Mo. L Ithaca, N. Y. N P'vid'ce, R.I.	356.9	840	500	CFC/ CHIC	A Toronto, Ont.
225 225.4	1,333	10 KFC	3C Bmghm., Ala. BR Aub'n, N. Y. Q Boone, Iowa U Juneau, Alaska		3*	500 20 100 100	KZIB Manila, P. I. WBBC Br'klyn, N. Y. WCAX B'rl'g't'n, Vt.	273 275.1	1,098 1,090	250 250 50	WSBF	St. Louis, Mo. Spokane, Wsh. Havre, Mont.	367 370.2		500 2,000 1,000	KMTI WEBI WJJI	R Hollyw'd, Cal. H Chicago, Ill. Mooseh'rt, Ill.			750 840 750 1,000	CKCI CKNO CNR	C Toronto, Ont. L Toronto, Ont. C Toronto, Ont. T Toronto, Ont.
79		75 KFI 50 KFC 100 KFC	Z K'ksville, Mo. B B'rl'game, Cal. R David C., Neb. Z H'ywood, Cal.			1,000 50 10 50	WEDC Chicago, III. WFBC Knxv., Tenn. WHBA Oil City, Pa. WHBY W. DeP., Wis.			50 500 500 50	KFDD KFKU KFSG	Boise, Idaho J Lawrence, Ks. Los Ang., Cal.	372 373.8 374.8		500 1,500	WRN KFBU	Jeannette, Pa. Y N. Y., N. Y. J Laramie, Wyo.	384.4 410.7		1,650 100	CNR' CFCF	Winnipeg, Man. W Win'peg, Man. Montreal, Que. Vanc'ver, B. C.
		50 WA	GM R. Ok., Mich. BM Chicago, Ill. AD N'shv'e, Tenn. BL U. S. (Ptb.)	×		100 500 100 500	WIAD Phila., Pa. WKBH LaCr'se, Wis. WLAL Tulsa, Okla. WMBB Chicago, Ill.			1,000 500 250 500	WBA	Z N. Orl'ns, La. D Pt. H'ron, M. K H'rrisb'g, Pa. Charlotte, N. C. C Storrs, Conn.	379.5	790	750 500 100 5,000	KFR	Ht Spgs, Ark. Bristow, Okla. San Diego, C. Schtdy., N. Y. Z Troy, N. Y.			500 750 7,500	CHYC	Vanc'ver, B. C. Burnaby, B. C. C Montreal, Que. C Montreal, Que.
227.1	1,320	10 WE 1,000 WI	BO H'rrisb'g, III. BO Chicago, III.	250	1,199	500 10 0	WNAT Phila., Pa. WQAN Scranton, Pa. WAGS S'm'v'l, Mass.	275.1	1,090	100 100 500	WEAT WEAT	D Baltimore, Md. U Sioux C., Ia. V Lincoln, Neb. D M'w'kee, Wis.	380	787		KFBC	G Norfolk, Nebr. San Diego, Cal.	434.5	5 690		CFA	D Vanc'ver, B.C. C Vanc'ver, B.C. M Montr'I, Que. C Calgary, Alta.
		50 WJI	3S Seattle, Wash. 3K Cleveland, O. 3R Omro, Wis. RJ J'maica, N. Y.	252	1,190	100 50 50 15	KFEC Portland, Ore. KFHA Gunnison, Col. KFOY St. Paul, Minn. KFPL Dublin, Texas			500 500 500 100	WHA WJAS WKY	R At. Cy., N. J. Pittsburgh, Pa. Okla., Okla.	384.4	780	1,000 500 500	KLZ	Seattle, Wash, Denver, Colo, W Omaha, Nebr. /B Milw'kee, W. L N. Y., N. Y.			1,800 750 250 100	CHCI CHX	M Calgary, Alta. C Ottawa, Ont. O Ottawa, Ont.
228.9	1,310	100 KFI KG	WO F. W'yne, Ind. V Rockford, Ill. U Ket'kan, Alas. MJ Clay C'r, Neb.			500 500 50	KFWB H'ywood, Cal. KGCR Br'kings, S.D. KOCW Cksha., Okla. KWUC LeMars, Ia.		200 3	20 100 15 5,000	WMA WOCI WOR	P Louisville, Ky. C C'z'n'v'a,N.Y. L Jmstn., N. D. D Batavia, III.	389.4	770	5,000 500 10,000 750	WMB	L N. Y., N. Y. F Miami B,Fla. AE Elec. Pk., Ill. R Cleveland, O.	499.3 516.9		10	CNRC CFCF CFCF	O Ottawa, Ont. I Iroquois, Ont. K Edm'ton, Alta.
		50 KPI 10 WA	C Pasadena, Cal. T Taunt'n, Mass.		<i>3</i> .	50 500 500 500	WKBT N. Orlns., La. WCOA Pens'c'la, Fla. WFBL S'r'cuse, N.Y. WGCP Newark, N. J.	NAME AND ADDRESS OF THE PARTY O		50 500 5,000 100	WSM WSW WWL	K Ag. Col., N.D. K Dayton, Ohio S Chicago, Ill. N. Orleans, La.	390.9 394		3,500	WOD	M Cleveland, O. A Pat'rs'n, N. J. S Br'klyn, N. Y.			500 500) CJCA	Y Edm'ton, Alta. Edm'ton, Alta. E Edm'ton, Alta.
		50 WD WF 500 KGI 250 WS	BM B'It'm'e, Md. BJ Roanoke, Va. CI P'wt'ck't, R. I. BU Ktchkn., Alas. AJ Grove C., Pa. AN Allent'n, Pa.			150 100 50	WKBL Monroe, Mich. WNJ Newark, N. J. WRCO Raleigh, N. C. WRHM Mnpls., Minn.	277.6	1,080	100 50 100 500	KWC	I G. Fks., N. D. Lacey, Wash. Vermn., S. D. R. C. Rpds., Ia.	394.5		1,000 500 500	KHQ WFI WLIT	Spokane, Wash. Philadelphia, Pa. Phila., Pa. I SanAnt'io,Tex.	200	W	AVE	LEN	IONS BY GTHS
230.6	1,300	5 KDI	AN Allent'n, Pa. R D.'s Lk., N.D. Z Mnpls., Minn. T Wichita, Kan.	254.1	1,180	100 100 250	WSRO Hamilton, O. WTAL Toledo, Ohio KFEL Denver, Colo.			500 500 100 500	WAA WAB	G, Brnsv., Tex. F Chicago, Ill. O Roch., N. Y. U Phila., Pa.	399.8 405.2		3,500	WHA WHT	S Louisv'le, Ky. Chicago, Ill. Los Angl's, Cal	210 225	1,430	10	6YR	Mantanazs Santa Clara Camaguey Havana Havana, Cuba
-		500 KFJ	R, Los Ang., Cal. QU Alma, Calif. L Seattle, Wash. Austin, Tex. RE W.'-Barre, Pa.			50 100 100	KFJZ Ft. Worth, Tex. KFLR Albuq., N. M. KFWH Eureka, Calif. KGDA DellR'pds,S.D.			100 100 10 500	WDZ WFB0 WGB0	Tuscola, III. G Altoona, Pa. C M'mphis, Ten.			500 1,000 500	WJY WOR	Clarinda, Ia. N. Y., N. Y. Newark, N. J.		.,,,,,,,	10 10 15 20	6DW 7AZ 8FU	Santa Clara Camaguey Santiago Santiago
		50 WC	BG H'rrisb'g, Pa.			20 500 200 500	WABC Ash'v'le, N. C. WCAJ Uni, Pl., Nebr. WCBA Allent'n, Pa. WEAI Ithaca, N. Y.	ž		100 500 500 500	WLB	U F. By-S., Fla. M Roch., N. Y. I Mnpls., Minn. Mnpls., Minn. L Stv. Pt., Wis.	407	736 733	500 500	KQV WBR	Firind'le, Mch. Pittsburgh, Pa. L Tilton, N. H.	230 235	1,304 1,277	20	2TW 2AB 2LR	Havana Havana Havana Camaguey
232.4	1,290	50 WT	Z Montgmy., Ala. AX Streator, Ill. ZY Kellogg, Ida. N Lg. Bch., Cal. DE Barrett, Minn.	Trainsteam		100 20 10 100	WFBR Baltimore, Md. WFBZ Galesb'g, Ill. WHBC Canton, Ohio WIAS Burlington, Ia.	00-	* 0=1	50 1,000 500	WMA WOQ WRB	N Columbus, O. Kans. C., Mo. C V'lp'raiso, Ind. X Ost'v'le, Mass.	412.4 416.4			WBB	R N. Y., N. Y. O Minn-St.P., M. W Chicago, Ill.	240 250	1,250 1,200	20	8AZ Q2LC 6GR	Santiago Havana Santa Clara Santa Clara
		10 WD 50 WH 10 WJ	BZ K'gst'n, N. Y. BQ M'phis, Tenn. 3K Ypsil'nti, Mich.			100 10 500 10	WJAK Kokomo, Ind. WJBB St. Ptsbg., Fla. WNAD Norm'n, Okla. WREC Coldwr., Miss.	280.2	1,071	250 1,000 5,000	WKB	J St. Psbg., Fla. J Boise, Idaho A St. Louis, Mo.	422.3 428.3		5,000 1,000	WLW	C Cincinnati, O. Cincinnati, O. San Fran., Cal. R Kenosha, Wis.	255 275 260	1,176 1,170 1,153	100	8BY 5 2BB 2OL	Santiago Havana Havana Santa Clara
234.2	1,280	50 WO 50 KFU 5 WJ 50 KM	KO P'kskill, N. Y. JP Denver, Colo. BS San F'rco, Cal. J Fresno, Calif.	256.3	1,170	100 100 100	WSAR Fall R., Mass. WTAQ E. C'ire, Wis. KFIQ Yakima, Wash.			15 5,000 500 100	KGCA KMO KOAO	Decorah, Ia. X St. Louis, Mo. Corvallis, Ore. B Boston, Mass.	430.1	697.1	1,000 500	WSB KFXI	Atlanta, Ga. Denver, Colo.	270 275 280	1,110 1,090 1,070	30	2JP 1AZ 2JL	Havana Havana Havana Havana
	is la Laren Laren	500 WC 1000 WF 100 WF	WK Ft.Wyne, Ind. BE Cincinnati, O. DF Flint. Mich.	***************************************		50 150 500 100	KFUS Oakland, Calif. KRE Berkeley, Calif. WASH G. Rds.,Mich. WBAX WBarre, Pa.		1,060 1,052	250 100 500	KGBV KSMI WCW	W Joplin, Mo. R S'ta Maria, C. S B'dg'pt, Conn.	431 431.4 434.5	635		WNA KFK AT9	P N. Y., N. Y. C Boston, Mass. B Milford, Kan. Fort Bragg, N.C.	282 295 315 320	1,070 1,060 1,016 952 937	100 100	0 2UF 2HP 2BY	Havana Havana Havana Havana
	61	150 WII	BX Orono, Me. BJ Ft. Wa'ne, Ind. BX Utica, N. Y. BC La Salle, Ill. AC Amarillo, Tex.	normalistic designation of the control of the contr		1,000 100	WCAH Columbus, O. WDOD Chtga., Tenn. WHBP Johnst'n, Pa. WKBZ L'd'gt'n, Mich.			500 100 500	WKE	O N. York, N. Y. N L'w'b'g, Tenn. E W'bst'r, Mas. C State Col., Pa.	440.9		500 1,000 1,000	KGCI NAA KLDS	I Wayne, Mich. Radio, Va. Independ., Mo.	338 350	890 857	4,000	2RK 6KW 2CG	Havana Twinucu Havana
235	1,276	500 WA WK 450 WR	AT Jersey Cy, N.J. BD Jersey Cy, N.J. AH Prov., R. I. DX Shrv'port, La.			100 100 50 1,000		285.5	1,050	1,000 500 1,000 750	KOW WKA	N'shv'le, Tenn. W W.W., Wash. R E. Lg., Mich. M Miami, Fla.			500 500 1,000 500	WLSI WMA WOS	F Prv'd'ce, R.I. Providence, R.I. F D'mth, Mass. Jeff'sn Cy, Mo.	355 360 400	845 833	400 100 10	2EP 2OK 5EV	Havana Havana
	1,270	10 KF 250 KF 15 KF	LU San B'n'to, Tx. OO S. L. Cy., Utah 'G In'd'p'd'ce. Ks.	258 258.5	1,162 1,160	250 100 50	KFPW C'rt'rv'le, Mo. KFUL Galv'st'n, Tex.	288.3	1,040	500 5,000 300	WRE KFKX WIB	O Lansing, Mich. K Hastings, Neb. V W'dh'en,N. Y.	447.5 454.3		1,000 1,000 1,000 1,000	WQJ	O Chicago, Ill. Chicago, Ill. Seattle, Wash. Seattle, Wash.	The great	EXIC	AN	STA'	TIONS BY GTHS
	1,2	500 WB	KC Ks. City, Mo. AW N'shv'lle, T. OQ Rich. Hill, N.Y. AM C'md'n, N. J. BJ Collegv., Minn.			500 25 500 500	KOCH Omaha, Neb. WAAD Cincinnati, O. WADC Akron, Ohio WCMA Culver, Ind.		1,030 1,021	500 1,000 50 50	WSB6 KFW WOC	I Chicago, Ill. C Chicago, Ill. C S'n B'rn'do,C. B Orlando, Fla.	461.3	650	50,000 1,000 500	KFNI KMA	Shenandh., Ia. Shenandoah, Ia.	260 265 310	1,153 1,130 967	()/(.	CYF CYA CYS	Oaxaca, Mex. Mexico Cy, Mex. Mexico Cy, Mex.
	1	100 WG	BF Ev'sv'lle, Ind. MU Rich. H., N. Y. 3A Madison, Wis.			100 150 50 100		293.9	1,020	750 750 750	WAI! WEA	Los Ang., Cal. U Columbus, O. O Columbus, O.	467		500 1,000 5,000	WCA WAP KFI	E Pittsb'gh, Pa. I Auburn, Ala. Los Angeles, Cal.	305.5 333 350	9 980 900 857		CYH	Chih'u Cy, Mex. Monterey, Mex. Mexico Cy, Mex. Mexico Cy, Mex. Mexico Cy, Mex.
	(1) per	100 WR	BV Br'kv'le, Ind. MU Rich. H., N. Y. AD Carthage, III.	Daywood		500 500 100	WNAL Omaha, Nebr. WPCC Chicago, Ill. WWRL W'dside, N. Y.		1,016	750	KPR	S Br'klyn, N. Y. C Houston, Tex. KL Detreit, Mich.	468.5	640	500 500 1,000	WJB	P Wash., D. C. T Chicago, Ill. Washin'n, D. C.	380 400 480	790 750 695	97.5	CAT	Mexico Cy, Mex. Mexico Cy, Mex. Mexico Cy, Mex.

MABEL GARRISON OVER WEAF CHAIN

HIGH LIGHTS OF THE AIR

Con-Saunders Night Hawks have found a new Radio home. They disappeared from the programs of WGN several weeks ago and the dial refused to tune in the well known antics of these original Kansas City Night Hawks. However, their frolics may now be heard from WBBM.

Little Jack Little is spending the first week in December at Hot Springs National Park, Arkansas, and will be heard nightly from KTHS. This little bit of information is just to help Marcella a bit. She gets swamped with requests as to his whereabouts. whereabouts.

whereabouts.

The musical scenarios from WBAL, Baltimore, written by Broughton Tall are interesting a new class of listeners. These programs combine educational features and entertainment in a pleasing manner. By tuning in WBAL Friday, December 3, at 10 p. m. Eastern time, you can get a

bird's-eye view of the evolution of

Both Saturdays, December 4 and 11. the Boston Symphony orchestra will be broadcast by WBZ, WJZ, WGY, be broadcast by WBZ, WJZ, WGY, and WRC. December 4 also marks the seventh concert given during the Balkite hour by Walter Damrosch over the WEAF chain. This Saturday the New York symphony gives the program. Next Saturday Mr. Damrosch gives Acts 1 and 2 of Wagner's "Gotterdammerung."

Atwater Kent artists singing the first part of the month from WEAF are Mabel Garrison, soprano, December 5, and Frances Alda, December 19 ber 12.

Santa Claus is making his appearance at many of the stations even this early in the month. The Christmas carols to be given by the William Hengerer Company choral society, December 13, at WGR, bring the holiday season even closer.

WEDNESDAY, DECEMBER 1 Headliners

Eastern Central Mountain
7:30 p. m. 6:30 5:30
WOC (483.6m-620kc) Voss Vagabonds,
2 8 7 WQI (447.5m-670kc) Operatic hour, 8:30 7:30 6:30 Skibinsky, wiolinist. WHAS (399.8m-750kc) Virginia Vetter's Enter-KTHS (374.8m-800kc) Folk song favorites, ensemble.

WCAU (277.6m-1080kc) Stan Lee Broza and Dave Rolontz, comedy.

WIZ (454.3m-660kc) Record boys.

WLW (422.3m-710kc) Heerman trio.
10:15 9:15 8:15 7:15

KFUO (545.1m-550kc) "Is It Lawful to Give Tribute to Caesar?" Lyric quartet.

KOA (322.4m-930kc) Newest dance steps.
10:30 9:30 8:30 7:30

WCCO (416.4m-720kc) Finte and clarinet trio.

WEAF (491.5m-610kc) "Trial by Jury." WEAF Light Opera company.

11 10 9

WHN (361.2m-830kc) Clarence Williams trio.

WSM (282.8m-1060kc) Peabody ensemble.

WEDNESDAY, DECEMBER 8

Headliners | Headliners | Central | Mountain | 4:30 | 3:30 | WGR | (319m-940kc) | Program | of Old | Gospel | hymns, two pianos, 7:30 | Simple | Simp orchestra. WRVA (256m-1170kc) Recital, Allene Stosberg.

9 8 7 6

WRVA (256m-1170kc) Original Negro songs and stories, 9:15
KPRC (296.9m-1010kc)
Bluebird. 9:30
KPRC (296.9m-1010kc)
Brown of the state of the Oldham.

10:05 9:05 8:05 7:05

KTHS (374.8m-800kc) Lawson Reid, organist.

10:15 9:15 8:15 8:15

KFUO (545.1m-550kc) "Which Is the Great orchestra.

Commandment in the Caw?" Rev. Gerecke's Commandment in the Law?" Rev. Gerecke's orchestra. KOA (322.4m-930kc) Frank prize winner. Mirado trio. 10:30 8:30 7:30 WOC (483.6m-620kc) Herman Schmidt, organist; Agnes Bodeen, contralto. 11 10 9 8 8 WSM (282m-1060kc) Lawrence Goodman, pianist. 12:05 11:05 10:05 9:05 KTHS (374.8m-800kc) Mona Motor Oil twins.

Educational Features Wednesday

6:30 (526.6m-570kc) Elementary Spanish lessons.

7

KVOO (374.8m-800kc) Law lecture, U, of T. WDAF (365.6m-820kc) School of the Air.
WNYC (526m-570kc) Advanced Spanish lessons.
7:30 (530.5m-570kc) 5:30 College of the Air.
7:45 KDKA (309.1m-970kc) 5:45 University of Pittsburgh.
7:55 WDBO (239.9m-1250kc) Rollins college.
8:05 WOR (405.2m-740kc) N, Y, U., Child training, Dr. Nason.
9:10 WMAO (447.5m-670kc) Lecture, U, of C., Prof. Fay-Cooper Cole.
10:30 (280.2m-1070kc) "Basketball Practice and Theory," home study course.
KWSC (348.6m-860kc) Dec. 1, "Hoping Is a Bad Word." See Substantial Practice and Theory," home study course.
KWSC (348.6m-860kc) Dec. 1, "Hoping Is a Bad Word." See Substantial Practice and Theory," home study course.
KWSC (508.2m-590kc) Educational program.
11:45 1245 Story course.

Regular Wednesday Features

Eastern Time Stations
CFCA Toronto, Can. (356.9m-840kc) 7-8 p. m. Canada Dry Ginger Ale orchestra; 10:45, dance orchestra.

KDKA Pittsburgh, Pa. (309.1m-970kc) 6:15 p. m KDKA string quartet; 8, concert; 9:30, R.V.B. trio RDRA STING QUARTET; 8, CONCERT; 9:30, K.V.B. TITO.
PWX HAvana, Cuba (399.8m-750kc) 8-10 p. m. Band
concert; 10-12, orchestra.
WAAM Newark, N. J. (263m-1140kc) 8 p. m. Monogram Melody Makers; 8:30, Caldwell Garden entertainers; 9, Castleberg's Diamond concertiers; 9:30,
program; 10, Bill McWalters; 11, Four Towers orchestra.

chestra.

WAHG Richmond Hill, N. Y. (315.6m-950kc) 7:30 p.

m. Margie Make-believe; 7:45, studio program;
8:15, Sterling male quartet; 8:45, Sterling male
quartet; 9:25, Good Humor Boys; 10:02, popular

WBZ Springfield, Mass. (333.1m-900kc) 7:15 p. m. orchestra; 7:30, nature league; 8, musicale; 9, Barnstonners; 9:30, musicale. WCAE Fittsburgh, Fa. (461.3m-650kc) 6 p. m. orchestra; 8-11:30, WEAF. WCAL petital; 8-11:30, WEAF. WCAL mildlephia, Pa. (277.6m-1080kc) 7:30 p. m. Snellenburg recital; 8, popular program; 10, Cheerup club.

wCWS Bridgeport, Conn. (285.5m-1050kc) 8 p. m. Melody Boys; 8:30, musicale club; 10:30, theater

Melody Boys; 8:30, musicale club; 10:30, theater presentation, WCX Detroit, Mich. (516.9m-580kc) 6-7 p. m. Dinner program, Goldkette ensemble; 8-9 studio program. WDBO Winter Park, Fla. (239.8m-1250kc) 9 p. m. Chamber of Commerce; 10, musical travels. WEAF New York, N. Y. (49).15m-610kc) 6 p. m. dinner music; 7, Synagogue Services by the United Synagogue of America; 7:30. United States Army band; WTAG, WJAR, WTAM, WRC; 8, Salon concert, WJAR, 8:30, Davis Saxohome Octet, WJAR, WRC, WJAR, WRC, WLEI, WJAR, WRC, WCAE, WEEI, WLIT, WCSH, WGR, WRC, WCAE, WEJ, WSAI, WCCO, WLIB, WSAI; 9:30, Moment musicale, WEEI, WGR, WCSH, KSD, WCAE, WJAG, WGR, WRC, WCAE, WJAG, WGR, WRC, WCAE, WJJ, KSD, WCCO, WSAI, WCCO, WDAF; 10:30, WEAF Light Opera company, WCAE; 10:30, Ben Bernie orchestra irom the Hotel Roosevelt.

musicale.
WEEI Boston, Mass. (348.6m-860kc) 8 p. m. musicale; 8:30-10, WEAF; 10, Joe Rines and his Palais Royal orchestra.
WFI Philadelphia, Pa. (394.5m-760kc) 6:45 p. m. Adelphia dance orchestra.
WGHB Clearwater, Fla. (265.3m-1130kc) 8:30 p. m. open house.

open house.

WGHP Detroit, Mich. (270.1m-1110kc) 6 p. m. dinner concert, Hotel Tuller; 8-10, concert.

WGR Buffalo, N. Y. (319m-940kc) 6:30-7:30 p. m. piano recitals; 8, poems; 9-10:30, WEAF.

WGY Schenectady, N. Y. (379.5m-790kc) 7:30 p. m. Eastman theater; 8:30, musicale, WHAM; 10, WFBL program.

WGY Schenectady, Iv.

Eastman theater; 8:30, musicale, WHAM; 10,
WFBL program.

WHN New York, N. Y. (361.2m-830kc) 7:30 p. m.
Loew's 7th Ave. Theatre organ recital; 9:30,
Loew's 7th Ave. Theatre concert; 10, Roseland
dance orchestra; 11:30, Silver Silper orchestra;
22. Cotton club orchestra.

WIP miladelphia, Pa. (508.2m-590kc) 6:05 p. m.
Benjamin Franklin concert orchestra; 7, Uncle
Wip's bedtime stories,
WJAX Jacksonville, Fla. (336.9m-890kc) 8-8:30 p. m.
Fopular program; 8:30-9:30 classical program; 9:3010 studio program.

Popular program; 8:30-9:30 classical program; 9:30-10, studio program.
WR Detroit, Mich. (516.9m-580kc) 7 p. m. Jean WR Detroit, Mich. (516.9m-580kc) 7 p. m. Jean Goldkette's Petite symphony orchestra; soloists; 9, 7:45, Good Will Oakland and Chief Pontiac; 9, studio program; 11, Murphy Brothers, organist, tenor, baritone; 12, Merry Old Chief and his Jesters.
WJZ New York, N. Y. (454.3m-860kc) 7 p. m. Hotel Commodore dinner orchestra; 8, Imperial Imps; 8:30, Dueber Hampden Watchmakers; 9, E. A. White hour; 10:30, Hotel Astor dance orchestra.
WKRC Cincinnati, Ohio (325.9m-920kc) 8:15 p. m. Hotel Alms orchestra; 8:30, "The Easy Tenor"; 8:50, Eugene Schmitt; 9, Everfresh program; 12, dance music.

dance music.

WLIT Philadelphia, Pa. (394.5m-760kc) 8 p. m. Concert orchestra; 8:30, WEAF; 9, Stanley theater cert orchestra; §:30, WEAF; 9, Stanley theater hour; 10, dance orchestra.
WLW Cincinnati, Ohio (422.3m-710kc) 7 p. m. Robert Visconti's orchestra; 7:40, Robert Visconti's orchestra; 10, Heerman trio; 11, organ recital; Johanna Graese

Grosse. WLWL New York, N. Y. (288.3m-1040kc) 10 p. m.

musicale.

WMAK Buffalo, N. Y. (285.5m-1130kc) 7:30 p. m.
Eastman theater, WGY; 8:15, WHAM program; 9,
musicale; 10, WFBL,
WMCA New York, N. Y. (340.7m-880kc) 6 p. m.
Ernie Golden and his Hotel McAlpin orchestra; 7:30,
Finkenberg's Radio Franks; 9, Alfshul's quartette;
10:30, Nest Club orchestra; 12, McAlpin entertainers.

10:30, Nest Club orcnestra; 12, McAlpin enter-tainers.
WNYC New York, N. Y. (526m-570kc) 6:10 p. m.
Piano selections.
WOO Philadelphia, Na. (508.2m-590kc) 7:30 p. m.
Hotel Sylvania dance orchestra; 8:10, lecture, Tem-ple university; 8:30, Sesqui Centennial concert; 10, Fox theater orchestra; 10:30, Sam Brown's dance

rox meater orchestra; 10:30, Sam Brown's dance orchestra, W.R. J. (405.2m-740kc) 6:15 p. m. Jacques Jacobs' Hotel Shelton ensemble; 6:45. Bill Wathey in sports; 7, Jacques Jacobs' Hotel Shelton ensemble; 9, Studio Guild hour cobs' Hotel Shelton ensemble; 9, Studio Guild hour cobs' Hotel Shelton ensemble; 9, Studio Guild hour and; 8:30-9, WEAF; 9, WEAF; 9:30, Staff program; 10, WEAF; WRVA Richmond, Va. (256.3m-1170kc) 8 p. m. Headliners.

WRVA Richmond, Va. (255.3m-11/ukc) & p. m. Headliners.

WSAI Cincinnati, Ohio (325.9m-920kc) 7:30 p. m. Bosworth artist series; 10, WEAF; 10:30, Congress
Playing card string quartet.

WTAG Worcester, Mass. (545.1m-550kc) 7 p. m.
Powers Coal Miners; 7:30, WEAF; 8, Bancroit hotel orchestra; 8:30, WEAF; 9, program; 10, WEAF.

WTAM Cleveland, Ohio (389.4m-770kc) 6 p. m. Guy
Lombardo's Royal Canadians; 7:15, talks; 7:30,
WEAF; 8, Public Auditorium program; 11, Jack
Hearf; 8, Detroit Auditorium program; 11, Jack
WWJ Detroit, Mich. (352.7m-820kc) 6 p. m. Dinner
concert; 8, Detroit News orchestra; 9, WEAF: 10,
WEAF: 10,



Central Time Stations
CKY Winnipeg, Can. (384.4m-780kc) 9-10 p. m. Prof.
Gregori Gorbovitsky, violinist.
KFAB Lincoln, Nehr, (340.7m-880kc) 5:30-6:30 p. m.
Hotel Lincoln orchestra; 8:30-10:30, request program. Hotel Lincoln orchestra; 8:30-10:30, request program. KFNF Shenandoah, Iowa (461.3m-650kc) 7 p. m. Concert, Henry Field Seed company.

KMA Shenandoah, Iowa (461.3m-650kc) 9-11 p. m. Two piano concert, Peregrin Brothers.

KMOX St. Louis, Mo. (280.2m-1070kc) 6 p. m. dinner organ rectial; 6:30, quartet; 7:30, quartet; 8, quartet; 9, soloists; 10:15, orchestra; 12-1, dance music.

quartet; 9, soloists; 10:15, orchestra; 12-1, dance music.
KPRC Houston, Texas (299.8m-1000kc) 7:30 p. m. Jack Willrich's orchestra; 8:30, evening concert; 211, Frank Tilton.
KSO Clarinda, Iowa (405.2m-740kc) 7 p. m. songs.
KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9-9:45 p. m. music; 9:45-11:05, frolic.
KVOO Bristow, Okla. (374.8m-800kc) 7-8 p. m. program; 8-9, Dorothy Heywood Reedy, artists; 12, dance orchestra.
KYW Chicago, Ill. (535.4m-560kc) 6:30 p. m. Joska DeBabary and his orchestra; 7, Family hour; 9-10:30, Edison classical concert; 10:30-12, Congress carnival.
WBBM Chicago, Ill. (226m-1330kc) 8, Coon-Sanders; 8:15-12, artists, orchestras; 12, Nutty club.
WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 6:45 p. m. Radio Pioneers' hour; 8, WEAF; 8:30, musicale; 9, WEAF; 9:30, musicale; 10:30 Marigold Ball Room orchestra; 11:30, organ recital, Eddie Dunstedter.
WCFI. Chicago. Ill. (491.5m-610kc) 6 p. m. talks; 7,

Ball Room orchestra, 17100, Dunstedter, WCFL Chicago, III. (491.5m-610kc) 6 p. m. talks; 7, Brevoort trio; 8, variety hour; 10, Alamo orchestra; 12, entertainers. WCOA Pensacola, Fla. (252m-1190kc) 6:30 p. m. Evening program.

ming program.

WDAF Kansas City, Mo. (365.6m-820kc) 6-7 p. m. School of the air; 8-9, musicale; 9-9:30, WEAF; 11:45-1, Nighthawk frolic.

WEBH Chicago, III. (370.2m-810kc) 7 p. m. Edgewater Beach hotel orchestra; 9-11, orchestra, artists; 12-12:30. revue.

water Beach hotel orchestra; 9-11, orchestra, artists; 12-12:30, revue.
WEMC Berrien Springs, Mich. (315.6m-950kc) 8:15
D. m. Dr. O. R. Cooper; recital.
WENR Chicago, III. (265.5m-1130kc) 6-7 p. m. Rauland trio; 8-10, All-American Pioneers; 12-2, frolic.
WGN Chicago, III. (302.8m-990kc) 6:45-7 p. m. Request program, Drake concert ensemble; Blackstone string quinter; 8:30-8:45, songs, Correll and Gosden; 8:45-10, Arabian Nights' entertainment; 10, Sam 'n' Henry; 10:10, Music Box; 10:20, songs, Tommy Coates; 10:30-12, The Pepper Party.
WHAD Milwaukee, Wis. (275.1m-1090kc) 6:10 p. m. Arthur Richter; 11:30, organ recital, Arthur Richter.
WHAS Louisville, Ky. (399.8m-750kc) 7:30-9 p. m. Artists.

Artists.

WHB Kansas City, Mo. (365.6m-820kc) 7-8 p. m

K. C. artist string trio; 10:45-11:45, midweek mu-

K. C. artist string trio; 10:45-11:45, mauveea sicale.

WHO Des Moines, Iowa (526m-570kc) 6-7 p. m. Bankers Life Little symphony; Myrtle Williams, soloist; 7:10-8, Hotel Ft. Des Moines orchestra, 8-9:30, program; 9:30-11:30, dance music.

WHT Chicago, Ill. (399.8m-750kc) 6 p. m. Al Carney; 7:45 (238m-1260kc), orchestra, Stuart Dawson; 9:30 (399.8m-750kc), Ray Lawson, tenor; Daddies Kids; John Powell; 10, variety program; 12, Al and Pat. WIRG Chicago, Ill. (225.4m-1330kc) 6-8 p. m. dinner

(399.8m-750kc), Ray Lawson, tenor; Daddies Kids John Powell; 10, variety program; 12, Al and Pat. WIBO Chicago, Ill. (225.4m-1330kc) 6-8 p. m. dinner concert; 10-12, dance music.
WIAZ Chicago, Ill. (329.5m-910kc) 6:30 p. m. Shoreland hotel; 6:45-8, musicale; 8, highlights; 9, diversified program; 10:30, frolic.
WJJD Mooseheart, Ill. (370.2m-810kc) 8-9 p. m. child artists; 11-12, Palmer House Victorians.
WLIB Chicago, Ill. (302.8m-990kc) 7-7:10 p. m. Dinner concert, 10 Prake concert ensemble; Blackstone string quintet; 7:10, Old Fashioned Almanack and the Million Sing; 7:22, Adventures of Oney Fred Sweet; 7:30, recital, Tommy Coats, bartione; Edward Barry, pianist; 8, WAF; 12-1 a. m., frolic.
WLS Chicago, Ill. (344.6m-870kc) 5:40 p. m. Al Melgard, organist; 6, May and June; 6:40, Maurie Sherman's College Inn orchestra; 7, May and June; 7:15, duo, Old Town Coffee room; 8:10, orchestra; 8:30, musicale; 9, orchestra; artists; 10, Jack Chapman's orchestra; 10:30, Ralph Emerson, organist; 11-12, May and June; 12, Maurie Sherman's College Inn orchestra.
WMAQ Chicago, Ill. (447.5m-670kc) 6 p. m. Chicago theater organ; 8, Gus Edwards orchestra; 9:30, WMAQ air line.
WMBB Chicago, Ill. (449.5m-1200kc) 7-8:30 p. m. Trianon duo; Bessie Beelman, contralto; Monte Blunn, tenor; 8:30-11, orchestra; artists.
WOAI San Antonio, Texas (334.5m-760kc) 8:30-9:30 p. m. Delaware Punch program.
WOC Davenport, Iowa (483.6m-620kc) 9-9:30 p. m. WEAP; WOB Grand Rapids, Mich. (241.8m-1240kc) 8 p. m. program; 9, frolic; 10, Woods, Whozit; 10:10, Nightingale.
WORD Chicago, Ill. (275.1m-1090kc) 7 p. m. North Shore Iline; 7:45, ten minutes of good reading; 9,

woods of the program; 9, frolic; 10, Woods, Wnozit; 10.10, Nightingale.
WORD Chicago, Ill. (275.1m-1090kc) 7 p. m. North Shore line; 7:45, ten minutes of good reading; 9, I. B. S. A. choral singers; 9:15, Bible lecture.
WOS Jefferson City, Mo. (440.9m-680kc) 7:30 p. m. address; 8, "Missouri in History," Roy Godsey; 8:05, talk; 8:20, musicale.
WOJ Chicago, Ill. (447.5m-670kc) 7-8 p. m. Rainbo Gardens orchestra; concert; 10-2 a. m. Rainbo frolic. WSB Atlanta, Ga. (428.3m-700kc) 10:45 p. m. Peerless

WSBC Chicago, III. (288.3m-1040kc) 6:30-8:30 p. m. dinner program; 9:30-1, New Jeffrey Tavern syn-

copators.

WSM Nashville, Tenn. (282.8m-1060kc) 6:45 p. m.
Andrew Jackson hotel orchestra; 8, Vito and his
Radio Seven: 10, headliners.

WSKC Bay City, Mich. (260.7m-1150kc) 9-11 p. m.
musicale musicale.

WSWS Chicago, Ill. (275.8m-1090kc) 6 p. m. Dinner hour program; Terrace Garden orchestra; 8, Terrace Garden orchestra; 10, popular program; 12 midnight, Witching hour.

Mountain Time Stations

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

Pacific Time Stations

Pacific Time Stations

RFI Los Angeles, Calif. (467m-640kc) 7 p. m. Virginia ballroom orchestra; 7:30, Nick Harris; 8-9, program, California Petroleum corp.; 9-10, semiclassical hour; 10-11, Sunset instrumental quartet.

KFWB Hollywood, Calif. (525m-1190kc) 6-7 p. m. Pontiac dinner hour; 7:50 news; 9-10, Bill Hatch and his orchestra; 10-11, Warner Brothers frolic.

KGO Oakland, Calif. (361.2m-830kc) 6-6:55 p. m. Stanislas Bem's Little symphony; 8:30, Bem's Little symphony; 8:30, Bem's Little symphony; 8:30, Bem's Little symphony; 8:30, Dem's Little symphony; 8:30, Dem's Little symphony; 8:30, Bem's Little symphony; 8:30, Dem's Little symphony; 8:30, Em's Little symphony; 8:30, Bem's Little symphony; 8:30, Bem's Little symphony; 8:30, Bem's Little symphony; 8:30, Dem's Little symphony; 8:40, Emselved Symphony; 8:40, Ems

Wednesday, silent night for: KFDM, KFDY, KLDS, KMMJ, KOB, KOIL, KPSN, KTAB, KUOA, KWWG, WABQ, WBAL, WBAP, WBBR, WCBD, WFAA, WFI, WGBF, WGBS, WGCP, WHAR, WIP, WJAZ, WMC, WOAI, WOAW, WPG, WSUI, WTIC.

THURSDAY, DECEMBER 2

Headliners

Eastern Central Mountain Pacific
8 p.m. 7 6 6
ROKA (309.1m-970kc) Pittsburgh Box Company
Wonder-hox.
KFNF (461.3m-650kc) Old familiar tunes.
WCBD (344.6m-870kc) Cornet quartet, celestial
bells. vocal trio. WCBD (344,6m-350kc) Cornet quartet, celestial hells, vocal trio.
WCBD (322,3m-710kc) Special feature.
WQI (447,5m-670kc) Band concert.
8:15 Fig. 3:15 Sig. 3 Clara Huhn, soprano; J. Lloyd Mahony, baritone.

KLDS (440,9m-680kc) Hazel Scott, organist.

KOII. (305,9m-980kc) Piano company program.

WSB (428,3m-700kc) Miss Daisy Cobb.

9:15 8:15

WHAS (399,8m-750kc) Honolulu Screnaders.

9:30 8:30

WFAA (475,9m-630kc) Schubert choral club.

WMC (499,7m-600kc) Vesey ensemble.

9 WGY (379,5m-790kc) Pinafore.''

WLW (422,3m-710kc) Latonia Melody.

10:95

KTHS (374,8m-800kc) Leona Iatone, pianist.

WIIC (475,9m-630kc) Helen V. Cain, soprano;

Mric (440,7m-880kc) Helen V. Cain, soprano;

10:25

KTHS (374,8m-880kc) Helen V. Cain, soprano;

10:25

WMCA (340,7m-880kc) Whozit contest.

10:25

KTHS (374,8m-800kc) Mrs. Byrd Rigsby, contralto.

10:30 9:30

WIIC (475,9m-630kc) Apollo male quartet KTHS (374.8m-800ke) Mrs. Byrd Rigsby, contralto. 10:30 9:30 8:30 7:30 WTIC (475.9m-630ke) Apollo male quartet. 7:40 KTHS (374.8m-800ke) Lawson Reid, organist. 10:45 9:45 8:45 7:45 WLW (422.3m-710ke) "Zozzerina" Tad Dondas. 11 10 S G G (361.2m-830kc) Comic opera, "The WTHS (374.8m-800kc) Little Jack Little. WOC (483.6m-620kc) Musical program, Psi Chapter, Sigma Alpha Iota. 11:15 9:15 8:15 WCCO (416.4m-720kc) Bob Brose and his entertainers,

DANCING

Central Time

Central Time
Saturday
9, Webh, Wjaz,
Wmbb, Wnyc, Wreo;
9:10, Kths, Wip; 9:30,
Kths, Wgbs, Wor,
Wre; 10, Kmox,
Kfwa, Koa, Kpo,
Weaf, Wgn, Wjaz,
Wjr, Wkre, Wmca,
Wnyc, Wor, Wgi, Wnyc, Wor, Wqi, Wreo, Wtam; 10:05, Weco; 10:30, Wamd; 10:45, Wls; 11, Kfwa, Kfwb, Kpo, Webh, Wfaa, Wgbu, Who, Wjaz, Woc; 11:30, Kfoa; 11:45, Wdaf; 12, Kgo, Kgw, Kn: Wgbu, Wjaz, Wjjd.

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

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

Wednesday
9:15, Wahg; 9:30,
Wbap, Who, Wor; 10,
Kfve, Whap, Weaf,
Wgbu, Wgfp, Whaz,
Wqi; 10:05, Weco;
10:30, Wbap, Whn;
11, Kmox, Koil, Kpo,
Webb, Wdyn, Wars Webh, Wgbu, Wgcp, Wgr, Whn, Wjaz; 11:45, Wdaf; 12, Kfwa, Knx, Kpo, Wjaz,

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

Friday

Friday
8, Wwi; 9, Wcx,
Webh Weei Wgbu
Wgcp, Wmbb; 9:15,
Wahg; 9:30, Wcau,
Whn; 10, Kpo, Kths,
Wgbu, Wgcp, Whn,
Wgr, Wqi.

HAIN, DEC. 5; FRANCES ALDA, DEC. 12



DANCING

Central Time

Saturday Wjaz, Saturay
9, Webh, Wjaz,
Wmbb, Wnyc, Wreo;
9:10, Kths, Wip; 9:30,
Kths, Wgbs, Wor,
Wre; 10, Kmox, Wrc; 10, Kmox, Kfwa, Koa, Kpo, Weaf, Wgn, Wjaz, Wjr, Wkre, Wmca, Wnye, Wor, Wdj, Wreo, Wtam; 10:05, Wcco; 10:30, Wamd; 10:45, Wls; 11, Kfwa, Wath 10:45, Wis; II, Kiwa, Kfwb, Kpo, Webh, Wfaa, Wgbu, Who, Wjaz, Woc; 11:30, Kfoa; 11:45, Wdaf; 12, Kgo, Kgw, Knx, Wgbu, Wjaz, Wjjd.

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

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

Wednesday
9:15, Wahg; 9:30,
Wbap, Who, Wor; 10,
Kíve, Wbap, Weaf,
Wgbu, Wg#p, Wjaz,
Wqi; 10:05, Weco;
10:30, Wbap, Whn;
11, Kmox, Koil, Kpo,
Webh, Wgbu, Wgcp,
Wgr, Whn, Wjaz,
11:45, Wdaf; 12, Kíwa,
Knx, Kpo, Wjaz, Kpo, Wjaz,

Thursday

8. Wjr; 9. Webh,
Weei, Wgbu, Whn,
Wjr, Wmbb, Wsai,
Wtag; 9:05, Wbz,
Wjp; 9:30, Wghs,
Wgy, Whn; 9:35,
Wnyc; 10, Kths, Why, Whin, 9.33, Whyc; 10, Kths, Wbbm, Weaf, Wgbu, Whn, Wmca, Wpg, Wqj; 10:30, Kths, Whn, Webh, Wgbu, Whn. Woc: 11:45. Wdaf; 12, Kgo, Khj, Knx, Kpo, Wjjd.

Friday

8, Wwi; 9, Wcx,
Webh Weei Wgbu
Wgcp, Wmbb; 9:15,
Wahg; 9:30, Wcau,
Whn; 10, Kpo, Kths,
Wgbu, Wgcp, Whn,
Wgr, Wqj.

THURSDAY, DECEMBER 9 Headliners

 Eastern
 Central
 Mountain
 Pacific

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

 WHAS
 (399.8m-750kc)
 Reynolds-Kent
 orchestra.

 WIZ
 (454.3m-660kc)
 New
 Brunswick
 string

 quarter,
 The control of the 9 8 7 6

KLDS (440.9m-680kc) Ella Clark, soprano.

KOIL (305.9m-980kc) Dorothy Steinbaugh, soprano.

WGY (379.5m-790kc) Troy pianoforte quartet.

WJZ (454.5m-660kc) Record boys.

WTIC (475.9m-630kc) Katherine Moran Pape,
soprano; Agnes Brothers, pianist.

10:15 8:15 7:15

WMCA (340.7m-880kc) Whozit contest,
10:25 8:25 7:25

KTHS (374.8m-800kc) Meyer Davis dance orchestra. 10:30 9:30 8:30 7:30

KPRC (296.9m-1010kc) Kelly and Abbitt, harmony boys.
WTIC (475.9m-630kc) Popular period, George Joy and Nell Cantor.
11 98 8 8 10 WORLD (483.6m-620kc) John Bishop, reader; Martha Beck, soprano.
11:15 10:15 9:15 8:15
KTHS (374.8m-880kc) Leona Iatone, pianist.
11:40 10:40 9:40 8:40
WLW (422.3m-710kc) The "Pep" boys.
12 11 WBAP (475.9m-630kc) John Josey, organist.

Educational Features Thursday

KUOA (299.8m-1000kc) University Extension lectures. Dec. 3, "The Man in the Moon"; "Rubber"; "Rose Varieties"; "Stories and Story Telling," Dec. 9, "Some Achievements in Secondary Education"; "Greater American Novelists." Dec. 16, "Attitude of Hopkinson's Contemporaries." (270.1m-1110kc) Iowa state radio courses.

Regular Thursday Features

10 9 8 7 WGST (270.1m-1110kc) Educational talks.

Eastern Time Stations A Toronto, Can. (356.9m-840kc) 8:15 p. m usical program, Luigi Romanelli and his orchestra musical program, Luigi Komanelli anu nis olenesti... KDKA Pittsburgh, Pa. (309.1m-970kc) 6:15 p. m. KDKA Little symphony orchestra; 8, program; 11:15, Flotilla club. PWX Havana, Cuba (399.8m-750kc) 8:30 p. m. Cuban

PWX Havana, Cuba (5350m-1508c) 5052 p. m. program.
WAAM Newark, N. J. (263m-1140kc) 7:15 p. m. musicale; 10, DeVita's orchestra; 11, Frank Dailey's Meadowbrooks.
WBAL Baltimore, Md. (246m-1220kc) 6:30-7:30 p. m. dinner orchestra; 7:30-8, organ recital; 8-9, musical program, instrumental and vocal selections; 9-10, ensemble; 10-11, staff concert; 11-12, dance orchestra orchestra. WBBR New York, N. Y. (416.4m-720kc) 8 p. m.

headliner.

WBZ Springfield, Mass. (333.1m-900kc) 6:15 p. m. organ; 6:30, orchestra; 8, musicale; 9, WJZ; 10, WJZ; 10; 30, orchestra.

WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. orchestra; 7:45, talks; 8:20, musicale; 9-11, WEAF; 11, dance music.

WCAU Philadelphia, Pa. (277.6m-1080kc) 7:30 p. m. Snellenburg recital; 8, Saddler's Serenaders; 8:30, Archie Lloyd, songs; 8:45, Getz Go-Getters: 9:30,

Archie Lloyd, songs; 8:45, Getz Go-Getters; 9:30, Musical Chefs; 10, frolic; 10:30, Parodians' dance orchestra; 11, Club Cadix revue.

WCWS Bridgeport, Conn. (285.5m-1050kc) 8 p. m. studio program

WEAU Columbus, Onio (233.9m-1020kc) 8:15 p. m. headliners.
WEEI Boston, Mass. (348.6m-860kc) 6:10 p. m. Palais Royal orchestra; 6:40, Boston Globe broadcast; 7:30, musicale; 8:30-11, WEAF.
WFI Philadelphia, Pa. (394.5m-760kc) 8 p. m. The Serenaders; 8:30, recital; 9, WFI; 10, WFI.

WOOD Grand Rapids, Mich. 1291.0001-12000. O P. M. Van Campen hour of music; 9, studio program; 10, Woods, Whozit.

WOR Newark, N. J. (405.200-740kc) 6-115 p. m. Jacques Jacobs' Hotel Shelton ensemble; 6-45, Bill Wathey in sports; 7, Jacques Jacobs' Hotel Shelton ensemble; 8, Vaughn de Leath "The Radio Girl"; 11, orchestra.

WPG Atlantic City, N. J. (299.800-1000kc) 7:15 p. m. organ recital, Arthur Brook; 7:30, Hotel Morton dinner music; 8:15, feature; 10:20, organ recital; 11:20, Silver Slipper Supper club dance orchestra. il 20, Silver Slipper Supper club dance orchestra.

WRC Washington, D. C. (468.5m-340kc) 7 p. m. dinner music; 8, WJZ; 8:30, bridge; 9, WJZ; 10-11, Swanee syncopators.

WRVA Richmond, Va. (256.3m-1170kc) 8:15 p. m. evening program; 11, Carry me back to Old Virginny.

WSAI Cincinnati, Ohio (325.9m-920kc) 6:40 p. m. talk, Cincinnati Better Business commission; 6:45, chimes; 7, Olympian Coffee club half hour; 10, WEAF.

WTAG Worcester, Mass. (545.1m-550kc) 8 p. m. program; 8:30, Standardyne trio; 9, WEAF; 10, WEAF;

WTAG Worcester, Mass. (545.1m-550kc) 8 p. m. program; 8:30, Standardyne trio; 9, WEAF; 10, WEAF.
WTAM Cleveland, Ohio (389.4m-770kc) 6 p. m. Hollenden hotel orchestra; 7:30, studio program; 9, WEAF; 10, studio program; 11, Guy Lombardo's Royal Canadians.
WTIC Hartford, Conn. (475.9m-630kc) 6 p. m. Hotel Heublein trio; 7, midweek religious sing; 7:30, staff artists; 8, Outlet Owlets; 8:30, Capitol theater presentation,
WWJ Detroit, Mich. (352.7m-820kc) 6 p. m. dinner concert; 8, WEAF. Central Time Stations CKY Winnipeg, Can. (384.4m-780kc) 8:30-9 studio program; 9-10, J. A. Banfield con concert. KFNF Shenandoah, Iowa (461.3m-650kc) 7 p. m. head-Liner.
Liner.
LLDS Independence, Mo. (440.9m-680kc) 8 p. m. studio program.
KOIL Council Blaffs, Ia. (305.9m-980kc) 6:03 p. m. Skinner Mfg. company program; 7:30, Ambassadors; 8. musicale; 11. Ambassadors, KPRC Houston, Texas (299.8m-1000kc) 8 p. m. evening program. KSO Clarinda, Iowa (405.2m-740kc) 7 p. m. band concert. The Holm Concert, 104 Springs National Park, Ark. (374.8m-800kc) 9-10:15 p. m. headliners; 10:15, Specialties. KVOO Bristow, Okla. (374.8m-800kc) 7-7:30 p. m. Hawaiian music; 7:30-8, Irene Buchner; 8-9, music lovers hour; 12, American Legion frolic, KYW Chicago, Ill. (535.4m-560kc) 6:30 p. m. Joska DeBahary and his orchestra; 7, family hour; 8, "Twenty Minutes of Good Reading," Rev. C. J. Pernin; 8:20-9, Congress studio; 9-10:30, classical concert; 10:30-12, Congress carnival.

cert, 10.05, Benjamin Chestra; WJR Detroit, Mich. (516.9m-580kc) 7 p. m. Jean Goldkette's Petite symphony orchestra; soloists; 7.30, Ide and Meginnity, entertainers; 9, studio

7:30, Ide and Meginnity, entertainers, 2, standard program.

WIZ New York, N. Y. (454.3m-660kc) 7 p. m. Hotel Pennsylvania dinner orchestra; 7:55, United Press Sporting news; 8, First National presentation. WRC; 9, Royal hour of music, WRC WCK, WBZ will also broadcast; 10, Program; 10:30, Iack Denny's Frivolity Club orchestra.

WKRC Cincinnati, Ohio (325.9m-920kc) 8 p. m. Swiss Garden frolic; 8:30, popular program; 9, Louisville Loons.

WKRC Cincinnati, Ohio (325.9m-920кс) 8 p. m. Swiss Garden frolic; 8:30, popular program; 9, Louisville Loons.
WLIT Philadelphia, Pa. (394.5m-760kc) 7:30 p. m. concert orchestra.
WLW Cincinnati, 0, (422.3m-710kc) 7 p. m. Robert Visconti's orchestra; 7:40, Visconti's orchestra; 10, music; 12:15 a. m. Night Howls.
WLWL New York, N. Y. (288.3m-1040kc) 9 p. m. Question box; 9:30, trio.
WMAK Buffalo, N. Y. (285.5m-1130kc) 6:15 p. m. Hotel Lafayette trio; 7:30, Syracuse university; 9, musicale; 11:30, WGY. (340.7m-880kc) 7:30 p. m. Grel-Meister's Hungarian orchestra; 9, Solow soloists; 11, Ernie Golden and his Hotel McAlpin orchestra; 12, Broadway niter orchestra; 12, 12:02 p. m. Tea Room orchestra; 4:45, organ recital; 7:30, Hotel Sylvania dance orchestra.
WOO Crand Rapids, Mich, (241.8m-1240kc) 8 p. m. Van Campen hour of music; 9, studio program; 10, Woods, Whozit.
WOR Newark, N. J. (495.2m-740kc) 6:15 p. m. Jac-

Daily Except Sunday CENTRAL TIME KFNF, 12:30 p. m. KMA, 11:30-12:30 KSO, 12:30-1:30 p m.

Special Farm Features

Farmer Dinner Concerts

FARMER'S PROGRAM INDEX

Wednesday contest. 1:10 12:10 11:10 10:10 WMAQ (447.5m-670kc), Prairie Farmer farm

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

12:13 11:13 10:13

WH3 (526m-570kc), Radio Farm school.

12:15 12:15 11:15 10:15

WEAO (293.9m-1020kc), Farm flash, poultry.

WTAW (270.1m-1110kc) Dec. 1, Gasoline Tank; Dec. 8, Dairy 20urse.

11:30 10:30

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

WFAA (475.9m-630kc), Sears-Roebuck agricultural program 12:40 11:40 10:40

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

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

WCCO (416.4m-720kc), Egg laying contest.

WOI (270.1m-1110kc), Poultry husbandry.

2 12:40 11:40 10:40

WSB (428.3m-700kc), Georgia State college farm course.

6:40 3:40

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

6:40 3:40

WGHP (270m-1110kc), I. S. Farm school.

farm course, **6:40** 5:40 4:40 3:40 WGHP (270m-1110kc), U. S. Farm school, **6:45** 5:45 4:45 3:45 WGY (379.5m-790kc), WGY Agricultural pro-

6.45
WGY (379.5m-790kc), WGY Agricultural program.
7:10
WGY (483.6m-620kc), Poultry talk.
7:30
WLW (422.3m-710kc), Farm Bureau Federation talk.
7:35
KSAC (340.7m-880kc), Dec. 1, "Legumes"; Dec. 8, "Plowing and Cultivating."
KSS (410.7m-730kc), U. S. Farm school.
WOS (440.9m-680kc), Radio Farm school.
WOS (440.9m-680kc), Radio Farm school.
WOS (440.9m-680kc), Radio Farm school.
S:27
KOA (322.4m-930kc), Radio Farm school.
S:27
KOA (322.4m-930kc), S. Farm school.
S:28
KCO (416.4m-720kc), Farm talk.
WOOD (241.8m-1240kc), U. S. Farm school.
S:6:85
KFAB (340.7m-880kc), Dec. 1, "The Use of Capital in Farming," A. W. Medlar.
10:30
WWSC (348.6m-860kc), Dec. 1, "Choosing a Wheat Variety," "The December Farm Situation," Dec. 8, "Weather Variations," "Winter Care of Breeders," "Image of Capital in Farming," A. W. Medlar.
10:30
WWSC (348.6m-860kc), Dec. 1, "Choosing a Wheat Variety," "The December Farm Situation," Dec. 8, "Weather Variations," "Winter Care of Breeders," "Image of Capital in Farming," A. W. Medlar, "Dec. 8, "Weather Variations," "Winter Care of Breeders," "Image of Capital in Farming," A. W. Wedlar, "Winter Care of Breeders," "Winter Care of Breeders," "Image of Capital in Farming," A. W. Wedlar, "Winter Care of Breeders," "Image of Capital in Farming," A. W. Wedlar, "Winter Care of Breeders," "Winter Care of Breeders," "The December Farm Situation," Dec. 8, "Weather Variations," "Winter Care of Breeders," "Thursday

Thursday

Eastern Central Mountain 10:30 a.m. 9:30 8:30 7:30
WFI (394.5m-760kc), Farm feature, 12:30 10:30 8:00 9:30
KVOO (374.8m-800kc), Oklahoma A. & M. course. COURSE (0/4.6m-800kc), Oklahoma A, & M.

1 p.m. 12 n. 11 10

WCCO (416.4m-720kc), Farm hour.

1:10 11:10 10:10

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

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

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

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

KFDY (306m-978kc), Dec. 2, Corn crop; Dec. 9, Wheat crop.

WEAO (293.9m-1020kc), Farm talk.

WTAW (270.1m-1110kc), Farm and Home Question box.

1:130 11:30 tion box. 11:30 10:30

KMA (461.3m-650kc), Agricultural aid. 11:45 12:45 11:45 10:45

WOI (270m-1110kc), Farm crops. 2 1 12 12

WSB (428.3m-700kc), Georgia State college. 4:30 3:30

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

WDBO (239.9m-1250kc), Primer for town farmers. mers.
6:40
WGHP (270m-1110kc), U. S. Farm school.
7:45
KSO (410.7m-730kc), U. S. Farm school.
8
KOL (305.9m-980kc), U. S. Government crop KOII. (305.9m-980kc), U. S. Government crop survey. WAMD (243.8m-1230kc), U. S. Farm school. 8:30 6:30 5:30 WCCO (416.4m-720kc), Farm lecture. WOI (270m-1110kc), Farm crops. 8:33 5:33 WCY (535.4m-560kc), American Farm bureau. WOI (270.1m-1110kc), Franklin County Farm Bureau program. 9:30 8:30 7:30 6:30 KOA (322.4m-930kc), Farm question box.

Friday Central Mountain 10:30 a.m. 9:30 8:30 WFI (394.5m-760kc), Farm feature. 11:50 10:50 9:50 KFNF (461.3m-650kc), Poultry talk. 1 p.m. 12 11 10 WCCO (416.4m-720kc), Farm hour. WLS (344.6m-870kc), R. F. D. dinnerbell program. WEAO (293.9m-1020kc), Farm flash, dairying. 1:10 WMAQ (447.5m-670kc), Prairie Farmer farm 1:13 12:13 11:13 WHO (526m-570kc), Radio Farm school. 1:15 12:15 11:15 WTAW (270.1m-1110kc), Farm talks. 1:30 12:30 11:30 10:30 KMA (461.3m-650kc), Agricultural aid. 1:40 12:40 11:40 10:40 WLW (422.3m-710kc), U. S. Radio Farm school. 1:45 12:45 11:45 WOI (270m-1110kc), Soils. WTAW (270.1m-1110kc), Dec. 3, Pork. WSB (428.3m-700kc), Georgia State college farm course. 6:40 5:40 4:40 3:40 WGHP (270m-1110kc), U. S. Farm school. 6:45 5:45 4:45 3:45 WRVA (256m-1170kc), Uncle Sam's farm flashes

 Eastern
 Central 5:20 p.m.
 Mountain 4:20 3:20
 Pacific 3:20 MDBO (239.9m-1250kc), Agricultural economist.

 WTIC (475.9m-630kc), Farm course, Agricultural college.

Monday Eastern Central Mountain 10:30 a.m. 9:30 8:30 WFI (394.5m-760kc), Farm feature. WFI (394.5m-700KC), Farm reature.

11 9 8

KMMJ (228.9m-1310kc), Poultry talks.

1p.m. 12

WCCO (416.4m-720kc), Farm hour.

WEEI (348.6m-850kc), U. S. farm school.

1:10 11:10

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

1:13 12:13 10:13

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

1:15 12:15 11:15

WTAW (270,1m-1110kc), "Less Cotton and More Rotation,"

1:30 12:30 11:30 10:30

KFDY (306m-978kc), Poultry course, KMA (461.3m-650kc), Farm talk, agricultural aid. KMA (461.3m-650kc), Farm talk, agricultural aid. WCCO (416.4m-720kc), Farm talk, feed choppers. WEAO (293.9m-1020kc), Timely economic information for the farmers.

1:35 10:35
KSAC (340.7m-880kc), Timely talks for the farmer. 1:40 11:40 10:40 10:40 11:40 10:40 10:40 10:40 10:40 10:40 10:45 1 1445
WOI (270.1m-1110kc), Questions and answers on horticulture.
WTAW (270.1m-1110kc), Dec. 13, Lambs.

2 1 12 11
WSB (428.3m-700kc), Georgia State College farm course.
4430 WLW (422.3m-710kc), Weekly letter to Dad.
6420 WDBO (239.9m-1250kc), Farm flashes.
6440 WGHP (270m-1110kc), U. S. Farm school.
7430 KSAC (340.7m-880kc), Dec. 6, Phosphates, Dairying; Dec. 13, "Warm and Cold Spells," Market news; Milling.
KSO (410.7m-730kc), U. S. Farm school.
WSM (282.8m-1060kc), Poultry talks,
650 (140.9m-880kc), U. S. Radio Farm school.
WAMD (243.8m-1230kc), U. S. Radio Farm school.
WGM (440.9m-680kc), U. S. Radio Farm school. school.
WOS (440.9m-680kc), U. S. Radio Farm school.
WRVA (256m-1170kc), Farmers' chat, Dibble, Cline.
8:20
8:20
KFJF (260.7m-1150kc), U. S. Agricultural service.
8:30
KUOA (299.8m-1000kc), Farm filosophy. Dec.
6, "Soybeans for Lawrence County," How to Get the Most from Arkansas Sheep;"
Dec. 13, "Home Curing of Pork," "Certification of Farm Flocks," "Grape Pruning,"
WCCO (416.4m-720kc), Farm lecture.
WMC (497.7m-600kc), Farm talk.
8:35
WOOD (241.8m-1240kc), U. S. Farm school.
9
KFNF (461.3m-650kc), Poultry talk. WOOD (241.8m-1240kc), U. S. Farm school.

9 KFNF (461.3m-650kc), Poultry talk.

WMC (499.7m-660kc), Farm talk.

9:30 7:30 6:30

KOB (348.6m-860kc), Farm program.

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

10:30 8:30

KWSC (348.6m-860kc), Dec. 6, Dairy talk; Dec.

13, Apples in the Northwest.

Tuesday Eastern Central Mountain Pacific 9:50 a.m. 8:50 7:50 6:50 WEAO (293.9m-1020kc), "Bugs and Rodents." 10:30 8:30 7:30 WFI (394.5m-760kc), Farm feature. 11 10 9 KMMJ (228.9m-1310kc), Poultry talks. 1 p.m. 12 11 WCCO (416.4m-720kc), Farm hour. 1:10 WMAQ (447.5m-670kc), Prairie Farmer farm 1:13 12:13 11:13 10:13 WHO (526m-570kc), Radio Farm school 1:15 WEAO (293.9m-1020kc), Farm flash, crops and wtaw (270.1m-1110kc), Important agricultural 1:30 12:30 11:30 10:30 KMA (461.3m-650kc), Agricultural aid. 1:40 12:40 11:40 10:40 KFJF (260.7m-1150kc), State farm talks. 1:45 12:45 11:45 10:45 WOI (270m-1110kc), "Animal Husbandry." WCCO (416,4m-720kc), Glass cloth. WSB (428,3m-700kc), Georgia St. farm course. 6:20 5:20 4:20 WDBO (239.9m-1250kc), Farm talk. 6:40 5:40 4:40 3:40 WGHP (270m-1110kc), U. S. Farm school. 6:45 5:45 4:45 3:45 WGY (379.5m-790kc), Agricultural program. 7:10 6:10 5:10 4:10 WEAO (293.9m-1020kc), Plant diseases. WEAO (293,9m-1020kc), Plant diseases.

7:30

KSAC (340,7m-880kc), Dec. 7, Weeds; Dec. 14,
Weather, Harmful and Useful birds.

KSO (405,2m-740kc), U. S. Farm school.

8 OLL (305,9m-980kc), U. S. Radio Farm school.

KYW (535,4m-560kc), American Farm Bureau
Federation.

WAMD (243,8m-1230kc), U. S. Farm school. 9:30 8:30 7:30 6:30 KOA (322.4m-930kc), Farm question box. 10:10 9:10 8:10 7:10 WOAW (526m-570kc), Poultry, pig troubles.

WBAP Fort Worth, Tex. (475.9m-630kc) 7:30-8:30 p. m. musicale; 9:30-11, Davis Baking Powder saxophone octet; 11-12, frolic.

WBBM Chicago, Ill. (226m-1330kc) 8 p. m. Coonsamders Night Hawks; 8:15-11, orchestra, piano; 11, Coon-Saunders Night Hawks; 8:15-11, orchestra, piano; 11, Coon-Saunders Night Hawks; 11:15, Hand and his theater gang.

WCBD Zion, Ill. (344.6m-870kc) 8 p. m. musicale.

WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 8 p. m. WEAF; 10:20, headliner.

WCFL Chicago, Ill. (491.5m-610kc) 6 p. m. talks; 7, Brevoort trio; 8, classical hour; 10, Alamo orchestra; 11-12, Alamo entertaines.

WDAF Kansas City, Mo. (365.m-820kc) 6-7 p. m. school of the air 11:45-1, Nighthawk frolic.

WEBH Chicago, Ill. (302.3m-810kc) 7-3 pm. Uptown theater; 9:30-11, Inckey and Johnson; Rita McFawn; Cook Sisters, Hickey and

WHAS Louisville, Ky. (595.6m-820kc) 7:30-9 p. in. concert.
WHB Kansas City, Mo. (365.6m-820kc) 7-7:45 p. m. organ concert; 9-10, Ukulele songsters.
WHO Des Moines, Ia. (526m-570kc) 7:30-8 p. m. Philbreck's Younker tea-room orchestra; 8-9, Bankers Life trio; 11-12, dance program.
WHT Chicago, Ill. (399.8m-750kc) 6 p. m. Al Carney, organist, violin; 7:45 (238m-1260kc), orchestra, songs; 9:30 (399.8m-750kc), Billy A. Huff, songs; 10, quartet; 12, Al and Pat.
WIRO Chicago, Ill. (225.4m-1330kc) 6-8 p. m. dinner

WJAZ Chicago, III. (329.5m-910kc) 7 p. m. diversified program; 9, Shoreland.

WIBO Chicago, Ill. (225.4m-1330kc) 6-8 p. m. dinner concert; 12-2, Aragon minstrels.

WJJD Mooseheart, III. (370.2m-810kc) 8-9 p. m. child artists; 11-1 a. m. Palmer House Victorians. WLJB Chicago, III. (302.8m-990kc) 7-7:10 p. m. dinner concert. Drake concert ensemble, Blackstone string quintet; 7:10, Old Fashioned Almanack and the Million Sing; 7:22, Adventures of Oney Fred Sweet; 7:30-8, songs, Correll and Gosden; Coon-Sanders orchestra; 11-12, Ruth Farley, organist; songs, Correll and Gosden; Bobby Meeker's Drake hotel dance orchestra; 'waltz time'; 12-1 a. m. frolic.

hotel dance orcnesura, wantz Line, a frolic, WLS Chicago, III. (344.6m-870kc) 6:30 p. m. sports; 6:40-7:55, artists; 10:30, organist; 11-12, orchestras. WMAQ Chicago, III, (447.5m-670kc) 6 p. m. Chicago theater organ; 6:30, Gus Edwards' orchestra; 8, program; 9:50, air line. WMBB Chicago, III. (249.9m-1200kc) 7-8:30 p. m. Trianon ensemble; 8:30-11, orchestra; Artur Truesdale.

dale.

WMC Memphis, Tenn. (499.7m-600kc) 8 p. m. talk
on Memphis commerce; 8:30, Vesey Piano company

on Mempins commerce, 5.55, ensemble.

WOAI San Antonio, Tex. (394.5m-760kc) 8:30-9:30 p. m. Radiola Super-Heterodyne hour. p. m. Radiola Super-Heterouyne nom.

WOAW Omaha, Nebr. (526-570kc) 6 p. m. Vagabonds; 9, classical program; 10, Roseland Gardens.

WOC Davenport, Iowa (483.6m-620kc) 7:30-8 p. m. Moline Plowboys; 8-9, WEAF; 9-10, WEAF. WOK Chicago, Ill. (238m-1260kc) 6-7:45 p. m. string ensemble; 8-9 (217.3m-1380kc), theater program; 9:30-12 (238m-1260kc), syncopators.

WORD Chicago, III. (275.1m-1090kc) 7 p. m. Webster Hotel duo orchestra; 9, musicale. WQJ Chicago, Ill. (447.5m-670kc) 7-8 p. m. Rainbo Gardens orchestra; specialty; 10-2 a. m. Rainbo

WGJ Chicago, M. Gardens orchestra; specialty; 10-2 a, m. Kallot frolic.
WSB Atlanta, Ga. (428.3m-700kc) 8 p, m. concert; 10:45, Charles A. Sheldon Jr., organist.
WSBC Chicago, Ill. (288.3m-1040kc) 6:30-8:30 p, m. dinner program; 9:30-1, New Jeffrey Tavern syndrometers.

dinner program; 7.00-1, 16.0. de p. m. dinner copators.

WSWS Chicago, Ill. (275.8m-1990kc) 6 p. m. dinner hour program; Terrace Garden orchestra; 8, production, the Magic Crystal; 10, popular airs; 12, Witching hour program.

Pacific Time Stations

Pacific Time Stations
KFI Los Angeles, Calif. (467m-640kc) 7-8 p. m. program by students of U. S. C.; 8-9, KFI drama hour; 9-10, varied hour; 10-11, Johnston and Farrell's music box revue.
KFWB Hollywood, Calif. (252m-1190kc) 6-7 p. m. Pontiac dinner hour; 7:50, news; 9-10, program; 10-11, Warner Brothers frolic.
KGO Oakland, Calif. (361.2m-830kc) 6-6:55 p. m. Stanislas Bem's Little symphony; 8, program; 10, orchestra.

Stamislas Bem's Little symphony; 8, program; 10, orchestra.

KGW Portland, Ore. (491.5m-610kc) 6-7 p. m. dinner concert; 7:45-8, lecture; 8-10, vaudeville.

KHJ Los Angeles, Calif. (405.2m-740kc) 6:30-7:30 p. m. children's hour; 8-10, features; 10-11, dance music. KMTR Hollywood, Calif. (370.2m-810kc) 8-9 p. m. program; 9-10, Cafe Lafayette dance orchestra; 10-12, Palais de Danse.

KNX Hollywood, Calif. (336.9m-890kc) 7 p. m. organ; 8, feature; 9, courtesy program; 11, Hotel Ambassador.

KPO San Francisco, Calif. (428.3m-700kc) 6:30-7 p. m. States Restaurant orchestra; 7-7:30, Rudy Seiger's Fairmont hotel concert orchestra. Rudy California; 9-10, Hawaiians; 10-11, Mandarin Cate orchestra.

KPSN Pasadena, Calif. (315.6m-950kc) 8-9 p. m. musical program.

Thursday, silent night for: CFCA, KFAB, KFDM, KFH, KFOA, KFUO, KLX, KMA, KMOX, KOA, KOB, KSWC, PWX, WAHG, WAMD, WEAO, WEBJ, WEMC, WGBF, WHAD, WJAX, WMAK, WOS, WSM, WSUI, WTAM.

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PROGRAMS. Hebor City, Utah,
The Miraco gure can't be beat at
any price. Coast to coast it are
does and more. I have head stations
in New York and Cuba in the east,
and secons of the program of the coast,
and secons of the coast it are
does and more. I have logged up to
date 150 stations and they all come
in wonderfully, Monte Glies.

The coarse is a wonder without
noise—that's one of the things I
is about the Miraco. I've said
is ab

MIRACOWINS AGAINST 3 OTHER MAKES. Pearland, Texas, I tried three other makes and the Miraco is the best of them all. Received kFl, Los Angeles, Calif. on loudspeaker, O. H. Richards.

Nacogdoches, Texas. Onmy Miraco I have heard stations from Cuba to San Francisco and from Mexico City to Pittsburgh. Walter M. Frisbic. COAST TO COAST LOUD AND

timony of nearby users.

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TO \$120.00 SET. Santa Cruz,
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o need to wear out expensive batteries burning 6, or 8 tubes when users everywhere are reporting in the big latest Miraco 5-tube sets actually are insurpassed (even at much higher prices) for razorige selectivity, extreme long distance reception, ear natural tone and powerful loud speaker volume ombined with great economy in use of battery curnit! Enjoy a powerful Miraco 30 days in your home at our risk—and be convinced! Your verdiet final—solutely no strings to this. Save or make a lot of oney on sets and accessories this season by sending MMEDIATELY for our Amazing Special Offer! ead Direct with a Big Reliable Corporation—need Big Reliable Corporation—Remember this offer is made direct to you by a big sponsible manufacturing corporation—one of the dest and most successful set-builders in the indus-y—a concern which has grown to immense size thru econimendations of its many thousands of satisfied astomy guaranteed for one year. Easy to install and operate—full instructions supplied. Send NOW for testimony of nearby users and Amazing Offer!

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Eastern Central Mountain Pacific 8:00 p. m. 7:00 6:00 6:00 5:00 WGY (379.5m-790kc) Remington band, WGJ (447.5m-670kc) Dramatic hour. 8:15 7:15 6:15 5:15 KFUO (545.1m-550kc) "Christ, the Creator of the World, the Redeemer of Mankind, the Head of the Church." 8:30 6:30 5:30 WEAF (491.5m-610kc) Hohner Harmony hour, WEEI, WGR, WLIT, WRC, WLIB, WWJ, WTAM, WCAE, WHAS (399.8m-750kc) Concert, Southern Baptist Theological seminary Concert, Southern Baptist 7:45 6:45 5:45 WCAU (277.6m-1080kc) Curlox girls.

Mrs. R. Evans, Symmetry, Spianist, WSB (428.3m-700kc) Charles Fry. WSM (282.8m-1060kc) Daisy Sartain, pianist, WTIC (475.9m-630kc) Friendly Fuller hour.

9:30 8:30 7:30 6:30 KOA (348.6m-860kc) Concert, State college Salon orchestra. WCAU (277.6m-1080kc) Sam J. Gold, the mur-muring baritone. WFAA (475.9m-630kc) Service Temple Emanu-El. 10 9 8 7 KTHS (374.8m-800kc) Meyer Davis string quin-WBAL (245.8m-1220kc) "Evolution of American WMAQ (447.5m-670kc) Recital.

10:15 9:15 8:15 7:15
KOA (322.4m-930kc) Harmony Peerless orchestra, Amphion quartet. Lively music.

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Eastern Central 11:00 p. m. 13:00 KLX (508.2m-590kc) Mountain 9:00 Pittsburgh Con (374.8m-800kc) Little Jack Little. (282.8m-1060kc) Aleda Waggoner, colora-WEAF (491.5m-610kc) Frank Farrell and his Greenwich Village Inn orchestra.
WSM (282.8m-1060kc) Pipe organ concert, F. Arthur Henkel. Arthur Henkel.

12 10 9

KOIL (305.9m-980kc) World theater, Old Doc

FRIDAY, DECEMBER 10 Headliners

Santa Claus, 7:45
Y-745
Y-745 111181. 8:45 7:45 6:45 5:45 6:45 Wary Made Some Marmalade," play.

orchestra. WSM (282m-1060kc) Vocal recital, Signor G. DeLuca. 9:15 8:15 7:15 6:15 WMAQ (447.5m-670kc) Kent School of Law De-WBAP (475.9m-630kc) Thorp Springs Christian college concert.

Educational Features Friday

Mountain Pacific 7 p. m. 5 4

WDAF (365.6m-820kc) School of the Air.
WNYC (526m-570kc) Advanced French lessons.
WOAW (526m-570kc) "Musical Appreciation,"
Hester Bronson Copper.
KVOO (374.8m-800kc) Law, U. of Tulsa.
WTIC (475.9m-630kc) Connecticut Agricultural WTIC (475.9m-630kc) connecticut Agricultura, college farm course, 7:162 farm course, 6:30 fish college of the Air. 6:45 fish c | Mask |

Regular Friday Features

Eastern Time Stations

KDKA Pittsburgh, Pa. (309.1m-970kc) 6:15 p. m. string ensemble; 8, concert; 9, Teaberry time.

WAHG Richmond Hill, N. Y. (315.6m-950kc) 7:30 p. m. studio program; 8, Grebe music hour; 9, artists' recital; 10:02, popular program.

WBAL Baltimore, Md. (246m-1220kc) 6:30-7:30 p. m. dinner orchestra; 7:30-8, quartet; 8-9, trio; John Wilbourn, tenor; 9-9:30, Fitz Sisters, musical sketch; 9:30-10, string quartet; 10-11, novelty program; 11-12, Dance orchestra.



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WBZ Springfield, Mass. (333.1m-900kc) 6:15 p. m. ensemble: 6:30. orchestra: 7:03, concert; 8, Radio ensemble; 6:30, orchestra; 7:03, concert; 8, Radio Four; 8:30, program; 10, WJZ. WBBR New York, N. Y. (416.4m-720kc) 8 p. m. Watchtower concert trio; 8:20, Fred Twaroschk,

Watentower concert trio; 8:20, Freu Iwaiosun, tenor.

WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. dinner music; 8, Sunday school lesson; 8:30, Burt McMurtrie's hour; 9:30-10:30, WEAF; 10:30, dance music. WCAU Philadelphia, Pa. (277.6m-1680kc) 7:30 p. m. Snellenburg recital; 8, Barry O'Moore, Irish tenor; 8:30, Cohen's Jewels; 8:45, Curlox Girls; 9, Meiody Makers; 9:30, Murmuring Baritone; 10, recital; 10:30, Myers' Musical Architects.

WCWS Bridgeport, Conn. (285.5m-1050kc) 6:30 p. m. orchestra; 7, orchestra; 7:30, hour of music; 8:30, sextet.

sextet.

WCX Detroit, Mich. (516.9m-580kc) 6-7 p. m. dinner concert, Goldkette ensemble; 8-9, studio pro-

gram.
WDBO Winter Park, Fla. (239.9m-1250kc) 9 p. m
popular program; 10:30, Newspaper trio; 11:30, jam

popular program; 10:30, Newspaper tric; 11:30, jamboree,

WEAF New York, N, Y, (491.5m-610kc) 6 p. m. dinner music; 7, orchestra; 7:30, headliners; 7:45, talk; 8, Happiness Candy Boys; 8:30, Hohner hour, WGR, WLIT, WRC, WLIB, WWI, WTAM, WCAE, 9, South Sea Islanders, WLIT, WWI, KSD, WTAG; 9:30, La France orchestra, WEEI, WGR, WDAF, WLIT, WCAE, WTAM, WWI, KSD, WOC. 10, Whittall Anglo-Persians, WRC, WJAR, WTAM, KSD, WW, WCCO, WDAF, WGR, WGN, WEEI, WTAG, WCAE, WCAE, WTAG, WGAE, WGR, WGN, WEEI, WTAG, WCAE, WOC, WLIT; 11:30 (headliner), orchestra.

WTAG, WCAE, WOC, WLII; 11:00 (neatmer), orchestra, WEEI Boston, Mass. (348.6m-860kc) 7:30 p. m. Whiting Milk company; 8, musicale; 9:30-10:30, WEAF, WFI Philadelphia, Pa. (394.5m-760kc) 6:45 p. m. Adelphia dance orchestra: (394.5m-760kc) 6:30 p. m. Bluebells of Long Island orchestra; 7:10, orchestra; 7:20, Bluebells of Long Island orchestra, 8:30 p. m. wine orean, program.

WGHB Clearwater, Fia. (265.3m-1130kc) 8:30 p. m. pipe organ, program.
WGHP Detroit, Mich. (270.1m-1110kc) 6-8 p. m. diner concert, Hotel Tuller; 10-11, WGHP entertainers; 11-12, Melodymakers.
WGR Buffalo, N. Y. (319m-940kc) 7:45 p. m. evening program; 9:30-10:30, WEAF; 11-1, supper

musicale; 9, WGY players; 10, WJZ; 11, WJZ; WGY Schenectady, N. Y. (379.5m-790kc) 7 p. m. Hotel Van Curler dinner music; 7:35, staff program; 8, musicale; 9, WGY players; 10, WJZ; 11, WJZ. WHN New York, N. Y. (361.2m-380kc) 7 p. m. Freshman Masterpiece entertainers; 7:30, Sachs Quality entertainers; 8, Treasureland Home Owners ensemble; 10, Roseland dance orchestra; 12, Silver Wilpper orchestra.

ensemble; 10. Roseland dance orchestra; 12. Silver Slipper orchestra.
WIP Philadelphia, Pa. (508.2m-590kc) 6:05 p. m. Benjamin Franklin concert orchestra; 7. Uncle Wip's bedtime stories.
WJAX Jacksonville, Fla. (336.9m-890kc) 7-7:30 p. m. Carling hotel dinner music; 8-9, studio popular program; 9-10, Casa de Baile.
WJR Detroit, Mich. (516.9m-580kc) 7 p. m. symbony; 8. Arctic flavors; 8:30, studio program.
WJZ New York, N. Y. (454.5m-660kc) 7 p. m. Hotel Commodore dinner orchestra; 8. Stundia? Shoe Serenaders & Bonnie Laddies; 9, Breyer le Cream hour, WRC will also broadcast; 10, Baldwin piano hour, WGY; 11, Raul Specht's Twin Oaks orchestra.

win piano hour, WGY; 11, Raul Specht's Twin Oaks orchestra;
WLIT Philadelphia, Pa. (394.5m-760kc) 8 p. m. concert orchestra; 8:30 Salon orchestra; 9, WEAF; 10, WEAF; 10:30, Arcadia cafe dance orchestra; 10, WMAK Buffalo, N. Y. (265.5m-1120kc) 7:30 p. m. weather; 7:30, WGY; 7:35, WGY; MGY, WMCA New York, N. Y. (340.7m-880kc) 6:30 p. m. Ernie Golden and his Hotel McAlpin orchestra; 8, Wanamaker's Hawaiians; 8:45, Broadway Association; 10, Entertainers; 12, McAlpin entertainers; WNYC New York, N. Y. (526m-570kc) 6 p. m. piano selections.

tion; 10. Entertainers; 12. MCADIN CHICAGNAL (New York, N. Y. (526m-570kc) 6 p. m. piano selections.

WOY Philadelphia, Pa. (508.2m-590kc) 11 a. m. organ recital; 12:02 p. m. Tea Room orchestra; 4:45, organ recital; 12:30. Hotel Sylvania dance orchestra; 8:10. hygiene talk; 8:20. WOO tourists, WOO orchestra; 9:30, Fox theater orchestra; 10, sesquicentennial concert; 10:30, Sylvania dance orchestra. WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Bill Wathey in sports; 6:30, Hotel Bretton Hall string quarter; 9:30, program; 11, orchestra.

WPG Atlantic City, N. J. (299.8m-1000kc) 7:15 p. m. organ recital, Arthur Brook; 7:30, Hotel Shelburne dinner music; 8, Hotel Traymore dinner music; 8:30, Hotel Chelsea evening concert; 9, Hotel President dance orchestra; 9:30, Hotel Ambassador concert orchestra; 10, Garden Pier dance orchestra; 10:30, dance music; 11, Garden Pier dance orchestra.

WRC Washington, D. C. (468.5m-640kc) 7 p. m. Meyer (Goldman's Hotel Hamilton orchestra; wroth musice; 9, W1Z; 10, WEAF; 10:30-12:30, Wardman Park hotel orchestra.

WRVA Richmond, Va. (256.3m-1170kc) 7 p. m. evening program.

WVA & Worcester. Mass. (545.1m-550kc) 8:30 p. m.

program.
WTAG Worcester, Mass. (545.1m-550kc) 8:30 p. m.
program; 9:30 Belco entertainers; 10, WEAF.

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WTAM Cleveland, Ohio (389.4m-770kc) 6 p. m. Jack Horwitz Collegian serenaders; 7, talk, Arthur Haas; 7:30, studio program; 9:30, WEAF; 10, WEAF; 10:30, studio program; 11, Bamboo orchestra. WTIC Hartford, Conn. (475.9m-630kc) 6:30 p. m. Hotel Bond trio; 7:15, Laura C. Gaudet, organist; 10:05, Emil Heimberger's Hotel Bond orchestra. WWJ Detroit, Mich. (382.7m-820kc) 6 p. m. dinner concert; 9, WEAF; 9:30, WEAF; 10, WEAF.

Central Time Stations KFAB Lincoln, Nebr. (340.7m-880kc) 8:30-10:30 p. m. entertainment. KFDM Beaumont, Texas (315.6m-950kc) band, KMA Shenandoah, Iowa (461.3m-650kc) 9-11 p. m. Dreamers.

KMOX St. Louis, Mo. (280.2m-1070kc) 6:30 p. m. dinner program; 8, program; 12-1, dance music.

KOIL Council Bluffs, Iowa (305.9m-980kc) 7:30 p. m.

Ambassadors; 8, artists; 8:30, Dresher Brothers,

Ambassadors; 8, artists; 8:30, Dresher Brothers, Inc.; 11, frolic, KSO Clarinda, Iowa (405.2m-740kc) 7 p. m. popular KSO Clarinda, Iowa (405.2m-740kc) / p. m. popular program.
KTHS Hot Springs National Park, Ark, (374.8m-300kc) 9:10-10:45 p. m. features.
KVOO Bristow, Okla, (374.8m-800kc) 7-7:30 p. m. Walter Schoggen, tenor; 7:39-8:30, Marie Gardner Swift; 8:30-9, Chickasaw Nightingale; 11-12, Knights of the Empty Skult; 12-1, Earl Thurston, organist. KYW Chicago, Ill. (535.4m-560kc) 6:30 p. m. Joska DeRabary and his orchestra; 7, family hour; 9-10:30, classical concert; 10:30-12, Congress carnival. WBAP Fort Worth, Texas (475.9m-630kc) 7:30-8:30 p. m. concert; 9:30-11, evening program; 11, musicale.

WBBM Chicago, Ill. (226m-1330kc) 8:15 p. m. artist recital; 9-10, popular music, WCCO Minneapolis-St. Paul, Minn. (416,4m-720kc) 6-30 pm. St. Paul Association; 8, popular orchestra program, Nash-Finch orchestra; 9, WEAF; 9-30, program; 10:05, dance program, Nankin Caie orchestra.
WCFL Chicago, Ill. (491.5m-610kc) 7 p. m. Brevoort concert trio; 8, hour; 10, Alamo orchestra.
WCOA Pensacola, Fla. (252m-1190kc) 6:30 p. m. mu-

wCoA renactor, Fig. (252m-1190c) 7.50 p. m. and-sicale.

WDAF Kansas City, Mo. (365.5m-820kc) 6-7 p. m. school of the air; 8-8:30, varied musicale; 8:30-9, WEAF; 9-9:30, WEAF; 11:45-1, Nighthawk frolic.

WEBH Chicago, III. (370.2m-810kc) 7 p. m. Edge-water Beach hotel orchestra; 10-11, Egdewater Beach hotel orchestra; 10-11, Egdewater Beach hotel orchestra, specialties.

WEMC Berrien Springs, Mich. (315.6m-950kc) 9 p. m. musicale.

musicale. WENR Chicago, III. (265.3m-1130kc) 6-7 p. m. Rau-

land lyric trioj 8-10, All-American Pioneers; 12-2, midnight frolic.

WFAA Dallas, Tex. (475.9m-630kc) 6:30-7:30 p. m. orchestra; 8:30, program.

WFAA Dallas, Tex. (475.9m-630kc) 6:30-7:30 p. m. orchestra; 8:30, program.
WGBF Evansville, Ind. (236.1m-1270kc) 7 p. m. Exide entertainers; 8, orchestra.
WGN Chicago, Ill. (302.8m-990kc) 6:45-7 p. m. request program, Brake concert ensemble; Blackstone string quintet; 7, The Million Sing; 7:05-7:15, Old Fashioned Almanack; 7:15, Paul Ash's show, Oriental theater; 8, musical program; 9, WEAF; 9:30, The Thantom violin; 10, Sam n. Henry; 10:10, Th

WHAS Louisville, Ky. (399.8m-750kc) 7:30-9 p. m. concert.
WHB Kansas City, Mo. (365.6m-820kc) 7-8 p. m. Sweeney orchestra; Songsters.
WHO Des Moines, Ia. (526m-570kc) 7:30-8 p.m. program; 8-9, Headdiner; II-12, dance program.
WHT Chicago, Ill. (399.8m-750kc) 6 p. m. Al Carney; Eleanor Gilmore; Helen Rauh; 7:45 (238m-1260kc), Stuart Dawson; 9:30 (399.8m-750kc), Kenneth Clark and his Hawaiians; 12, Al and Pat.
WIBO Chicago, Ill. (225.4m-1330kc) 6-8 p. m. evening musicale; 10-1, dance program.
WJAZ Chicago, Ill. (329.5m-910kc) 7 p. m. popular program; 8, highlights; 9, Shoreland; 10:30, Club Chez Pierre.

WJAZ Chicago, III. (323.5m-21082), p. 2016. Pierre, S. highlights; 9, Shoreland; 10:30, Club Chez Pierre, WJJD Mooseheart, III. (370.2m-810kc) 8-9 p. m. child artists; 11-1 a. m. Palmer House Victorians; Jack Nelson, WLIB Chicago, III. (302.8m-990kc) 11-12 midnight, songs, Correll and Gosden; Ambrose Larsen organist; Bobby Meeker's Drake hotel dance orchestra; romantic songs, Tommy Coates, baritone; 12-1 a. m., frolic.

romantic songs, Tommy Coates, baritone; 12-1 a. m., frolic.

WLS Chicago, Ill. (344.6m-870kc) 7 p. m. May and June; 7:15, duo, Old Town Coffee room; 8, program; 9:30-12, show boat.

WMAQ Chicago, Ill. (447.5m-670kc) 6 p. m. Chicago theater organ; 6:30, Wide Awake club; 8, musicale; 9:50, air line, 9:50, air line, WMBB Chicago, Ill. (249.9m-1200kc) 7-8:30 p. m. Trianon duo; Norman Harte, baritone; Veronica Krebs, contralto; John Stamford; 3:30-11, frolic WMC Memphis, Tenn. (499.7m-690kc) 8 p. m. Mississippi Valley facts; 8:30, Cooper ord entertainers. WOAI San Antonio, Tex. (394.5m-760kc) 8:30-9:30 musical program, Fex. (394.5m-760kc) 8:30-9:30 WOAW Onaha, Nebr. (526m-870kc) 6 p. m. Hugo Heyn, marimba soloist; Emil Hofmann, pianist; 6:50, orchestra; 9, classical.

WOC Davenport, Iowa (483.6m-620kc) 7:30-8:30 p. m. Moorman Melody Mixers; 8:30-9, WEAF; 9-9:30, WEAF; 9-9:30, WeAF; 9-9:30, WeAF; 9-9:30-10:30, lecture. WOK Chicago, III. (228m-1260kc) 6-7:45 p. m. string ensemble; 8-9 (217.3m-1380kc), theater program; 9:30-12 (238m-1260kc), syncopators. WOOD Grand Rapids, Mich. (241.8m-1240kc) 8 p. m. program; 9, Van Wyck instrumental quartet. WORD Chicago, III. (275.1m-1090kc) 7 p. m. North Shore line; 7:45, World News digest; 9, station program.

Shore line; 7:45, World News algest, 2, Station, program.

WOS Jefferson City, Mo. (440.9m-680kc) 7:15 p. m. Radio Bible class, talks; 8:20, musicale.

WQJ Chicago, III. (447.5m-670kc) 7-8 p. m. Rainbo Gardens orchestra; 10-2 a. m. Rainbo frolic.

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

WSBC Chicago, III. (288.3m-1040kc) 6:30-8:30 p. m. dinner program; 9:30-1, New Jeffrey Tavern syncopators.

dinner program; 9:30-1, New Jeffrey Tavern synco-pators.

WSM, Nashville, Tenn. (282.8m-1060kc) 6:45 p. m. Andrew Jackson hotel orchestra; 8, studio concert; 10, studio concert; 10:30, F. Arthur Henkel, organist.

WSWS Chicago, Ill. (275.8m-1090kc) 6 p. m. dinner hour program; Terrace Garden orchestra; 8, recital; 10, Mildred Colucio, blues singer; Terrace Garden orchestra; 12, Witching hour program; Terrace Garden orchestra.

orcnestra; 12, witching nour program; 1errace Garden orchestra.

Mountain Time Stations

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

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

Pacific Time Stations

KFI Los Angeles, Calif. (467m-640kc) 7-8 p. m. popular program; 8-9, Aeolian organ recitat; 9-10, semiclassical hour; 10-11, Packard ballad hour.

KFWB Hollywood, Calif. (252m-1190kc) 6-7 p. m.

Poutiac dinner hour; 7:50, news; 9-10, Bill Hatch and his orchestra; 10-11, Warner Brothers frolic.

KGO Oakland, Calif. (361.2m-830kc) 6-6:55 p. m.

Stanislas Bem's Little symphony.

KGW Portland, Ore. (491.5m-610kc) 6-7 p. m. dinner concert; 8-8:30, KGW movie club; 8:30-10:30, dance music; 10:30-12, frolic, Hoot Owls.

KHJ Los Angeles, Calif. (405.2m-740kc) 6:30-7:30 p. m. children's hour; 8-10, feature program; 10-11, Marigold Gardens dance orchestra.

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

KMTR Hollywood, Calif. (370.2m-810kc) 8-9 p. m.

cial program; 9:30-10:30, Athens Athletic club or-clustra, KMTR Hollywood, Calif. (370.2m-810kc) 8-9 p. m. ensemble; 9-10, dance music: 10-12, Palais de Danse, KNX Hollywood, Calif. (336.9m-890kc) 7 p. m. fea-ture; 8, 9, 10, features; 11, Hotel Ambassador.

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This graph is drawn on a musical scale—the only accurate way of showing the full value of each tone which your set receives. Note that the evenness and fullness of amplification in both the Ferranti A. F. 3 and the A. F. 4 extends throughout the range of the organ, cello and the human voice.

THE NEARLY PERFECT TRANSFORMER

KPO San Francisco, Calif. (428.3m-700kc) 6:30 p. m. States Restaurant orchestra; 8:30-9, Cabiria caie orchestra; 9-10, Palace Hotel Rose Room dance or-chestra; 10-11, States Restaurant orchestra; 11-12, Clift Hotel dance orchestra.

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

Friday, silent night for: CFCA, CKNC, KFDY, KFNF, KGO, KLDS, KPRC, KPSN, KUOA, KWWG, PWX; WBBR, WCAD, WCBD, WFI, WGBS, WF, WJAZ, WKRC, WLIT, WLW, WLWL, WREO, WSAI, WSMB, WSUI, WTAM.

SATURDAY, DECEMBER 4 Headliners

| Central | Mountain | Pacific | 7:30 p. m. | 6:30 | 5:30 | 5:30 | 4:30 | WEAF (491.5m-6.10kc) One-act play, "Phipps." | WMCA (340,7m-880kc) | Whozit contest. | 7:45 | 5:45 | 5:45 | 4:45 | WBZ (333.1m-900kc) | Knights of Pythias quartet. | 8 | 7 | 6 | F | 7:45 | 6 | 5 | KFNF (461.3m-650kc) | Paw Paw Serenaders. | WTIC (475.9m-630kc) | Hartford Composers' | period, Benjamin Loveland. | 8:05 | 5:05 | WBZ (333.1m-900kc) | Boston symphony orchestra, | WGY, WJZ. | 8:25 | 6:25 | 6:25 | 5:25 | WIZ (454.3m-660kc) | Boston symphony orchestra, | 8:30 | 7:30 | 6:30 | 5:30 | WHAS (399.8m-750kc) | Arthur Findling, baritone. | WLW (422.3m-710kc) | Ensemble program. | WMC (497.5m-630kc) | Washington syncopators. | WTIC (475.9m-630kc) | Washington syncopators. | WTIC (475.9m-630kc) | Washington syncopators. | WILS (491.5m-630kc) | Nora Figum and her juvenile double violin trio. | Balkite hour, New York Central Mountain Pacific

8 KOIL (305.9m-980kc) Nora Figum and her juvenide double violin trio.

WEAF (491.5m-610kc) Balkite hour, New York symphony, Walter Damrosch; WEEL WGR, WFI, WCAE, WWI, WSAI, WTAM, WGN, KSD, WCCO, WDAF; Academic Festival Overture, Brahms; (a) Air on the G String, Bach; (b) Gavotte in E; The Policeman and the Nursemaid, Carpenter; Siegfried and the Forest Bird, Wagner; Rakoczy March, Berlioz.

WMAQ (447.5m-670kc) Gov, of Idaho.
9:30 8:30 7:30 8:30 7:30 6:30 KFAB (340.7m-880kc) Hazel Brittel, reader, Orchestra, WHAA (475.9m-630kc) Mrs. Otis Holt, singer. WMAC (499.7m-660kc) Concert, George Powers.
10 9 KLDS (440.9m-680kc) Little Jack Little, WCCO (416.4m-720kc) "Monsieur Beaucaire," Sumpmann trio.

WJAX (336.9m-890kc) Ed and Mama McConnell, Just Florida Folks, WOC (483.6m-620kc) Burnell Schuler, organist, Faye McCarthy, reader. Marigold Cassin, soprano.

WPG (299.8m-10000kc) American Composer's night.

prano.

WPG (299.8m-1000kc) American Composer's night.
10:30 9:30 8:30 7:30

KTHS (374.8m-800kc) New Arlington dance orchestra,

11:15 10:15 9:15 8:15 KTHS (374.8m-800kc) Joe Kuntz and his ac-11:45 9:45 8:45 WSB (428.3m-700kc) Journal Hired Help Skylark.

SATURDAY, DECEMBER 11 Headliners

Central Mountain 6:30 5:30 WEAF (491.5m-610kc) "Fancy Free," play.

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ALHAMBRA FOR CONE TYPE LOUD SPEAKERS

Central Pacific Eastern Central Mountain Pacific
8:00 p. m. 7:00 6:00 5:00
WOC (483.6m.620kc) Toher trio. Robert Lynch,
baritone. Chris Oberlander, reader.
WTIC (475.5m-630kc) Hartford Composer night,
"Ralph L. Baldwin."
8:25 6:25 5:25
WBZ (333.1m-900kc).
WGY (379.5m-790kc).
WJZ (454.3m-660kc) Boston symphony orchestra.
8:30 HAS (399.8m-750kc) Blue Grass Triple male
quartet.
WIC (475.9m-630kc) Raymond Cook, tenor;
Mrs. A. Waite, contraito. Israel Rosenberg,
panist.
8 (CIL signific Ergilly Mountain

KOIL (305.9m-980kc) Lillian Gill, pianist. Emily Davis, violinist. Betty Lane, cellist. KPRC (296.9m-1010kc) First Band of Houston schools. WEAF (491.5m-610kc) Balkite hour, Walter Damrosch, WEEI, WGR, WFI, WCAE, WWJ, WSAI, WTAM, WGN, KSD, WCCO, WDAF; Wagner's "Gotterdammerung," Acts 1 and 2. WMAQ (447.5m-670kc) Gov, of Kansas. 7

TO SURE COUNTY OF THE PROPERTY WJAX (336.9m-890kc) Ed and Mama McConnell, Just Florida Folks, 11:30 9:30 9:30 8:30 KTHS (374.8m-800kc) Dance frolic, Meyer Davis orchestra. WBAP (475.9m-630kc) Alfred Broward's Little symphony.

Educational Features Saturday

Eastern Central Mountain Pacific
 V p.m.
 6
 5
 4

 WOAW
 (526m-570kc)
 Literary period.
 5:30

 WOAW
 (526m-570kc)
 Creighton educational period.
 9:30

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

 WMAQ
 (447.5m-670kc)
 Photologues.
 6:30
 Regular Saturday Features

Eastern Time Stations
KDKA Pittsburgh, Pa. (309.1m-970kc) 6:15 p. m
dinner concert, Westinghouse band; 7:15, Radio
chat; 8, concert.
PWX Havana, Cuba (399.3m-750kc) 8:30 p. m. frolic.

chat; 8, concert.

PWX Havana, Cuba (399.3m-750kc) 8:30 p. m. frolic.

WAAM Newark, N. J. (263m-1140kc) 6 p. m. Ken Smith and his orchestra; 7, bill Fellmeth; 10:30, Four Towers orchestra.

WAHG Richmond Hill, N. Y. (315.6m-950kc) 12 p. m. Mita Weinzoff 8 concert orchestra.

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

WCX Detroit, Mich. (516.9m-530kc) 6-7 p. m. dinner program, Goldkette ensemble.

WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner music; 7, Janssen's Hofbrau orchestra; 7:30, headliner; 7:45, talk; 8, musical comedy hits by the WEAF comedy troupe; 9, Balkite hour, New York symphony, Walter Damrosch, WEEI, WGR, WFI, WCAE, WWI, WSAI, WTAM, WGN, KSD, WCCO, WDAF; (regular), 10, WEAF Revue; 11, Vincent Lopez orchestra from Casa Lopez.

WEEI Boston, Mass. (348.6m-860kc) 7:55 p. m. Boston Globe; 8, WEAF; 9, WEAF.

WFI Philadelphia, Pa. (394.5m-760kc) 6:45 p. m. Adelphia dance orchestra; 8:15, recital; 9 concert, 9:30, Starlight Players; 10:30, Adelphia French Room orchestra.

WGBS New Yorks, N. Y. (315.6m-950kc) 7:45 p. m. George Hall and his Royal Arcadians; 10:30, Arrowhead Inn dance orchestra.

WGR Buffalo, N. Y. (319m-940kc) 9-10 p. m. WEAF.

WGC Schenectady, N. Y. (379.5m-790kc) 6:30 p. m. dinner, program, Onondaga hotel, WFBL, WGY;

WGR Buffalo, N. Y. (319m-940kc) 9-10 p. m. WEAF.
WGY Schenectady, N. Y. (379.5m-790kc) 6:30 p. m.
dinner program, Onondaga hotel, WFBL, WGY;
7:30, Shea's Buffalo hour, WMAK, WGY; 8:05,
WJZ; 10:30, dance program.
WIP Philadelphia, Pa. (508.2m-590kc) 6:05 p. m.
Benjamin Franklin concert orchestra; 7, Uncle
Wip's bedtime stories; 8, sports corner, Dr.
Francois D'Eliscu; 8:15, recital; 8:45, program
from WGBS; 10:30, Arrowhead Inn dance orchestra from WGBS; 10:30, Arrowhead Inn dance orchestra from WGBS; 10:30, Carga recital.
WJAX Jacksonville, Fla. (336.9m-890kc) 8-9 p. m.
classical program; 9-10 Casa de Baile dance music.
WJR Detroit, Mich. (516.9m-580kc) 7 p. m. Jean
Goldkette's Petite symphony orchestra, soloists; 9,
studio program; 11:30, Merry Old Chief and his
Jesters.

TO A CONTROL TO A CONTROL OF A

WJZ New York, N. Y. (454.3m-660kc) 7 p. m. Football results; 7:10, Hotel Commodore dinner orchestra; 8, Don Voorhees orchestra; 8:25, Boston symphony, WBZ, WGY, WRC; 10:30, Jack Denny's Frivolity Club orchestra, WRC will also broadcast.

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

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

WLW Cincinnati, Ohio (422.3m-710kc) 7 p. m. organ concert, Johanna Grosse; 8, Seckatary Hawkins Radio club; 8:30, headliher; 9, dance music, Castle

Raulo Citty, 5, 0.09, Beaumer, 9, uance music, Caster Farm.

WMAK Buffalo, N. Y. (265.5m-1130kc) 6:30 p. m. Hotel Onondaga orchestra; 7:30, Shea's Buffalo theater, WGY, WHAM, WFBL; 8:30, musicale, WMCA New York, N. Y. (340.7m-880kc) 10:30 p. m. Nest Club orchestra; 11, Ernie Golden and his Hotel McAlpin orchestra; 12, McAlpin entertainers.

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

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

WOO Philadelphia, Pa. (508.2m-590kc) 7;30 p. m. Hotel Sylvania dance orchestra,
WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Jacques Jacobs' Hotel Shelton ensemble; 6:45, Bill Wathey in sports; 7, Hotel Shelton string ensemble; 8, Albert E. Sonn; 8:15, Vanderbilt Hotel orchestra; 8:40, orchestra.

WPG Atlantic City, N. J. (299.8m-1000kc) 7:15 p. m. organ recital, Arthur Brook; 7:30, Hotel Morton dinner music; 8:30, "Little Journeys to the Homes of Great Musicians," Alice Sachse, pianist; 9, Hotel Chelsea concert; 9:30, Hotel Traymore concert orchestra; 10, studio program; 10:30, dance music; 11, President hotel dance orchestra; 11:15, orchestra.

WRC Washington, D. C. (468.5m-640kc) 7:15 p. m. Hotel Washington orchestra; 8:10, WBZ; 10:30, WJZ; 11, orchestra.

WSAI Cincinnati, Ohio (325.9m-920kc) 9 p. m. WEAF,
WTAG Worcester, Mass. (545.1m-550kc) 8:30 p. m. Bancrott hotel orchestra; 9, program; 10, WEAF,
WTAM Cleveland, Ohio (389.4m-770kc) 6:15 p. m. Hotel Cleveland orchestra: 7:15, studio program; 9, WEAF; 10, Ev Jones' Merrymakers.

WTIC Hartford, Conn. (475.9m-630kc) 6 p. m, Hub Restaurant tric: 8, program.

WTIC Hartford, Conn. (475.9m-630kc) 6 p. m. Hub Restaurant trio; 8, program. WWJ Detroit, Mich. (352.7m-820kc) 9 p. m. WEAF.



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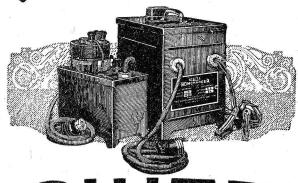


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Central Time Stations

CENT Winnipeg, Can, (384.4m-780kc) 9:30-10:30 p. m. Herbert Sadler, organist. KFAB Lincoln, Nebr. (340.7m-880kc) 8:30-10:30, variety program. KFNF Shenandoah, Ia. (461.3m-650kc) 7 p. m. headliner; 11, old time music. KMA Shenandoah, Ia. (461.3m-650kc) 9-11 p. m. Greenlee Brothers. KMOX St. Louis, Mo. (280.2m-1070kc) 6:30 p. m. Children's club; 7, Little Red Schoolhouse; 8, orchestra; 9, KMOX Minstrels; 9:30, orchestra; 10, dance music.

dance music.

KOIL. Council Bluffs, Ia. (305.9m-980kc) 6:03 p. m.

Y Pioneer Radio club; 6:30, McCrory music period;

7, practical radio; 7:30, entertainers; 8, artists;

11, Ambassadors,

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

Bible class; 8, Skyline studio concert; 11, frolic.

KTHS Hot Springs National Park, Ark. (374.8m800kc) 9:10-10 p. m. dance frolic; 10:15-10:45,

Specialties.

Specialties.

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

lesson; 7-8, Cleeman, c-, (1985), m. bedtimers, KYW Chicago, Ill. (535.4m-560kc) 6 p. m. bedtimerstory; 6:30, Joska DeBabary and his orchestra Johnny Hamp and his orchestra; 7, Family hour 9:10:30, classical concert; 10:30-12, Congress car-

WBAF Fort Worth, Tex. (475.9m-630kc) 8-8:30 p. m. pianist; 9:30-11, orchestra.
WBBM Ctirago, Ill. (226m-1330kc) 8 p. m. Coon-Saunders Night Hawks; 8:15. Log Cabin days; 8:45, safety play; 9, orchestra, artists; 11:30, supper club; 12, Nutty chib.
WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 6:15 p. m. Wesley Barlow's Nicollet hotel orchestra; WAR; 9, program; 10:05, dance program, Wallie Erickson's orchestra.
WTA, Chicago, Ill. (491.5m-610kc) 7 p. m. Brevoort chiberty of the cooling of the coo WBAP Fort Worth, Tex. (475.9m-630kc) 8-8:30 p. m.

concert.

WGN Chicago, III. (302.8m-990kc) 6:35-7 p. m.
Drake concert ensemble; Blackstone string quintet; 8-9, WEAF; 9-10, Light opera period; 10, Sam 'n' Henry; 10:10, The Music Box; 10:20, song group; 10:40-11, songs, Correll and Gosden.

WHAD Milwaukee, Wis. (275.1m-1090kc) 6:10 p. m., orchestra and vocal selections, Wisconsin hotel.

WHAS Louiseille Kr. (209.8m.750kc), 2:20.0 s. m.

WHAS Louisville, Ky. (399.8m-750kc) 7:30-9 p. m. Studio concert.
WHT Chicago, III. (399.8m-750kc) 6 p. m. Al Carney, organist; 7:45 (238m-1260kc), Stuart Dawson; 9:30 (399.8m-750kc), Brown and Craig; 12, Pat and Al. WIBO Chicago, III. (225.4m-1330kc) 6-7 p. m. dinner concert; 7-8, Bradley college hour.
WJAZ Chicago, III. (329.5m-910kc) 6:30 p. m. dinner program; 7-8, Shoreland; 8, musical highlights; 9-11, Shoreland; 11-2, frolic.

WJJD Mooseheart, Ill. (370.2m-810kc) 8-11 p.m.; Victorians, Gail Bandell; 12-1 a. m. Settin' Up hour, Victorians; Jack Nelson, Gail Bandell. WLIB Chicago, Ill. (302.8m-990kc) 7-7:10 p. m. dinner concert, Drake concert ensemble; Blackstone string quintet; 7:10-7:22, Old Fashioned Almanack and the Million Sing; 7:22, Adventures of Oney Fred Sweet; 7:30-7:45, orchestra; 7:45-8, Neighbor Daw in old time songs; 11-12 midnight, songs, Correll and Gosden; Ambrose Larsen, organist; Bobby Meeker's Drake hotel dance orchestra; 12-1 a. m. frolic.

WLS Chicago, Ill. (344.6m-870kc) 6:40 p. m. College Inn orchestra; 7, lullaby time; 7:15-1, barn dance.

WMAQ Chicago, Ill. (344.7sm-670kc) 6 p. m. Chicago theater organ; 6:30, Gus Edwards' orchestra; 8, photologue; 8:30, Chicago theater revue; 9:30, songs, WMBB Chicago, Ill. (249.9m-1200kc) 7-8:30 p. m. Trianon ensemble; artists; 8:30-11, Trianon orchestra;

Trianon ensemble; artists; 8:30-11, Trianon orches tra, ensemble.

WMC Memphis, Tenn. (499.7m-600kc) 8:30 p. m. en tertainment tertainment.

WOAW Omaha, Neb. (528m-570kc) 6 p. m. literary
MOAW Omaha, Neb. (528m-570kc) 6 p. m. literary
Moury: 9, program; 10, Tracy-Brown's Oklahomans.

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

ensemble; 8-9 (217.3m-1380kc), program; 9.50-12 (238m-1260kc), syncopators.
WORD Chicago, Ill. (275.1m-1090kc) 7 p. m. Webster hotel concert program; 9, studio program.
WOJ Chicago, Ill. (447.5m-670kc) 7-8 p. m. Rainbo orchestra; 10-3 a. m. Rainbo Gardens frolic, WSB Atlanta, Ga. (428.3m-700kc) 8 p. m. Atlanta Atwater Kent hour; 10:45, Ernest Rogers' Red Head

club, WSBC Chicago, III. (288.3m-1940kc) 6:30-8:30 p. m. dinner program; 9:30-1, New Jeffrey Tavern synco-WSKC Bay City, Mich. (260.7m-1150kc) 11-2 a. m.

wShC Bay City, Mich. 2002.

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

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

Mountain Time Stations

Denver, Colo. (322.4m-930kc) 10:30 p. m. uerman's Colorado orchestra.

Scheuerman's Colorado orchestra.

Pacific Time Stations

KFI Los Angeles, Calif. (467m-640kc) 7-8 p. m. program arranged by Paul Roberts, tenor; 8-9, program, L. A. Soap company; 9-10, Angelus string quartet; 10-11, Packard Radio club; 11-2 a. m., KFI midnight frolic.

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

KGO Oakland, Calif. (361.2m-830kc) 4-5 p. m. Stanislas Bem's Little symphony; 9-1, Hotel Whitcomb band; Frank Gibney, soloist.

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

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

KMTR Hollywood, Calif. (370.2m-810kc) 7-8 p. m. Fire and Police Depts, program; 8-9, KMTR concert

orchestra; 9-10, studio program; 10-12, Palais de Danse.

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

frolic.

KPO San Francisco, Calif. (428.3m-700kc) 6:30 p. m. States Restaurant orchestra; 9-10, Associated Pack-States Restaurant orchestra; 9-10, Associated Packard dealers; 10-11, Clift hotel dance orchestra, KPSN Pasadena, Calif. (315.6m-950kc) 8-9 p. m. Star-News instrumental ensemble.

Saturday, silent night for: CFCA, KFDM, KFDY, KFUO, KLX, KOA, KOB, KSWC, KTAB, KUOA, KWWC, WBAL, WCAL, WCAU, WCBD, WCX, WEBJ, WEEI, WEMC, WGBF, WGCP, WGHB, WGHP, WGR, WHA, WHAD, WHB, WHN, WHO, WJAR, WLWL, WOAI, WOOD, WOS, WRVA, WTAG, WTIC, WWJ.

SUNDAY, DECEMBER 5 Headliners

Eastern Central Management of the KFUO (545.1m-550kc) "The Messenger of the Covenant." Musicale, 2 1 1 The Management of Central Mountain Pacific Covenant." Musicaie.
4 p. m. 3 2 1

WSM (282.8m-1060kc) Elks' Memorial program.
4:30 3:30 2:30 1:30

KFUO (545.1m-550kc) "Christ, the Promised Priest" (German).
5 4

KFUO (545.1m-550kc) "He That Believeth and Is Baptized Shall Be Saved." Musical program.
7 6 5 4

WLS (344.6m-870kc) Westminster quartet.

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er suppry.	of the th	housands (of enthusias	tic users.
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	Eastern 7:50 p. m. WOC (483.6m	Central	Mountain	Pacific
	7:50 p. m.	6:30	5:30	4.30
	WOC (483.6m	-620kc) "Th	a World's Cl	anllonge to
	Christian Se	atrico II	c world's C	namenge to
	Chilistian Si	er vice.		
	8:30 WLW (422.31	7:30	6:30	5:30
	WLW (422.31	n-710kc) "G	etting Acqua	inted With
	Beethoven."		G quu	1,100
	Beethoven." 9:15 WEAF (491.5 WEEI, WOUCO, KS.	9.15	7.15	
	NUTEATE (401 F	0:10	7:15	6:15
	WEAT (491.5	m-610kc) At	water-Kent i	adio hour.
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	WOC WEL	o, marie, t	vino, wea	T'S AA T TITAT'S
	Mahal C	Epitologica Percenti		
	Mabel Garri	son, sopra	no, and E	rnst von
	Dohnanyi,	pianist. A	twater-Kent	orchestra
	Louis Edlin	conductor	twater-Kent	Or chicoela,
		T T		
	A	1		100 S 1 S
	Ario—Manon Micaela's Aria Mabel Garri			Massenet
	Micaela's Aria	from Carm	en	Bizot
	Mahel Garri	son and the	Atwates Vant	
	manor Guiri	II	atwater Kent	orcnestra.
	Manula II.			
	Marche Humo	resque		.Dohnanvi
	Aria			Dohnanyi
	Aria Presto aus Ru	ralin Hunga	rica	Dohnami
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•	Name of the Party	mist van	Domanyi	
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	Danny Boy			Old Trich
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	Estrellita Mah Lindy Lo Mabel	DOTCHICCH.		Swedish
	Mak That T	*********		. Mexican
	Man Lindy Lo	ou		Strickland
	Mabel	Garrison a	nd accompani	st
	Hungarian RI			19674
	mungarian Ki	apsoure		····Liszt
		Ernst von .	Dohnanyi	
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	waitz song,	TI Datio		.L. Araiti
	Geor	ge Siemonn.	accompanist	
	9:30 Geor	8:30	7.30	6:30
	WFAA (475.91	n. 6301ca) Sa	nos D	0.00
	Thompson.	Tropowe) 20	igs, Dr. and	Mrs. K.
	i nompson.			
	12:15 a. m.			
	WHB (365.6n	1-820kc) Co	Here Erates	nity and
	WHB (365.6n Sorority pro	rram M M	core organi	4 dill
	Sorotti, bio	5 - ce x 11. 1VI. 1VI	oore, organis	L.
	GT 1315 A		Total Control of the	

SUNDAY, DECEMBER 12 Headliners

astern Central Mountain Pacific 10:15 a.m. 9:15 7:15 7:15 7:15 FUO (545.1m.550kc) "The Purifier of His People," Musicale. 12 10 9 OA (322.4m.930kc) First Church, Quartet, chorus. 2 1 10 4 p. m. 3 2 1 4 p. m. 3 2 1
WSM (282m-1060kc) Nashville symphony orchestra concert. Solon Drukenmiller, tenor.

Eastern	Central	Mountain	Pacific
11011 (022.4)	.1m-550kc) " Mansions." n-930kc) Deny	3 In My Fath Musical prover El Jebel S	er's House gram. bhrine band.
WSB (428.31 8:30 KOA (322.41 8:45	5 n-700kc) Jenl 7:30 n-930kc) Orga 7:45 n-700kc) Seco	cins family, go 6:30 in recital, Par	ospel songs. 5:30 al Eslinger.
	8:15 York, N. Y. RC, WWJ, AR, WTAG, ater Kent rad		
Mme. France	s Alda, soprai estra, Louis I	n Assistad	by Atwater or,
	Atwater Kent	The state of the s	
a. A Christm b. Je ne suis c. In the Tim d. Nymphs ar	as Carol qu'une Berge	ra	Philidor
Aria from La	Villi(Madam		
a. J'ai Pleure b. Mensaje (c. Polubila (R d. Erstes Beg e. Jag Lefver	en Reve (Fr Spanish)	ench)Rac	Hue Feuster chmaninoff
(Atwater Kent	Orchestra)	
Aria: "Jewel	(Madam).	Faust Alda)	Gounod
a. The Birth b. Last Night c. Thank God d. Song of the e. Home Swee	for a Garden.		Kjerulf Del Riego
9:15	8:15	7:15	6:15

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

WEAF (491.5m-610kc) Atwater Kent program,
Frances Alda, see chain above,
9:30 7:30

KOA (322.4m-930kc) First 7:30

Church, Presbyterian

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VERYBODY, including experienced radio engineers, said—it cannot be done. But we did it—produced a high grade, long distance single dial control radio to operate a loud speaker to retail for—\$25.00 and yet allow liberal discount to agents.

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This marvelous instrument is the result of five years' hard work by an organization of trained radio engineers. It is no experiment—thousands are in use-the results speak for themselves.

There Will Be a Radio in Every Home
Thousands have been waiting for just such a
radio—a real long distance, powerful instrument—
but at a price they can afford.
It is here, and live, wide-awake salesmen will
recognize their opportunity immediately—they
won't lose a single minute writing for full information.

Just as there are 100 Fords to one high-priced car, just so will there be 100 Vikings to every \$75.00 and \$100.00 radio—think what this means to men who get in on the ground floor right now.

A \$25 Radio Which Will Equal a \$75

A \$25 Radio Which Will Equal a \$75 Radio

Put a Model 599 Viking, which retails for \$25.00, alongside any radio retailing for \$75.00 and even more. Compare them for ease of tuning—only one dial to tune on the Viking—distance received, volume and tone. The results will make any man say, "I'll save that \$50.00."

Radio is today the biggest and quickest selling line—thousands are being sold—salesmen have made unheard-of profits. But here is a far greater, a far more interesting radio proposition than anyone ever dreamed of.

Agents Wanted

You Should Make \$100.00 a Week Easily

You can't help it—many will make more. Some will control a county—others will control many

counties. We have the liveliest radio selling plan of today—instruments of all prices—a radio price to fit every pocket book.

Any man who will follow our teaching cannot help but add big money to his present income and start to do it immediately. If you want more money here is your chance, but you'll have to act quick—others will jump at this chance.

Sell Radio in Your Spare Time-

Sell Radio in Your Spare Time—Evenings
You don't even have to give up your present position. The only time radio can be sold is in the evening—by demonstration. So here is a chance to add to your present income. During the past five years we have trained 4,364 men in this very profitable business.

You'll be the first one with a real low priced long distance radio—your price will startle every-body—the results will be even far more startling. Once you demonstrate you're sure of a sale. No one can think of investing \$75.00 to \$100.00 in a radio when this instrument will equal the results and your retail price is only \$25.00. Just think of the advantage you have. Sell a radio for only \$25.00, and yet make a handsome commission.

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Name
Address
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County .

 Eastern
 Central 11:30
 Mountain 9:30
 Pacific 8:30

 WBAP (475.9m-630kc) orchestra
 Sorin-White Texas Hotel
 orchestra.

12 11 10 9
WFAA (475.9m-630kc) Harry Hassall and his symphonic orchestra.
12:15 a.m., 11:15
WHB (365.6m-820kc) Flapper night program.

Regular Sunday Features Eastern Time Stations

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

KDKA Pittsburgh, Pa. (309.1m-970kc) 6:30 p. m. KDKA Little symphony orchestra; 7:30, service; 10:15, Maxwell Coffee hour of music.

PWX Havana, Cuba (399.8m-750kc) 8:30-11:30 p. m. Cuban songs and music.

WBBR New York, N. Y. (416.4m-720kc) 10 a. m. music, choral singers; 2 p. m., Watchtower string quartet, vocal, Bible lecture; 8, Watchtower violin choir, vocal selections.

WBZ Springfield, Mass. (333.1m-900kc) 10 a. m. services; 6:30 p. m. organ; 7, quartet; 7:30, program; 8, address; 9, program; 10, WJZ.

WCAE Pittsburgh, Pa. (461.3m-650kc) 4 p. m. WEAF; 6:30, orchestra; 7:15, WEAF; 9:15, WEAF.

WCAU Philadelphia, Pa. (277.6m-1080kc) 11 a. m. services, First Unitarian church; 5. recital; 5:15, Undenominational church services; 5:25, sermon, Rev. John W. Stockwell; 6:45, orchestra; 7:45, Cathay Garden orchestra; 8:30, Bonwit Teller Ensemble; 10, Al Zemsay's orchestra.

WCWS Bridgeport, Conn. (285.5m-1050kc) 10:50 a. m. service; 2 p. m. Sunday afternoon concert.

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

WEAF New York, N. Y. (491.5m-610kc) 6 p. m. orchestral concert; 7:20, musical program from the Capitol theater. WEEI, KSD, WRC, WWJ, WAR, WCAE, WT, WGR, WY, 9:15, Afwater-Kent radio hour. WEEL, WGR, WRC, WWJ, WSAI, WGN, WCO, WFI; 10:15, Shakespeare.

WEEI Boston, Mass. (348.6m-860kc) 10:50 a. m. Old South church; 2 p. m., program; 4. WEAF; 7:20, WEAF; 10:15, B. F. Keith's theater. WGBS New York, N. Y. (315.6m-950kc) 4 p. m. Evensong and devotions, Church of the Transfiguration. WGR Buffalo, N. Y. (319m-940kc) 10:45 a. m. service; 7:45, Central Presbyterian church; 9:15-10:15, WEAF; 10:15, WFAF; WGY Schenectady, N. Y. (379.5m-790kc) 3 p. m., musicale; 4:30, organ recital, Elmer A. Tidmarsh; 7:30, service; 9, WIZ; 10:15, WIZ.

WHN New York, N. Y. (361.2m-830kc) 6:30 p. m. Libby's Hotel orchestra; 11:30, The Playground. WIP Philadelphia, Pa. (508.2m-590kc) 10 a. m. First Baptist church; 10 p. m. special song service, First Baptist church, 110 p. m. special song service, First Baptist church, 10 p. m. special song service, First Baptist church, 10; 15, MyZ.

WHZ, WWC, WGY & KDKA will also broadcast, WGY will also broadcast; Godfrey Ludlow, voilnist; 10:15, MyZ. WRC, WGY & KDKA will also broadcast wKRC Clincinnati, Ohio (325.9m-920kc) 6:45 p. m. Walnut Hills Christian church; 10, classical program; 11:15, Louisville Loons; 12, Marie Turner; 12:15, Louisville Loons; 12, Marie Turner;

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Space wound; basket weave; cylindrical; highest practical air dielectric. Proved to give the best results in sharpness of tuning, increase in volume and improvement in quality. Authoritative laboratory tests and practical experience of manufacturers and amateurs shows that this type of coil excels in every important characteristic.

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30 cents each

WLW Cincinnati, Ohio (422.3m-710kc) 11 a. m. serv-

New York, N. Y. (340,7m-880kc) 6 p. m. Romer's Homestra; 10, Monte Carlo orchestra; 10, Monte Carlo or WOO Philadelphia, Pa. (508.2m-590kc) 2:30 p. m. Sunday School musical exercises; 6, organ recital,

WOO Philadelphia, Pa. (508.2m-s90kc) 2:30 p. m. Sunday School musical exercises; 6, organ recital, Clarence K. Bawden, WPG Atlantic City, N. J. (299.8m-1000kc) 3:15 p. m. organ recital, Arthur Brook; 4:15, community vocal and instrumental recital; 9:15, concert orchestra; 10. Sunday evening concert.
WRC Washington, D. C. (468.5m-640kc) 11 a. m. service; 4 p. m. chapel; 7:20, WEAF; 9:15, WEAF; 10:15, WIZ.
WSAI Cincinnati, Ohio (325.9m-920kc) 11 a. m. service; 4-5:30 p. m. WEAF; 7:45-10:15, WEAF, WTAG Worcester, Mass. (545.1m-550kc) 7:20 p. m. WEAF; 9:15, WEAF, WTAG Cleveland, Ohio (389.4m-770kc) 11 a. m. service; 3 p. m. musicale; 6, Hollenden hotel orchestra; 7, Stilman theater orchestra; 8, services; 9:15, WEAF; 10:15, Austin Wylle's Vocalion Recording orchestra.

orchestra.

WWJ Detroit, Mich. (352.7m-820kc) 10 a. m/ service;

2 p. m. Detroit News orchestra; 4, vesper service;

7:20, WEAF; 9:15, WEAF.

Central Time Stations

Central Time Stations
CKY Winnipeg. Can. (384.4m-780kc) 11 a. m. Wesley church; 7-8:30 p. m. First English Lutheran church; 9-10. Royal Alexandre hotel.
KFAB Lincoln, Neb. (340.7m-880kc) 9-10:30 p. m. Sunday evening musicale.
KFNF Shenandoah, Iowa (461.3m-650kc) 10:45 a. m. services; 2:30 p. m. Seed House song service; 3. headliner; 6:30, Golden Ralle Circle; 7:30, services.
KLDS Independence, Mo. (440.8m-680kc) 8:30 a. m. Bible study; 11, Stone church; 3 p. m. Radio church; 6:30, vespers; 9:15, studio service.
KMA Shenandoah, Iowa (461.3m-650kc) 4-5 p. m. sacred program.

Koll Council Bluffs, Iowa (305.9m-980kc) 11 a. m. First Congregational church; 7, children's hour; 7:30, Dean Nordin and his orchestra; 11, Ambassadors.

KPRC Houston, Texas (299.8m-1000kc) 7:30 p. m. church service; 9:30, evening concert; 11, Texan theater pipe organ. KSO Clarinda, Iowa (405.2m-740kc) 11 a. m. M. E.

church,
KTHS Hot Springs National Park, Ark. (374.8m800kc) 11 a. m.-1.2:15 p. m., service; 9-9:45, Meyer
Davis ensemble, classic hour concert; 9:45-1.0;30,
Lawson Reid, organist; 10:30-11:30, Arkansas Traveler Radio Train.
KVOO Bristow, Okla. (374.8m-800kc) 1-2 p. m. Walter
Schoggan, Doris Kintner; 5-6, Gospel hour; 6-7,
Sophia Osina, pianist; 7-9, services; 12-1, Melody
Boys.

Boys.

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

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

seminary; 9:30-11, Sorin-White Texas hotel orchestra,
WBBM Chicago, III. (226m-1330kc) 8 p. ni. CoonSaunders Night Hawks; 8:15, travel talk; 9-12,
froi: 12, Nutty club; Coon-Saunders orchestra.
WCCO Minneapolis-St. Paul, Minn., (416.4m-720kc)
10:50 a. m. services; 4:10 p. m. House of Hope
Presbyterian church; 6:20, Second Church of Christ,
Scientist; 8:15, WEAF; 9:15, musical program,
Chippewa Indians; 10:30, St. Paul Municipal organ
recital, Hugo Philler Goodwin.
WDAF Kansas City, Mo. (365.6m-820kc) 3-4 p. m.
Star's orchestra; 4-4:45, vespers.
WEBH Chicago, III. (370.2m-810kc) 5 p. m. Seventh
Church of Christ Scientist; 5-6, twilight musicale;
7-9, artists' program.
WEMC Berrien Springs, Mich. (315.6m-950kc) 11 a. m.
studic sacred services; 8:15 p. m. chapel.
WENR Chicago, III. (265.3m-1130kc) 2-3 p. m. chapel

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hour of music; 3-4, classical program; 9:30-12, All-WFAA Dallas, Texas (475.9m-630kc) 6-7 p. m. Bible class; 7:30-8:30, services; 8:30-9:30, artists; 11-12, Evansville, Ind. (236.1m-1270kc) 7:30 p. m.

Services WGN Chicago, III. (302.8m-990kc) 6:45-7 p. m. Black-stone string quintet, solo artists; 7, The Million Sing; 7:20, Old Fashioned Almanack; 7:30, Drake concert ensemble; Correll and Gosden; 8, Auld Sandy; 8:15, WEAF; 9:15, Our Music Room; 10, Sam 'n Henry; 10:10, Armand Buisseret, violinist; 10:20, Bible reading; 10:30-11, Coon-Sanders or-chestra

chestra.

WHAD Milwaukee, Wis. (275.1m-1090kc) 3:15 p. m.

Turnverein concert.

WHAS Louisville, Ky. (399.8m-750kc) 10 a. m. services; 4:30-5:30 p. m. choral evensong.

with Scuttering Ry, (93-5am-ode) to a m, services; 4:30-5:30 p, m, choral evensong.

WHB Kansas City, Mo. (365.6m-820kc) 9:40 a, m, Linwood Blvd, Christian church; 11:10-12:30, Independence Blvd, Christian church; 7.7:45, Dr. Burris A, Jenkins; 8-9, Westport Methodist church; 11:15-1, Morrill Moore, organist; Don Anchors, poet.

WHO Des Moines, Iowa (528m-570kc) 11 a. m. service; 5-6 p. m. Bankers Life Little symphony; 7:30-9, orchestra; 11-12, nuisical program.

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

Paul Rader, WJAZ Chicago, III. (329.5m-910kc) 4:30-9 p. m. Sun-WJAZ Chicago, III. (323.8m-910kc) 4:30-9 p. m. Stinday evening concert.

WJJD Moosehgart, III. (370.2m-810kc) 7:45-8:45 a. m. Catholic services; 9:30-10:30, Protestant services; 1-2 p. m. Howard Peterson, organist; 2-2:30, Bible class; 2:30, Sacred song service; 3-4, popular concert; 4-5, Palmer House Sunday symphony orchestra.

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

Tommy Coates, baritone; Blackstone string quintet.

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

WMBB Chicago, III. (249.9m-1200kc) 3-6 p. m. Sunday afternoon concert; 7:40, church service; 9-11,

Trianon orchestra, artists.

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

WOAW Omaha, Nebr. (526m-570kc) 9 a. m. Omaha
Gospel tabernacle; 1:30 p. m. Father Flanagan's
Boys' home period; 9, chapel service.

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

WORD Chicago, Ill. (275.1m-1090kc) 10 a. m. I. B. S. A. service; 2:30 p. m. Chicago Rapid Transit company program; 3:30, Bible lecture; 7, Webste hotel duo orchestra; 9, I. B. S. A. choral singers. NOJ Chicago, III. (447.5m-670kc) 10:45 a. m.-12:45 p. m. People's church; 5-6, musical program; 10:11, popular program; Rainbo Gardens orchestra; Jack Klein, Adelaide Kerkoff, Harry Geise.

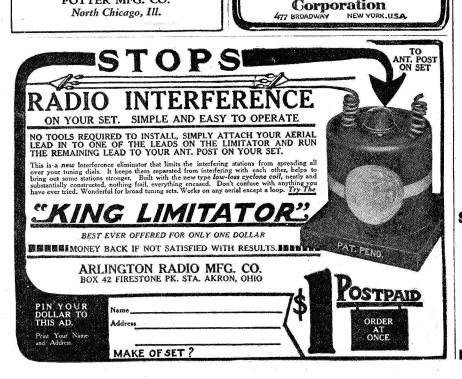
WSB Atlanta, Ga. (428.3m-700kc) 5 p. m. sacred concert; 8, services.

cert; 8, services. WSBC Chicago, Ill. (288.3m-1040kc) 5-7 p. m. Sunday concert; 9-10, concert; 10-1, New Jeffrey Tayeru wskc Bay City, Mich. (260.7m-1150kc) 11-12 noon

WSM Nashville, Tenn. (282.8m-1060kc) 10:30 a. m. service. Mountain Time Stations
KOA Denver, Colo. (322.4m-930kc) 10:30 a. m. church
service; 7:45 p. m. church service.



General Instrument



Pacific Time Stations

I Los Angeles, Calif. (467m-642kc) 7-8 p. m. Jack Smith's dance orchestra; 8-9, Aeolian organ recital; 1-10, Bob Bottger's Venetians; 10-11, Packard Six lance orchestra dance orchestra. **KFWB Hollywood**, Calif. (252m-1090kc) 9-11 p. m. Warner Brothers Sunday night movie frolic. KGO Oakland, Calif. (361.2m-830kc) 11 a.m. service; 2:45 p.m. symphony; 6:30-7:30, little symphony; 7:35, service; 9-10, symphony.

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

7:30-9 p. m. church; 9-10, Symphony orenestra.

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

KMTR Hollywood, Calif. (370.2m-810kc) 6:30-7 p. m. Leila Castberg's half hour; 7-8, Cafe Lafayette string quartet; 8-10, classical program.

string quartet; 8-10, classical program.

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

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

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

Sunday, silent night for: CKAC, CKNC, CNRA, CNRC, CNRE, CNRM, CNRO, CNRR, CNRT, CNRV, CNRW, KFDY, KFXF, KLX, KMA, KOB, KSWC, KWWG, WAHG, WCFL, WDAF, WEBJ, WFI, WGBF, WGHB, WGHP, WHAD, WHAS, WJJD, WJR, WLIT, WLWL, WMAQ, WMC, WNYC, WOI, WOO, WOOD, WOR, WSMB, WRVA, WSWS, WTIC.

MONDAY, DECEMBER 6 Headliners

Central Mountain Pacific 7 p. m. 6 WHN (361,2m-830kc) Movie club.

WHAZ (379.5m-790kc) Calvin Dater, 88-year-old singer.

8 FUO (545.1m-550kc) "The Fear of the Lord Is the Beginning of Wisdom." Musicale. KOIL (305.9m-980kc) Inner Circle candy night, WHAZ (379.5m-790kc) Troy Junior symphony orchestra.

WSM (282m-1060kc) Vocal recital.

9:10 8:10 7:10 6:10

WRVA (256m-1170kc) Acca Temple Shrine band.

9:30 7:30 6:30

KFAB (340.7m-870kc) Cowbell boys, violin and guitar. Orchestra.

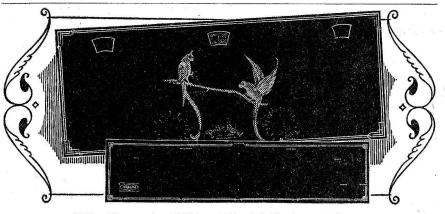
KFRC (296.9m-1010kc) Mabel Shearer, pianist.

WBAP (475.9m-630kc) 9:30, "The Song Shop," a novelty request program.

10 8 7

KOIL (305.9m-980kc) "The Strange Transient Woman," play.

KPRC (296.9m-1010kc) El Tex temple band, D. O. K. K.



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Eastern
10 p. m,
8
KTHS (374.8m-800kc) Southern classics.
WEAF (491.5m-610kc) "Lakme," Grand opera,
WJAR, WCCO, WCAE, WCSH, KSD, WDAF,
WSAI, WLIT,
WLW (422.3m-710kc) Gold Button Melody Weavers. 9:15 8:15 7:15

KOA (322,4m-930kc) Minstrel show. 10:30 9:30 8:30

KTHS (374,8m-800kc) Lawson Reid, organist. dance orchestra. 9:45 8:45 7:45

MONDAY, DECEMBER 13 Headliners

Eastern Central Mountain Pacific 6:30 5:30 4:30
WFAA (475.9m-630kc) Jimmy Crow and his Tuners orchestra.
8:30 6:30 5:30 6:30 5:30
MJZ (454.3m-660kc) Willys-Overland program.
9 7 6
KFUO (545.1m-550kc) "Rejoice, O Young Man, in Thy Youth." Musicale.
WSM (282m-1060kc) American Legion, Nashville Post No. 5, program.
9:30 8:30 7:30 6:30
KFAB (340.7m-880kc) Queen Incubator half hour.
Zenith quartet.
KOA (485.m. 960kc) Concent State Caller 6 of the KFAB (340.7m-880kc) Queen incupator law Zenith quartet.
KOA (348.6m-850kc) Concert, State College Salon orchestra.
WBAP (475.9m-630kc) Northern Texas Traction company employees' program, 10 7 KOIL (305.9m-980kc) Dance program, 11 10 8 Northern Texas Traction Pinkey Douglass and Castle | ROIL (305.9m-980kc) | Dance program. | 11 | 10 | WSM (282m-1060kc) | Pinkey Douglass and Castle Heights Military orchestra. | 11:30 | 10:30 | 9:30 | 8:30 | WBAP (475.9m-630kc) | Santa | Fe band. | 1 a. m. | 12 | WBAP (475.9m-630kc) | Vess | Taylor, violinist.

Educational Features Monday

Eastern 2:30 p. m. 1:30 12:30 12:30 13:30 13:30 12:30 13:30

 $\begin{array}{c} 660 \\ \mathrm{WGN} \\ \mathrm{G}_{130} \\ \mathrm{G}_{130} \\ \mathrm{G}_{130} \\ \mathrm{WNYC} \\ \mathrm{K}_{1} \\ \mathrm{G}_{130} \\ \mathrm{Elementary} \\ \mathrm{German} \\ \mathrm{German} \\ \mathrm{lessons}, \end{array}$

Regular Monday Features Eastern Time Stations

Eastern Time Stations
CFCA Toronto, Can. (356,9m-840kc) 7:15 p. m. organ
recital, Clifford McCormick,
KDKA Pittsburgh, Pa. (369,1m-970kc) 8 p. m. feature,
WAAM Newark, N. J. (263m-1140kc) 8 p. m. The
Two of Us; 9. Overland Whippets; Four Towers
orchestra; 11, Frank Dailey and his Meadowbrooks,
WAHG Richmond Hill, N. Y. (315,6m-850kc) 7:30
p. m. Boy Scouts program; 7:45, Walter Iooss,
novelty pianist; 8, studio program; 9, Synchrophase
hour; 10:02, studio program; 12, Midnight variety
program.

program.

WBAL Baltimore, Md. (246m-1220kc) 6:30-7:30 p. m.
dinner orchestra; 7:30-8, organ recital, Frederick

Yeaver; 8-9, musical program; 9:10-10, ensemble;
10-11, concert, Roberta Glanville, sopranc; Helen

Broemer, cellist; George Bolek, pianist; 11-12, dance

orchestra, WBZ Springfield, Mass. (333.1m-900kc) 7:05 p. m. organ; 7:30, talk; 8, orchestra; 8:30, trio; 9, band; WBZ Springfield, Mass. (335.1m-500MC) 7.05 p. m. organ; 7:30, talk; 8, orchestra; 8:30, trio; 9, band; 9:30, feature.
WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. William Penn hotel orchestra; 7:45, talks; 8:15, dance music; 9:11, WEAF; 11, Zez Confrey's orchestra.
WCAU Philadelphia, Pa. (277.6m-1080kc) 7:30 p. m. Snellenburg recita; 8, Skiler's Skylarks; 8:25, recital; 8:45, Merry Minstrels; 9:30, trio; music; 10:30, Parodians' dance orchestra.
WCWS Bridgeport, Conn. (285.6m-1050kc) 7 p. m. kiddies story; 8, studio program; 9, theater presentation.
WCX Detroit, Mich. (516.9m-580kc) 6-7 p. m. dinner program, Goldkette ensemble; 8, studio program, WDBO Winter Park, Fla. (239.6m-1250kc) 8:55 p. m. citrus talk; 9, musicale; 10, sports.
WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner music (regular); 7, music; 7:15, Columbia University talk; 7:30, headliner; 8, headliner; 8:10, Old Timers concert, talk, WLIT; 9, A. & P. Gypsies, WEEI, WJAR, WRC, WCSH, WCAE,

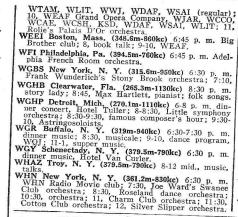
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WIP Philadelphia, Pa. (508.2m-590kc) 6:05 p. m. Benjamin Franklin concert orchestra; 7, Uncle Wip's bedtime stories; dancing lessons. VJAX Jacksonville, Fla. (336.9m-890kc) 7-7:30 p. m. Hotel Carling dinner music; 8-9, popular program; 9-10, classical music; 11-12, Arcade theats. WJR Detroit, Mich. (516.9m-580kc) 7 p. m. Jean Goldkette's Petite symphony orchestra, soloists; 7:15, Caspar Lingeman entertainers; 7:45, Good Will Oakland and Chief Pontiac; 9, studio program. WJZ New York, N. Y. (454.3m-660kc) 7 p. m.

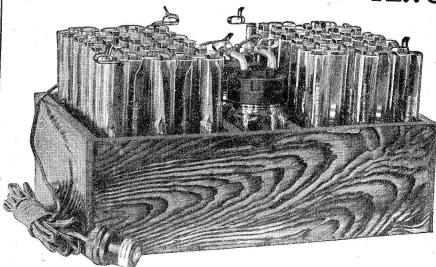
7:15, Caspar Lingeman entertainers; 7:45, Good Will Oakland and Chief Pontiac; 9, Studio program.

WIZ New York, N. Y. (454.3m.-660kc) 7 p. m. Hotel Commodore concert orchestra; 7:55, John B. Kennedy; 8, Markel's dance orchestra; 8:30, Willys Overland; 9:30, Thayer West Point Cavaliers; 10:30, Waldorf-Astoria grill dance orchestra; 8:40, Willys Overland; 9:30, Thayer West Point Cavaliers; WKRC Cincinnati, Ohio (325.9m.-920kc) 6:15 p. m. 8:15, dance; 8:45, Dave Brinkmoeller, pianist; 9, Bently Post American Legion; 12, popular program. 8:15, dance; 8:45, Dave Brinkmoeller, pianist; 9, WLIT Philadelphia, Pa. (394.5m.-760kc) 7:55 p. m. WLW Cincinnati O. (422.3m.-710kc) 7 p. m. Robert Visconti's orchestra; 7:40, Visconti's orchestra; 8, program; 9, Steen Maiden.

WLWL New York, N. Y. (288.3m-1040kc) 8 p. m. Ensemble; 8:30, McEvoy concert; 9, question box; 10, music.

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

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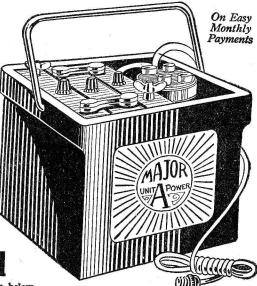
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WMCA New York, N. Y. (340.7m-880kc) 6:30 p. m. Ernie Golden and his Hotel McAlpin orchestra; 7:30, Grel-Meister's Hungarian orchestra; 8, Chris-tian Science services; 9:15, Headliner; 12, McAlpin

tian Science services; 9:15, Headliner; 12, McAlpin entertainers.

WNYC New York, N. Y. (526m-570kc) 6 p. m. Piano selections; 6:20, piano selections, 6:20, piano selections, 12:20 p. m. Tea Room orchestra; 4:45 organ recital; 7:30, Sylvania dance orchestra; 8, organ recital, Mary E. Vogt; 8:30, address, Rev. Forest E. Dager; 9, concert; 10:30, Sam Brown's dance orchestra.

WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Jacques Jacobs' Hotel Shelton ensemble; 6:45, Bill Wathey in sports; 7, Jacques Jacobs' Hotel Shelton ensemble; 9, Klein's Serenading Shoemakers; 11, Jascha Guerwich's dance orchestra.

WPG Atlantic City, N. J. (299.8m-1000kc) 7:15 p. m. Arthur Brook, organist; 7:30, Hotel Morton dinner music; 8:305, Hotel Shelburne dinner music; 8:305, studio program; 9, Hotel Traymore concert orchestra; 10, quartet; 10:30, President hotel dance orchestra; 11, Silver Silpper Supper club dance orchestra.

WRC Washington, D. C. (468.5m-640kc) 7 p. m. din-

orchestra.

WRC Washington, D. C. (468.5m-640kc) 7 p. m. dinger russic 8 Emerson hour: 9. WEAF; 10, WEAF;

NESSINISCOTT, 19. (490.5m-940KC) / p. m. dinner music; 8. Emerson hour; 9. WEAF; 10, WEAF; 11-12. Loew's Palace theater.

WRVA Richmond, Va. (256.5m-1170kc) 8:15. Evening program; 9, "Virginia Folk Lore." Dr. Douglas S. Freeman; 9:30, music; 10:30, Hotel Richmond Winter Garden orchestra.

WSAI Cincinnati, Ohio (325.9m-920kc) 10 p. m. WEAF. WTAG Worcester, Mass. (545.1m-550kc) 7:45 p. m.

program to be announced S8.4m-770kc) 6 p. m. Guy Lombardo's Royal Canadians; 7, Allen Theater orchestra; 8, orchestra; 9, WEAF; 10, Willard concert orchestra; 11, Emerson Gill and Bamboo Garden

orchestra.
WTIC Hartford, Conn. (475.9m-630kc) 6 p. m. Mother Goose; 6:30, Hotel Bond trio; 7, program; 11:05, Goose; 6:30, Hotel Bond trio; 7, program; 11:05 Walter Dawley, organist. WWJ Detroit, Mich. (352,7m-850kc) 6 p. m. Dinner concert; 8, musical program; 9, WEAF.

Central Time Stations

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

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

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

KMA Shenandoah, Iowa (461.3m-650kc) 9-11 p. m. Farnham trio.

KMOX St. Louis, Mo. (280.2m-1070kc) 6 p. m. Organ; 6:30, quartet; 7, quartet; 8, quartet; 9, soloists; 10:15, orchestra; 12-1, orchestra; ROII Council Bluffs, Iowa (305.9m-980kc) 7:30 p. m. Hotel Lassen program, Don Hill and his ukulele; 7:30, musicale; 8, program; 9, play; 10, Crosley hour; 11, Ambassadors.

KPRC Houston, Texas (299.8m-1000kc) 7:30 p. m. Houstonians; 8:30, concert; 9, studio concert.

MUSIC. KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9-11:20 p. m. musicale.

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KVOO Bristow, Okla. (374.8m-800kc) 6-7 p. m. Warner trio: 7-8. quartette; 8-9, Luckey's orchestra;

WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 6:15 p. m. St. Paul hotel orchestra; 8, U. of Minn.; 9, WEAF; 10:10, dance program; 11:30, organ, Arthur Hays.
WCOA Pensacola, Fla. (252m-1190kc) 6:30 p. m. WCOA happiness period.
WDAF Kansas City, Mo. (365.6m-820kc) 6-7 p. m. School of the air; 8-9, WEAF; 9-10, WEAF; 11:45-1 Nighthawk frolic.
WEMC Berrien Springs, Mich. (315.6m-950kc) 8:15 p. m. Lighthouse Music Makers.
WFAA Dallas, Texas (475.9m-630kc) 6:30-7:30 orchestra; 8:30-9:30, Sears-Roebuck Agricultural Foundation program.
WGBF Evansville, Ind. (236m-1270kc) 8 p. m. musicale; 9, orchestra.
WHAD Milwaukee, Wis. (275.1m-1090kc) 6:10 p. m. organ recital, Arthur Richetr; 8:30, headliner; 9:15, old favorite hour, string trio; 9:45, popular program, Sally and her Gang.
WHB Kansas City, Mo. (365.6m-820kc) 7 p. m. Sweeney Radio orchestra.
WHO Des Moines, Iowa (526m-570kc) 7:30-8 p. m. music; 8-9, dance orchestra; 11-12, dance program.
WLS Chicago, Ill. (344.6m-870kc) 5:40 p. m. Al Melgard, organist; 6, supperbell program; 6:40, Maurie Sherman's College Inn orchestra.
WMC Memphis, Tenn. (499,7m-600kc) 8:30 p. m. Britling Melody Makers.
WOAW Omaha, Nebr. (526m-570kc) 6 p. m. Joe Bauer and his Highway gardens orchestra; 6:50, specialty; 11, air mail hour; 12, woodpile.
WOS Jefferson City, Mo. (440.9m-680kc) 7:30 p. m. Missouri music appreciation contest; 8, program.
WSB Atlanta, Ga. (428.3m-700kc) 8 p. m. Sears Roebuck program; 10:45, program.
WSC Bay City, Mich. (260.7m-1150kc) 9-11 p. m. dance music.



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ner trio; 7-8, quariette; 8-9, Luckey's orchestra; 12, Earl Thurston, organist, WBAP Fort Worth, Texas (475.9c-630kc) 7:30-8:30 p.m. Classical concert; 9:30-11, old time music; 11-12, midnight musicale. WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 6:15 p. m. St. Paul hotel orchestra; 8, U. of Minn.; 9, WEAF; 10:10, dance program; 11:30, organ, Arthur Hays.

dance music.

WSM Nashville, Tenn. (282.8m-1060kc) 6:45 p. m.
Andrew Jackson hotel orchestra; 8, concert; 10,

Mountain Time Stations

Mountain Time Stations
KOA Denver, Colo. (322.4m-930kc) 8 p. m. Scheuerman's Colorado orchestra; 8:15, studio program.
KOB State College, N. M. (348.6m-860kc), 7:30 p. m.
State College orchestra;
Pacific Time Stations
KFI Los Angeles, Calif. (467m-640kc) 7-8 p. m. Owen
Fallon's Californians; 8-9, popular program; 9-10,
program, Walter M. Murphy Motors Co.; KPO;
10-11, program by Meiklejohn Brothers.



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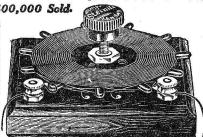
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KFWB Hollywood, Calif. (252m-1190kc) 6-7 p. m. Pontiac dinner hour; 7:50, news; 9-10, program; Pontiac dinner hour; 7:50, news; 9-10, program; 10-11, Warner Br, frolic.

KGO Oakland, Caiff. (361.2m-830kc) 6-6:55 p. m. Stanislas Bem's Little symphony; 8-9, Gondoliers; 9, "Chats about New Books," Joseph Henry Jack-

Son.
KGW Portland, Ore. (491.5m-610kc) 7;45-8 p. m.
talk; 8-9, vaudeville; 10-12, dance music.
KLX Oakland, Calif. (508.2m-590kc) 8-9 p. m. Studio
program, Piggly Wiggly company; 9-10, Lake Merritt Ducks

KMTR Hollywood, Calif. (370.2m-810kc) 7:30-8:30 p. m. program, Safeway Stores; 8:30-9:30. KMTR concert orchestra; 9:30-10, Y. M. C. A. program; 10-12, Palais de Danse.

KNX Hollywood, Calif. (336.9m-890kc) 7:30 p. m. playlet; 8, program; 9, feature; 10, Alexandria

playlet; 8, program; 9, feature; 10, Alexandria hotel orchestra; 11, frolic. KPO San Francisco, Calif. (428.3m-700kc) 6:30-7 p. m. States Restaurant orchestra; 7-7:30, Rudy Seiger's Fairmont hotel concert orchestra; 8-9, music; 9-10, KFI and KPO broadcast; 10-11, Mandarin cafe orchestra.

orchestra. WSC Pullman, Wash. (348.6m-860kc) 7:30 p. m. Students concert.

Monday, silent night for: CFCA, KFDM, KFDY, KHJ, KLDS, KFSN, KYW, PWX, WBBM, WCBD, WCFL, WEBH, WEBJ, WENR, WFI, WBF, WGBS, WGES, WGN, WGY, WHAS, WHT, WIBO, WIP, WJAZ, WJJD, WLIB, WLS, WMAQ, WMB, WOAI, WOC, WOK, WORD, WQJ, WSAI, WSWS.

TUESDAY, DECEMBER 7 Headliners

Eastern Central Mountain 4:10 3:10
WLW (422.3m-710kc) Santa Claus, 6:25 4:25 5:25 4:25 3:25
WTIC (475.9m-630kc) Ruth Patterson Stoddard, 77 5 6:25 5 4

WEAF (491.5m-610kc) Pauline Haggard, piano-

Eastern Central Mountain Pacific 7:30 p. m. 6:30 bible story, "The Birth of John the Baptist."
WEAF (491.5m-610kc) Great moments in history. WTIC (475.9m-630kc) Robert Young, baritone; Mildred Warner, contralto. 8 7 6 5
WTIC (475.9m-630kc) McCoy's Music Masters, 8:30 Feb. 10:30 6:30 5:30
KPRC (296.9m-1010kc) Canadian Red Jackets of Kensington Hall. WGHP (270m-1110kc) Dodge Brothers concert band.
WHAS (399.9m-750kc) Zoeller's Melodists. 8 7 6
KIL (305.9m-980kc) Mrs. E. Callahan, soprano. KUOA (299.8m-1000kc) Pupils of H. D. Tovey. WMAQ (447.5m-670kc) Woman's symphony orchestra.
WSM (282m-1060kc) Fisk University student gartett. 9 8 7

chestra.
11:15 10:15 9:15 8:15
KTHS (374.8m-800kc) Mona Motor Oil twins,
11:30 01:30 9:30
WEAF (491.5m-610kc) Hofbrau orchestra.

TUESDAY, DECEMBER 14 Headliners

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Eastern Central Mountain 9:00 p. m. 8:00 7:00 7:00 6:00 KUOA (299,8m-1000kc) University of Arkansas glee club. WHAS (399.8m-750kc) Eddie Rosson and his orwith (393-301-730kc) Eddle Rosson and his or-chestra.
WSM (282m-1060kc) Golden Echo quartet, spir-ituals. ituals.

10

WBAP (475.9m-630kc) Ft. Worth club orchestra.

WFAA (475.9m-630kc) Sacred harp singers.

WGY (379.5m-790kc) Cook's travelogue, "A Day in Paris.

10:30

WEAF (491.5m-610kc) Hofbrau orchestra.

KOA (322.4m-930kc) Auction bridge instruction.

11:30

WBAP (375.9m-630kc) Excel ensemble.

WEAF (491.5m-610kc) Ben Bernie and his orchestra.

Educational Features Tuesday

Eastern Central Mountain Pacific
11:50 p. m. 12:50
WMAQ (447.5m-670kc) "The Voice in Speech."
5:35 4:35
WMAQ (447.5m-670kc) Book review.
6: 5
4
3 Com.

WGY (379.5m-790kc) Dec. 7, "The Constellations and How to Find Them," Prof. Grover; Dec. 14, "The Moon, Our Nearest Neighbor." 9:10

WMAQ (447.5m-670kc) University of Chicago, 10

WMAQ (447.5m-670kc) Glimpses into foreign service. Service
W1Z (454.3m-660kc) WGY (379.5m-790kc) Cook's
tours. Dec. 7, "A Day in Berlin"; Dec. 14,
"A Day in Paris."
10:30
8:30
7:30
KFMX (336.9m-890kc) Dec. 7, "Medical Progress
Since Pasteur"; Dec. 14, "Pathogenic Bacteria." Regular Tuesday Features

Eastern Time Stations
KDKA Pittsburgh, Pa. (309.1m-970kc) 8 p. m sacred song concert; 8:45, genus from American literature; 9, musicale; 11:35, Grand theater.
PWX Havana, Cuba (399.8m-750kc) 8:30-11:30 p. m.

PWX Havana, Cuba (339.5m-/300c) 0.50-11.50 p. m. program.
WAAM Newark, N. J. (263m-1140kc) 7:15 p. m. Gene and Jeff, Snappiness Twins; 9, Y. M. C. A. hour; 10, Richmond Ramblers; 11, Frank Dailey and his Meadowbrooks.
WBAL Baltimore, Md. (246m-1220kc) 6:30-7:30 p. m. dinner orchestra; 7:30-8, quartet; 8-9, tric; 9-9:30, Jubilee singers; 9:30-10, violin and piano recital; Michael Weiner, violinist; LeRoy Evans, pianis; 10-11, Municipal band of Baltimore; 11-12, dance orchestra. WBBR New York, N. Y. (416.4m-720kc) 8 p. m. program.

WBZ Springfield, Mass. (333.Im-900kc) 7:05 p. m. organ; 7:30, features; 10:03, orchestra
WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. dinner concert; 7:45, talks; 8, WEAF, 8:30, feature; 9, WEAF; 10, bridge; 10:30, WEAF, 8:30, restaure; 9, WCAU Philadelphia, Pa. (277.6m-1080kc) 7:30 p. m. Snellenburg instrumental trio; 8:15, Gurnse Buttermaker; 8:30, recital; 9, Monthard Follies; 9:30, Robert Fraser, blind gospel singer; 10, Prof. Doolittle; 10:05, Chapman Engart Syncopators; 10:15, tenor; 10:30, Cathay dance orchestra.
WCWS Bridgeport, Conn. (285.5m-1050kc) 8 p. m. program; 11, Charles Coles and his orchestra.
WCX Detroit, Mich. (516.9m-580kc) 6-7 p. m. dinner program, Goldkette ensemble; 10, Red Apple club. WDBO Winter Park, Fla. (239.9m-1250kc) Rollins conservatory trio; 9:20, bridge; 10:30, organ; 11:30, request program.

WDBO Winter Park, Fla. (239.9m-1250kc) Rollins conservatory trio; 9:20, bridge; 10:30, organ; 11:30, request program.

WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner music; 7, headliner; 7:10, talk, Columbia University; 7:30, Fairyland; 8, The Vikings, WEEL WFI, WCAE, WWJ, WGR, WTAM, WSAI, WJAR, WTAG, WCC, WCCO, WCCO, WCSH, KSD; 8:30, J0H, Buckeye Bakers, WEAF, WTAG, WFI, WTAM, WJJ, WSAI, KSD, WCCO; 9, Eveready hour, WEAF, WEEI, WFI, WTAG, WJAR, WGR, WCAE, WTAM, WWJ, WSAI, WGN, WOC, WCCO, KSD, WRC; 10, auction bridge instruction, WEAF, WEEI, WCSH, WTAG, WJAR, WGR, WCAE, WTAM, WFI, WWJ, WSAI, WGN, WOC, WCCO, KSD; 10:30, orthestra, WFI, WWJ, WCAE, WGR, WTAM, WCSH; 11:30, orthestra, WEAC, Columbus, Ohio (233.9m-1020kc) 7:45 p. m. musicale.

musicale.
WEEI Boston, Mass. (348.6m-860kc) 7:30 p. m. intercollegiate broadcast; 7:45, musicale; 8-10:30, WEAF.



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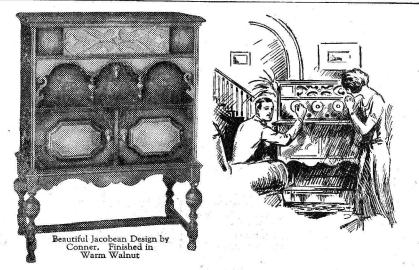
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WFI Philadelphia, Pa. (394.5m-760kc) 6:45, Adelphia dance orchestra; 8, WEAF; 8:30, WEAF; 9, WEAF; 10, Moment Musicale; 10:30, orchestra. WGBS New York, N. Y. (315.6m-950kc) 7:20 p. m. Arrowhead Inn concert orchestra; 8:10, talk; 8:30, musicale; 11, Arrowhead Inn dance orchestra. WGY Schenectady, N. Y. (379.5m-790kc) 6:30 p. m. dinner program, Ten Eyck hotel; 7:45, artist; 8, WJZ; 9, WJZ; 10, WJZ; 10:30-11:30, WMAK. WJAX Jacksonville, Fla. (336.9m-890kc) 7-7:30 p. m. Carling hotel dinner music; 8-9, popular program; 9-10, Casa de Baile.

WJR Detroit, Mich. (516.9m-580kc) 7 p. m. Jean Goldkette's Petite symphony orchestra; soloists; 8, Board of Commerce, Mt. Clemens, Mich; 8:30, Manuel Cigar girls.

WJZ New York, N. Y. (454.3m-660kc) 7 p. m. Frank Dole; 7:15, Hotel Commodore concert orchestra; 8, Champion Spark Plug hour, WCY, WCC; 9, Pennsylvania Railroad hour, WGY; 10, Cook's Southern Hemisphere Cruise, WRC, WGY; 10:45, George Olsen's Pennsylvania Grill orchestra. WKRC Cincinnati, Ohio (325.9m-920kc) 10 p. m. organ; 11, Al Kirschner, pianist; 11:30, dance program.



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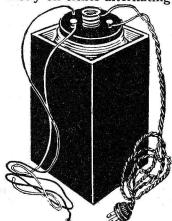
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WLW Cincinnati, Ohio (422.3m-710kc) 7:30 p. m. Castle Farm dance music; 9, Formica concert orchestra; 8:30, Gay Nineties; 9, Formica orchestra. WMAK Buffalo, N. Y. (265.5m-1130kc) 6:15 p. m. diner music; 7:30 evening program; 10:30, musicale, WGY, WHAM, WFBL; 12, Harold Rumsey, ormist

WCY, WHAM, WFBL; 12, Harold Rumsey, organist.

WMCA New York, N. Y. (340.7m-880kc) 7 p. m. Monte Carlo orchestra; 11, Ernie Golden and his Hotel McAlpin orchestra; 12, McAlpin entertainers.

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

WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Bill Wathey in sports; 6:30, Hotel Bretton Hall string quartet; 7:30, orchestra; 9:15, New Jersey Laundry Owners Association program; 11, Wadsworth's Carlton Terrace orchestra.

WPG Atlantic City, N. J. (299.8m-1000kc) 7:15 p. m. organ recital, Arthur Brook; 7:30, Hotel Morton dinner music; 8:05, Hotel Shelburne dinner music; 8:30, Hotel Chelsea concert; 9, Dual concert trio; 10:30, President hotel dance orchestra; 11, Silver Slipper Supper club dance orchestra; 11, Silver Slipper Supper club dance orchestra; 11, Silver Slipper Supper club dance orchestra; 12, Silver Slipper Supper club dance orchestra; 12, Silver Slipper Supper club dance orchestra; 14, Silver Slipper Supper club dance orchestra; 12, Silver Slipper Supper Club dance orchestra; 14, Silver Slipper Supper Club dance orchestra; 15, p. m. dinner concert; 7:45, music; 8, WEAF; 10, WIZ; 10:30-11:30, Meyer Davis' Le Paradis band. WSAI, Cincinnati, Ohio (325.9m-920kc) 7:15 p. m. orchestra; 8-11, WEAF; 11, Austin Wylie's Vocalion Recording orchestra.

WTIC Hartford, Conn. (475.9m-630kc) 6 p. m. Hotel Heublin trio; 6:30, musicale; 10:05, Club Palais Royal orchestra.

Central Time Stations

KFAB Lincoln, Nebr. (340.7m-880kc) 5:30-6:30 p. m. musicale; 8:05-10:30, University of Nebraska. KFDM Beaumont, Texas (315.6m-950kc) orchestra. KFNF Shenandoah, Ia. (461.3m-650kc) 7 p. m. pro-

gram.

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

May's Mandolin Musicians.

KMOX St. Louis, Mo. (280.2m-1070kc) 6 p. m.

dinner music; 7, program; 8, quartet; 9, 49th State

Etherlogue; 9:30, soloists; 10:15, orchestra; 12-1,

frolic Ambassadors; 8, program; 11, dance music. KPRC Houston, Tex. (299.8m-1000kc) 7:30 p. m. concert; 9, bridge. KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9:10-10:45 p. m. musicale. KVOO Bristow, Okla. (374.8m-800kc) 7-8 p. m. KVOO orchestra; 8-8:30, mixed quartet; 8:30-9, Dinah; 12, Rough and Ready.

KVOO Bristow, Okla, (374.5m-count, 7.5 g. m. archestra; 8-8:30, mixed quartet; 8:30-9, Dinah; 12, Rough and Ready,
KYW Chicago, Ill. (535.4m-560kc) 6:30 p. m. Joska
DeBabary and his orchestra; Johnny Hamp and his orchestra; 7, Family hour; 8, American Farm Bureau federation; 9-10:30, classical concert.
WBAP Fort Worth, Tex. (475.9m-630kc) 7:30-8:30 p. m. musicale; 8-8:30, Fort Worth club orchestra; 9:30-11, Excel ensemble.
WBBM Chicago, Ill. (226m-1330kc) 8 p. m. Coon-Sanders Night Hawks; 8:15-11-15, staff artists, orchestra; 11:15, Supper club.

WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 7-9:30 p. m. WEAF; 9:30, musical comedy, Garrott's Chocolate Soldiers; 10:15, Izaak Walton

league.

WCFL Chicago, III. (491.5m-610kc) 6 p. m. talks; 7,
Brevoort trio; 8, Spinning Wheel hour; 10, Alamo
orchestra; 11-12, entertainers.

WDAF Kansas City, Mo. (365.6m-820kc) 6-7 p. m.
school of the air; 11:45-1, Nighthawk frolic.
WEBH Chicago, III. (370.2m-810kc) 7 p. m. classical
hour; 9-11, Balaban and Katz Uptown theater musical hits.

WFAA Dallas, Texas (475.9m-6;30kc) 6:30-7:30 p. m. musicale; 8:30-9:30, bridge game, selections; 11-12,

orchestra.

WGBF Evansville, Ind. (236.1m-1270kc) 8 p. m. musical program; 9, classic hour.

WGN Chicago, Ill. (302.8m-990kc) 6:45-7 p. m. dinner concert, Drake concert ensemble; Blackstone string quintet; 8-9, WEAF; 9, Auction Bridge game; 9:30-10, WGN male quartet; 10, Sam 'n' Henry; 10:10, The Music Box; 10:20, musical program; 10:40-11, songs, Correll and Gosden.

WHAD Milwaukee, Wis, (275.1m-1090kc) 6:10 p. m. dinner hour, orchestra selections; 8:30, theater review.

WHAS Louisville, Ky. (399.8m-750kc) 7:30-9 p. m.

WHAS Louisville, Ky. (399.8m-750kc) 7:30-9 p. m. concert.
WHAS Louisville, Ky. (399.8m-750kc) 7-7:45 p. m. organ concert; 8-10, program.
WHO Des Moines, Ia. (526m-570kc) 7:30-8:30 p. m. 14th Cavalry band; 8:30-9, Paul Stoye, pianist; 11-12, dance program.
WHT Chicago, III. (399.8m-750kc) 6 p. m. Al Carney, organist; Bob York, Julie Juliens; 7:45 (238m-1260kc), Stuart Dawson, songs; 9:30 (399.8m-750kc), Bel Canto male quartet; 10, variety program, 12, Al and Pat.
WJJD Mooseheart, III. (370.2m-810kc) 8-9 p. m. child artists; 11-1, Palmer House Victorians.
WLIB Chicago, III. (302.8m-990kc) 7-7:10 p. m. dinner concert, Drake concert ensemble, Blackstone string quintet; 7:10, Old Fashioned Almanack and the Million Sing; 7:22, Adventures of Oney Fred Sweet; 7:30, orchestra; 7:45-8, Neighbor Daw in old time songs; 11-12, songs, Correll and Gosden; Ruth Farley, organist; Bobby Meeker's Drake hotel dance orchestra, "waltz time"; 12-1 a. m., Purple Grackle, WLS Chicago, III. (344,6m-870kc) 6 p. m. May and June, Fleming Smith; 6:40, Maurie Sherman's College Inn orchestra; 6:55, Si Spencer; 7, May and June; 7:30-7:55, Don Malin; 10:30-12, organ; Maurie Sherman's College Inn orchestra; Jack Chapman's orchestra.
WMC Memphis, Tenn. (499,7m-600kc) 8:30 p. m.

Sherman's College Inii orcuestia, Jack Chapman's orchestra.

WMC Memphis, Tenn. (499,7m-600kc) 8:30 p. m. Hotel Gayoso orchestra; 11, midnight frolic.

WOAI San Antonio, Tex. (394,5m-760kc) 8:30-9:30 p. m. Gebhardt Mexican players.

WOAW Omaha, Nebr. (526m-570kc) 6 p. m. Henry Thornton, organist; 6:30, Lilliam Madsen, popular entertainer; 6:50, Auction bridge; 9, popular and old time music.

WOC Davenport, Iowa (483.6m-620kc) 7-7:30 p. m. WEAF; 7:30-8, musicale; 8-9, WEAF; 9-9:30, WEAF; 9-9:30, Jecture

WEAF; 9:30-10:30, lecture. WOOD Grand Rapids, Mich. (241.8m-1240kc) 8 p. m

WQJ Chicago, Ill. (447.5m-670kc) 7-8 p, m, Rainbo Gardens orchestra; vocal selections; 10-2 a, m. Rainbo Gardens orchestra; frolic.
WSB Atlanta, Ga. (428.3m-700kc) 8 p, m, headliner; 10:45, concert.

Mountain Time Stations KOA Denver, Colo. (322.4m-930kc) 9 p. m. bridge.

Pacific Time Stations

KFI Los Angeles, Calif. (467m-642kc) 7-8 p. m. Howard's Quality serenaders; 8-9, grand opera program; 9-10, varied hour; 10-11, Azure Music club. KFWB Hollywood, Calif. (252m-1190kc) 6-7 p. m. Pontiac dinner hour; 8-9, news and studio program; 9-10 p. m. musicale; 10-11 p. m. Warner Brothers frolic.



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cent discount for cash with order. Send your order today—NOW!

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Makers of the Famous World Radio "A" Storage Battery
es: 6-volt, 100 Amp. \$10.50. 120 Amp. \$12-50. 140 Amp. \$18.25.

All equipped with Solid Rubber Case.

All equipped with Soun Annual Property of the new 1000-wait World Storage Battery Station State (See Storage Battery Station Station Storage Battery Station S ·×WGN×WJS×KHJ×KGO×KFAF×WJY×KG

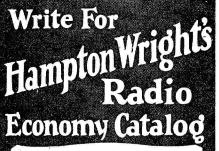
KGO Oakland, Calif. (361.2m-830kc) 6-6:55 p. m. Stanislas Bem's Little symphony; 8-9, Pilgrims;

Stanislas Bem's Little Symphony; 8-9, Filgrims; 9, surprise broadcast.

KNX Hollywood, Calif. (336.9m-890kc) 8 p. m. program; 9, musicale; 10, frolic.

KPSN Pasadena, Calif. (315.6m-950kc) 8-9 p. m. Star-News concert hour; James H. Shearer, organist.

Tuesday, silent night for: CFCA, KFH, KFKX, KFUO, KLX, KOB, KSWC, KTAB, KWWG, WAHG, WAMD, WBBR, WEMC, WGCP, WOS, WRVA, WSMB, WSUI, WTAM, WTIC.



Quality Radio Equipment at Worthwhile Prices

Hundreds of items are listed that make fine radio sets and parts within the reach of every home. Our service is unusually attractive to dealers, set builders and users of parts. Satisfaction is assured on all Hampton Wright pur-chases. Specify catalog No. C-8.

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sports, market reports from stations all over the country. Compare it with old style 3 or 4 dial sets costing more, then if not convinced that Westingale gives you the greatest Radio satisfaction and the best value for your money, you don't have to keep it.

NOW! Westingale offers the last word in Radio. Either 1 or 2-Dial Control — easiest to tune and years ahead in powerful reception and tone. Newest period type cabinets, two-tone walnut finish. The front panel embossed in dull gold with artistic Spanish Galleon design. Unbeatable for performance, appearance or price.

2-Dial, 5 tubes \$4700 1-Dial, 5 tubes \$5700

Where else can you get so much for the money on 30 days trial? Why pay more? Why take chances? Why not have the NEWEST Radio when you can try them at our risk. Before you buy get our Free Catalog and 30 Day Trial Offer.

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Department 131
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New ONE You can put a new 1927 Westingale Radio in your home Dial Radio and use it to your heart's content on 30 Days' Trial. Listen to music, concerts, news,

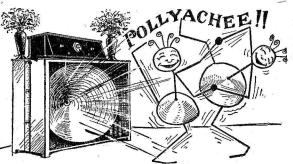
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WORLD'S FINEST LOUD SPEAKER

Genuine

3 FOOT

CONE KIT ONLY



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

price.

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

Kit includes famous "ENSCO" cone unit, the only direct-drive, distortionless unit for large cones; Alhambra Fonotex for big cone, with brass apex, two Sepia Prints showing cabinet or simple stand construction. All necessary instructions.

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

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Engineers' Service Co. 25 Church St. (Desk D) New York City **Battery Eliminator**

Will Operate Any Set From Your Light Socket

Buy Direct Save 60%

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PRICE

No Hum

50-60 CYCLE AC-OUTPUT 200 VOLTS

MAIL YOUR ORDER TODAY and we will ship you a Super "B" eliminator, guaranteed to operate any set without hum and give efficient service and loud, clear reception. Our research of over 3 years makes this possible.

GUARANTEE

EVERY Super "B" is guaranteed to give constant service. Give it five days' trial and be convinced that it is the best "B" power supply to be had. If you are not satisfied after the trial period return it at our expense and your money will be refunded. Mail your order today, enclosing full amount, \$18.90 or half this amount and pay the balance on delivery.

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WE only can

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price, as we sell

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the jobbers and

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dealers profit.

offer you the Super"B"elim-



Out of CHAOS in the AIR Make Music in your EAR

No more scrambled reception! No more fuming while you try to tune in one good program from the swarm of songs, tunes, stories, speeches and reports that dozens of stations are throwing on the air at the same time. Get the program you want, strong and clear, with

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Can be hung anywhere. Don't risk your life erecting an outside aerial on already crowded roofs, when you can hang an Effarsee Antennae in your attic, cellar, spare-room or a closet—under carpets or behind pictures, drapes or furniture, in less time than it takes to tell. Special parchuent covering keeps wires properly spaced, and insulated from moisture and electrical losses. Fixed condensers at each end provide the sharp tuning of a short aerial and the range and volume of a long one. Gives improved selectivity and tone and reduces static.

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Just mail the coupon. We will send antennae complete with full instructions. Pay the postman \$4.00 on delivery. A Binghanton, N. Y., user writes, "Have never heard as good reception as is given on your Antennae," A Detroit user says, "Got Denver, San Antonio and others with locals going full blast."

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Address

Cincinnati, Ohio

FISHWICK RADIO CO.

MONEY

BACK!

133 West Central Parkway,

if not

Delighted

BUILDING REGENATROL

(Continued from page 13)

dition, electrically speaking. If we use a single rheostat or a ballast such as an Amperite to control all the tubes, or even a few tubes, the result will be that the defective tube will require more than its fellows with which it is connected in parallel under a single control and will necessitate a stepping up of filament voltage to take care of its requirements.

Better Tube Control

This, of course, will result in operation of the good tubes at more than their rated voltage, thereby lessening the effective life of the other tubes. Where separate Amperites are used with each tube this is not the case, since the requirements of

is not the case, since the requirements of each tube are taken care of automatically. If an Amperite is connected into each filament circuit, the danger of operating the filaments at more than their rated voltages is eliminated. You will find, however, that in many cases better operation will be had if the filaments of the radio frequency and detector tubes are operated at less than their rated voltage. The use of rheostat R1 permits the adjustment of the radio frequency and detector tube filament voltage to the best

point of operation below their rated voltage. The Amperites in the filament leads prevent overloading of the tubes at any time, since they will be operated at rated voltage, even though the rheostat is turned on full

Provisions for Voltmeter

In the receiver proper, tip jacks are pro-

ELECTRAD Parts are Mentioned

> **ELECTRAD** Certified Mica Condensers

vided for a voltmeter across the filament of the second radio frequency tube. This voltmeter serves as an indicator of the best adjustment of the rheostat for most efficient operation of the radio frequency and detector tubes.

A Jewell type 135C voltmeter of the (Continued on page 38)

For Perfect Filament Control 3 AMPERITES are specified in the

BRUNO REGENATROL Receiver described in this issue.

Radiall Company Dept. R.D. 7. 50 Franklin Street, New York City



F-ADJUSTING" Rheostat

Special Cabinet



7x24 Panel, 10" deep

WALNUT ONLY MOUNTING BOARD, splined and varnished. For above cabinet. 80c Also full line of cabinets for Infradyne LC-27 and other circuits. Write for 1927 folder.

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—as usual—

CARTER

Rheostats—Switches Jacks are specified in

Bruno-Regenatrol

and other leading circuits, because of preferred: Design and Quality

In Canada-Carter Radio Co., Limited, Toronto

Parter Radio Co.



Success with Bruno Regenatrol demands

use of the specified Samson Transformers. and Chokes

The pleasure you get from your set largely results from its tone quality. This depends principally on two things—keeping all radio frequency currents in their own circuits, a job only Samson R.F. Chokes can perform because of their patented helical winding, and amplifying impartially all notes. Only the Patented Helical Winding of Samson Audio Frequency Transformers equally amplifies all notes through nullification of distributed capacitance effects.

Price, Choke No. 85, \$1.50 Transformers, all ratios, \$5.00

Samson Electric Co. Main Office Canton, Mass. MEMBER Sales offices in RMA all large cities

LIGNOLE Chosen by Joseph Calcaterra for the Bruno Regenatrol Receiver

After thoroughly canvassing the field for a front panel that combined the highest electrical efficiency with beauty unsurpassed, Joseph Calcaterra selected inlaid walnut LIGNOLE for the Bruno Regenatrol Receiver. The most discriminating radio engineers and designers regularly choose LIGNOLE, the new specially treated wood that meets all panel requirements.



LIGNOLE CORPORATION OF AMERICA 508 South Dearborn Street

CHICAGO, ILL.

The SIMPLICITY of tuning

The **EFFICIENCY** of Bakelite Shaft Condensers and Quartzite Coils And the BEAUTY of the Bronze Plate

makes the

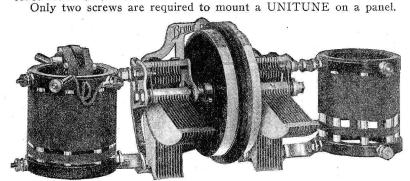
BRUNO UNITUNES

the ideal tuning device for those wanting the best

The BRUNO UNITUNE consists of an aluminum frame upon which are mounted two bakelite shaft S.L.F. condensers, insulated from each other. Each condenser may be tuned simultaneously or

independently.

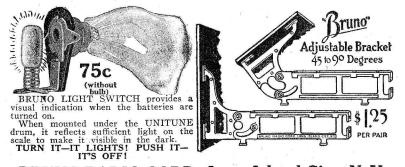
The two Quartzite Coils are already wired into the circuit simplifying



The UNITUNE model TK, above illustrated, is suitable for all circuits using one stage of tuned R.F. and regenerative detector.

This model is licensed under the Armstrong regenerative patent, 1,113,149.
Completely assembled and including bronze plate—it lists at \$20.00.

"There is a UNITUNE for every circuit." Please write for booklet.



BRUNO RADIO CORP., Long Island City, N. Y.

Build This New

Regenatrol Receiver

As Described in This Issue by Joseph Calcaterra

Complete Kit of Parts Ready to Wire With Instructions

All regenerative UNITUNE kits are licensed under the Armstrong patent No. 1,113,149 and are assembled by the Clapp-Eastham Com-pany exclusively for The Bruno Radio Corp.

Other Popular Kits Ready for Shipment. Every Kit Includes Full Instruction Sheets for Wiring.

New Improved Diamond of the Air Kit 5 Tubes

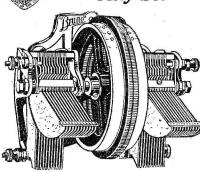
Complete \$37.50 Parts,

Radio World's Popular Bernard 6-Tube Kit Complete Parts,

4-Tube Improved Diamond of the Air Kit Complete \$30.00 Parts,



Simplifies and Beautifies Any Set



UNITUNE 2CB—Used in the BERNARD and other popular circuits consists of two BRUNO .00035 mid. straightline frequency condensers. Price.\$11.00 Frame, Panel-plate and Drums.................... 3.50

UNITUNE MODEL CC—Consists of one .0005 mfd. bakelite shaft, straight line frequency condenser and a three circuit tuner on one frame, with regular Bruno drum control, Price.......\$12.00

UNITUNE MODEL RF—Consists of the basic condenser frame, Model 2C, and two Bruno LOW LOSS RF transformers. This combination provides two radio frequency stages and covers a wavelength of 200 to 550 meters. Price completely assembled \$17.00

UNITUNE MODEL CF—Consists of 2C unit with one fixed RF coupler and special three winding coil, with fixed primary and tickler, for use in capacity feedback regenerative circuits. Price.\$19.00

UNITUNE MODEL BD—Consists of two condensers and two specially wound coils designed for use only in the BROWNING-DRAKE circuit.
Price \$21.00

We Carry Complete Stock of Standard Merchandise and All Popular Kits

SEND IN FOR BOOKLET

B. C. L. RADIO SERVICE CO. INCORPORATED

221-D Fulton St., N. Y. C.

(Continued from page 37) mantel clock type, which can be mounted on the top of the cabinet with flexible leads which can be inserted in the tip jacks, serves admirably for this purpose. If you do not care to go to the expense of buying the voltmeter when building the statement of the server when surprised the fin jacks. the set, you may provide the tip jacks and buy the voltmeter later.

A Bruno combination filament switch, S1, and pilot lamp L is used to make and break the filament circuit. In the constructional article it will be explained how to place the lamp so that it also lights up the dial.

The use of UX type sockets, Amperites, and separate B and C battery leads, permits the use of standard or power tubes of the storage or dry cell type as desired.

Suggested Use of Fixed Condensers

A series fixed condenser, C1, of .0005 mfd. capacity is used in the ground lead

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DOGS

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

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Ever Go Rabbit Hunting? My New Invention, a mechanical ferret gets the rabbits out of the holes better than live ferrets. Five days' trial. Money-back guarantee. Write for circulars. Al. Grabow, Byron, Ill.

LOG BOOKS

Radio Record Book: Logs 350 Stations, Postpaid 25 cents. Satisfaction guaran-teed. Roy Stacy, Publisher, Rockford, Ill.

PATENT ATTORNEYS

PATENT ATTORNEYS

PATENTS. Booklet free. Highest references. Best results. WATSON E. COLEMAN, Patent Lawyer, 724 Ninth St., N. W., Washington, D. C.

RADIO

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"SOCK-ANTENNA" AERIAL WIZARD inductive aerial works from light socket, solves aerial problem, separation of stations, reduces static and interference to tions, reduces static and interference to minimum, increases volume, adds clarity, equals outside aerial. Sold, satisfaction guaranteed, price \$5.00. Write for bulle-tin "T-R-S SOCK-ANTENNA." Tid-marsh's Radio Supply, Elwood, Indiana.

Headphones and Loud speakers repaired. Sam T. Sherrill, Smithville, Texas.

Will sell nearly new B-T Nameless, with voltmeter for \$50. Cost \$100. Wm. H. Vordenfeld, Shumway, Illinois.

For Sale—7-tube super-het in beautiful walnut cabinet. Reasonable. John Wisher, 105 S. Kostner Ave., Chicago.

Will sell my factory-built 7-tube super-het cheap. Beautiful walnut cabinet. Same circuit as Ryan's Simplest Possi-ble. 700 S. Taylor Ave., Oak Park, 11l.

FOR SALE—Six-tube Het-Duo-Gen receiver without cabinet for \$25. Parts alone cost over \$75. Henry Martin, 3136 Chris-tiana Ave., Chicago.

Prove your reception by the most practical and convenient method: Proof of Reception Cards. Contains spaces for complete reception record, dial settings and signature of announcer. Handy size, 3x5 inches. Send 25 cents for sample package. Radio, 2617 Hollywood Ave., Chicago.

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Make \$100 Weekly in spare time. what the public wants—long distradio receiving sets. Two sales w Sell 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 countrywrite today before your county is gone. Ozarka, Inc., 431 N. LaSalle Av., C, Chicago.

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Back copy of Radio Digest. Volume 1, Number 4, 1922. Wanted to complete file in Library of Congress at Washington. Will give selection of six photogravures for this copy. Editor, Radio Digest, 510 North Dearborn St., Chicago.

of the receiver to sharpen tuning. If a B battery eliminator is used in place of batbattery eliminator is used in place of batteries, it is advisable to substitute a 1 mfd. bypass condenser in position C1 to eliminate the possibility of danger from the use of a grounded eliminator.

You will notice that a .0005 mfd. fixed

You will notice that a .0005 mfd. fixed condenser is used across the primary of the first stage audio frequency transformer and a .006 mfd. condenser is used across the loud speaker jack. Bypass condensers of 1 mfd. each are used as shown at C2, C6 and C7. While the use of these condensers is not absolutely necessary to the operation of the set, you will find that their use greatly improves reception and eliminates the distortion often found in receivers which are built down to a price rather than up to a standard. You can economize somewhat by eliminating some Amperites and fixed by eliminating some Amperites and fixed condensers, but the resultant loss in effi-

By Return Mail!

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profits. 201-A type with

RADIO TOWERS

These towers are 106 feet high and have been in use a little more than one year, having been kept painted

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Tuning Charts Show wave length you are tuning to. Tell where to set dials for any station. Identify programs without announcement.

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RADEX, P. O. Box 143-P, Cleveland, O.

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MELCR-INE 10% to 50%\$ 100 for ONLY 100

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Easily installed in place of your present ground. No Radio Set complete without it. Indorsed by Radio listeners everywhere. YOU TAKE NO RISK-ACT NOW PEEDIN RUBBER & RADIO CO. SHERIDAN, WYOMING

Yale GROUND HOG

Profet DOUBLES POWER AND TO PROFET OF THE PROFES OF THE PR

Improved

Send for it TODAY

1021 Moseley St., Owensboro, Ky.

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UX bakelite bases. * TRELCOT SALES

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KWWG

GUARANTEED RADIO TUBES

Prepaid

ciency and tone quality will hardly make the small saving worth while. It is best to build the Regenatrol exactly as directed, rather than to change parts.

Detailed instructions for building the

receiver will be given in the next issue of Radio Digest. While waiting for the next installment you can prepare by buying the parts specified in the list given here-

NEW INFRADYNE KIT ARTS IN STOCK NOW! WHOLESALE CATALLE Listing thousands of new radio parts, kits, furniture, accessories and complete radio sets, at prices that save you money. Write for your copy now, it's free. Dept. 6.

THE HARCO CO., 1255 S. Wabash Ave., Chicago, III.



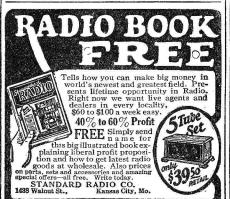
Matchless bargains in radios and accessories. Full line of Bremer Tully, Balkite, All American G.E. Tungar, Thorola, Majestic, Utah, R. C. A. Tubes, nationally advertised parts, batteries, chargers, etc. Big opportunity for live dealer to double sales quick. Tell us about your business as we sell wholesale only. Postcard or letter brings catalog and dealer, spoposition. Exclusive territories open. Act—NOW!

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Finest genuine sheepskin leather case with coin pocket, richly embossed. Any name engraved in 18 kt. gold. Contains pencils and penholder in assorted colors, point protector, ruler, sharpener. Absolutely supreme in its class.

Send Check, Money Order or U.S. Postage. U. S. PENCIL CO., Inc. 487 Broadway Dept. R. D. New York





Your Name and

Address on Each

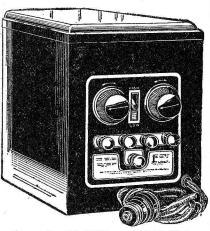


Stations gladly put on numbers you request. Stations and entertainers appreciate appliause cards. We print special individual cards that get immediate ATLENTION. Appliaud your favorites. Quality cards and printing. Special radio design. Fost card backs. All The Rages. You and your children will got many hours of pleasure coupons each good for \$1 payment on other cards. Let your friends have these coupons at 25c each and you have YoUR cards absolute FREE or at 50c per coupon you have \$2 extra.

SEND NO MONEY Just pay postman after you get cards Sendry Coupons of the card will bring the property of the card will bring the send you while offer lasts. A post card will bring these individual cards. Radio Printers, Dept. 8419C, Marengo, III.

Genuine RAYTHEON "B" Battery Eliminator

\$50 Value—Our Price Only



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

Positively the Greatest Value in "B" Eliminators

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

CANNOT DETERIORATE WITH USE—NOTHING TO WEAR OUT!

Contains no materials or parts which are subject to wear. Always delivers the same, unvarying output of current. Employs the use of the famous Raytheon tube to rectify the current. There is no filament to burn out, sag, or wear, therefore lasts forever. Has full wave rectifications, exceptionally efficient. Uses but a few cents worth of current a week. No liquids or chemicals. This is a genuine high capacity eliminator and a quality product throughout.

Delivers Smooth, Steady "B" Current-No Hum

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

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

Belmont Scientific Laboratories

1301 Wilson Ave., Dept. RD, Chicago III.

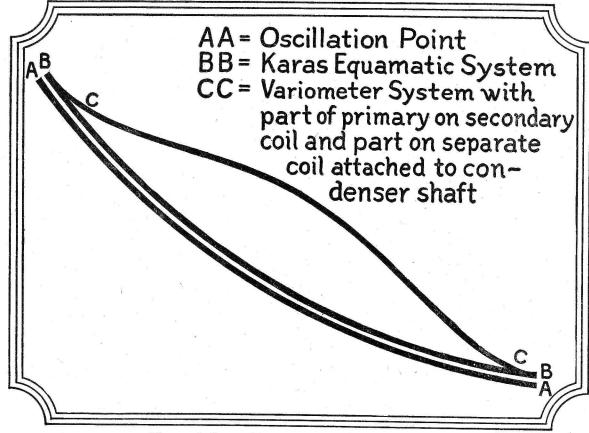
Belmont Sci 1301 Wilso Chicago	entific Laboratories, n Ave., Dept. RD. , Ill.
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Marvelous newly-invented ground gives 100% improved reception. Doubles power and distance. Stops leakage, Reduces static. Stops jangling even in midsummer. Results never before equalled, users say. Satisfaction guaranteed.

Proven absolutely essential to clear, powerful distance reception. Draws and holds moisture indefinitely. Highly sensitive to radio energy. SEND NO MONEY—To introduce, we offer to those who act at once, regular \$5.00 size for only \$2.00. Send name today and pay \$2.00 plus 17c postage on delivery. Or send only \$2.00 with order and save postage. FREE—Full description of Ground Hog and amazing special low priced battery offer on request — write today. Yale Specialty Supply Co.

Only KARAS has been able to solve the vital problem of automatic tuning at every dial setting through the marvelously efficient KARAS Equamatic 5-Tube Sensation



[Equamatic System Licensed Under King Patents Pending]

Essential Parts of the Karas **Equamatic Sensation**

KARAS EQUAMATIC INDUC-TANCE COILS are packed three in a carton, and come to you with complete manual of simple diagrams and instructions, all necessary nuts, screws and binding posts, ready for mounting in your receiver. Price, set of three coils, \$12.00.

KARAS SPECIAL 17 PLATE ORTHOMETRIC CONDENSERS,

three of which are used in the Equa-matic Receiver, have special extended shafts upon

which to mount the primary coils of the Inductances. Price, each, \$7.00. KARAS HARMONIK AUDIO

FREQUENCY AMPLIFYING TRANSFORM-

ERS are essential to the tone quality success of the Equamatic Receiver. Two of these are used for the two stages of a u dio frequency amplification. Price, each, \$7.00.

KARAS EQUAMATIC RETARD COILS, two of which are used, were designed especially for the Equamatic System. Price, each, \$1.00.

KARAS EQUAMATIC SUB-PAN-EL BRACKETS. To insure the nec-

essary exact positions of primary and secondary coils these brackets are essential. Price, set of three, 70c.

KARAS MICROMETRIC DIAL.



Karas Micrometric Dial

It has a 63 to 1 vernier and tunes to
1/1000 of an inch.
Micrometrics are
made of Bakelite. They have large, comfortable knobs, gold inlay markings of unusual precision, and may be attached to your present set without drilling any additional holes in panel. To really know sharp tuning

you must use Karas Micrometrics. Order them today from your dealer, or if he cannot supply you, order direct from us. Price, each, \$3.50.

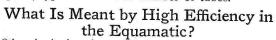
HE Karas Equamatic 5-Tube Sensation—the talk of all of the great national radio exhibitions—the most discussed set in the pages of leading radio publications—is the only receiver which accomplishes automatic tuning at every wave length setting of the dials. Only Karas has been able to solve the problem in a simple, practical, automatic manner.

What Does the Equamatic Receiver

Accomplish?

The Equamatic System provides a CONTINUOUS MAXIMUM and an absolutely EQUAL TRANSFER OF ENERGY between primary and secondary inductances AT ALL WAVE LENGTHS. It utilizes a coupling system that is absolutely unique in the

system that is absolutely unique in the entire field of radio engineering. Because of this feature the Karas Equamatic actually delivers from five tubes results that heretofore have only been possible with six or seven tubes. Its volume is tremendous. Its selectivity is sensational. Its clear, pure, rich, sonorous tones are a revelation. And all because the Equamatic System, utilizing Karas precision-built parts, has been brought to a peak of operating efficiency that will not be found in any other receiver regardless of price, type of circuit or number of tubes. of price, type of circuit or number of tubes.



Other circuits have been called highly efficient in the past, and even today remarkable claims are made for the operating efficiency of certain receivers. What constitutes this much to be desired peak point in receiver operation?

Radio engineers are agreed that the radio frequency tubes in a tuned radio frequency receiver are at highest efficiency when just below their oscillation point. The problem in such receivers always has been to keep the r. f. tubes at this point by continuously maintaining an equal transfer of energy between primary and secondary coils. Until the Equamatic System was invented no one had ever done this, although there had been several makeshift attempts to reach the desired goal.

The Story Told in Graphic Form

Study the curve chart reproduced above. It is a graphic picture of the oscillation curve of a radio frequency tube, designated by the line AA. Naturally you will find the highest operating efficiency of radio frequency tubes indicated by a line, BB, exactly parallel to it, and directly above the line AA. Tests have shown that this line, BB, also indicates the exact efficiency of the radio frequency tubes in the Karas Equamatic Sensation—just below the oscillation point, WHERE EVERY TUBE IS MOST EFFICIENT. And the Karas Equamatic maintains this peak efficiency at every wave length setting of the dials—not at certain points in the broadcast waveband, BUT AT EVERY DIAL SETTING BETWEEN 200 and 600 meters.

The Problem Solved Only by the

The Problem Solved Only by the Equamatic

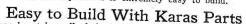
In the Equamatic System the primary coils are entirely separate from the secondaries. They are attached to the shafts of the condensers, in a way to make them adjustable in their relation both to the condenser shafts and to the secondary coils. The secondaries are adjustable to any desired angle in relation to the primaries and also as to their degree of coupling with the primaries. By means of this method of mounting the inductances, the primaries are AUTOMATICALLY, CONSTANTLY AND CONTINUOUSLY VARIED at a definite, ever-changing rate of variation, with the turning of the condenser dials. This is the means by which an absolutely exact amount of coupling at every wave length setting is provided—the precise amount necessary to deliver to the secondary coils exactly the quantity of energy required to cause the radio frequency tubes to operate constantly at their very peak of efficiency—as shown by the line BB, just below their oscillation curve AA. So efficient is the Karas Equamatic that when on ce correctly adjusted it positively cannot and will not oscillate in the slightest at any frequency between 200 and 600 meters, yet the slightest increase in filament voltage will throw the tubes into instant oscillation.

Not only is the Karas Equamatic that when on ce correctly adjusted it positively cannot and will not oscillate in the slightest at any frequency between 200 and 600 meters, yet the slightest increase in filament voltage will throw the tubes into instant oscillation.

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Not only is the Kara s Equamatic that when on ce correctly adjusted it positively cannot and volume that operate. You will be able to spend far more time listening to the p

The Karas Equamatic 5-Tube Sensation



Easy to Build With Karas Parts

Karas has taken all of the bother out of building this powerful, full-toned, sensitive receiver by making its assembly a pleasant job for some convenient evening when you have an hour or so. We furnish complete layouts for panel and subpanel—simple, easily understood instructions for the placing of every part and the wiring of the receiver. A complete manual of simple wiring diagrams and full directions for building the Equamatic is packed with each set of three Karas Inductance Coils, together with all necessary nuts, screws and binding posts for building the complete receiver. You should use Karas parts in building the Equamatic wherever they are specified because this remarkable receiver was designed especially for these famous parts, and will operate at its highest efficiency only when they are used.

To build the Equamatic you will need the Karas parts listed in the coupon, plus certain other standard parts easily obtainable anywhere. If your dealer cannot supply you with Karas parts for your Equamatic you may order direct from us by filling out and mailing the coupon below. SEND NO MONEY. Just hand the postman the price of the parts plus a few cents postage. Then build the set and have the receiver you have always wished you might own! Order the Karas parts today from your dealer or from us. Act NOW, while this page is before you. Learn for yourself how marvelously better the Karas Equamatic Receiver really is.

KARAS ELECTRIC CO. 1079 Association Building **CHICAGO**

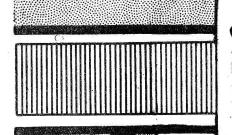
Other	Sets	Vastly	Less
	Effi	cient	

To give you a graphic idea of how much less efficient are other types of receivers we have plotted the curve of a typical set using the variometer system. In these sets part of the primary coil is carried on the secondary, where it cannot possibly be varied, and part of it is carried on a separate coil mounted on the condenser shaft. The curve of operating efficiency of the radio frequency tubes in such sets is shown by the variable curved line CC. Note how far from peak efficiency such sets must be except at one or two points.

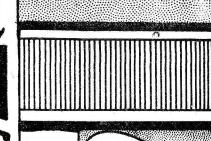
The variometer type of design cannot possibly offer the efficiency of the Karas Equamatic System because it does not provide a continuously equal and constantly maintained transfer of energy between primary and secondary inductances at every wave length setting of the dials—a thing absolutely essential if highest efficiency is to be secured.

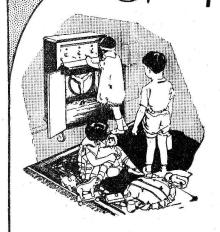
KARAS ELECTRIC CO	D.
1079 Association	Building, Chicago, Illinois.
Please send me set of 3 Orthometric Condensers with Vernier Dials, \$3.50 each; 2 Equamatic Retard Coils, \$1.00 of I will pay postman \$60.20, plus I have the privilege of return	Equamatic Inductance Coils, \$12.00; 3 special extended shafts, \$7.00 each; 3 Micrometric Harmonik Audio Transformers, \$7.00 each; 2 each; and 3 sub-panel brackets, 70c, for which postage, upon delivery. It is understood that ng any of this apparatus for full refund any not prove entirely satisfactory.
Name	
Address	
City (If cash accompan	State



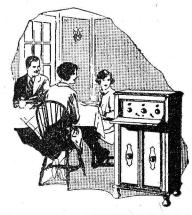


New and Improved FRESHMAN ASTERPIECE





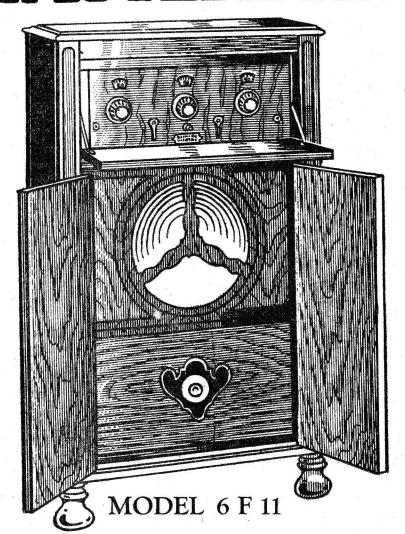
Uses C-Battery and Power Tube



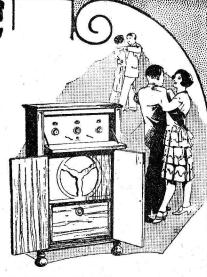
Operates by Electricity if you prefer

This new QUALITY set is so designed to operate from your light socket by installing the new Freshman "ABC"

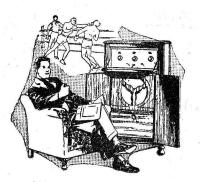
Power Supply.



\$11950



Shielded all metal Front and Sub-panel



Genuine R.C.A Radiotrons

are recommended for use with Freshman Masterpiece Receivers. A special package containing—1 UX 112 power tube, 1UX 200A detector tube and 3 UX 201A amplifying tubes—matched and tested for the set in which they are shipped, is sold by Authorized Freshman Dealers.

Makes Life More Pleasant

—it is massive—it is beautiful—an article of furniture you will be proud to own. This "masterpiece of masterpieces" surpasses all expectations—the most perfect radio ever designed.

—takes you on mysterious journeys; miles and miles—North, South, East and West; comfort and rest in your easy chair.

—the world's finest entertainment yours—opera, dance music, concerts, lectures, sports; just take your pick.

-easy to tune with its three distinct controls;-brings in the

stations wanted day after day at the same dial points—eliminates overlapping of wave lengths which assures distinct separation of one broadcasting station from all others.

—its tone quality makes it wonderful—the large cone-speaker has been designed to exactly match the new Freshman Receiver. This special cone-speaker easily handles the full power that the new set delivers.

-make life more pleasant-with a Freshman Masterpiece Radio.

Sold on Convenient Terms by Authorized Freshman Dealers

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IV World's Greatest Radio