

Best Ways to Eliminate Interference

# Radio Digest

TWICE  
A MONTH

PROGRAMS  
Illustrated

FIFTEEN  
CENTS

FIRST DECEMBER NUMBER, 1926

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\$26000<sup>00</sup> IN PRIZES  
**Whozit**

*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

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 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 hard.

### 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 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 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 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 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 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 from different stations, but one of the most interesting is the club idea. A 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.	11	10	9	9:30 p.m.	8:30	7:30	6:30
WHT (399.8) Daily except Sundays.				CKY (384.4) Monday, Wednesday.			
WMAK (265.6) Daily.				WHB (365.6) Tuesday, Thursday.			
6:45 p.m.	5:45	4:45	3:45	10	9	8	7
WOAW (526) Daily.				WHK (272.6) Mondays, Wednesdays.			
7	6	5	4	WSEO (241.8) Monday.			
WOC (483.6) Daily.				10:15	9:15	8:15	7:15
7:15	6:15	5:15	4:15	KOA (322.4)			
WMAK (265.6) Daily.				WMCA (340.7) Thursdays.			
7:30	6:30	5:30	4:30	10:30	9:30	8:30	7:30
WHK (272.6) Fridays.				WMC (499.7) Thursday.			
WMCA (340.7) Fridays, Saturday, Dec. 4.				11	10	9	8
7:50	6:50	5:50	4:50	KMOX (280.2) Daily.			
WJAX (336.9) Daily except Thursdays.				KTSH (374.8) Daily.			
8	7	6	5	WHK (272.6) Tuesdays.			
KVOO (374.8) Daily except Sundays.				WHT (399.8) Daily except Monday.			
WHT (399.8) Daily ex Sun., Mon.				WLW (422.3) Daily except Friday.			
WMCA (340.7) Wed., Dec. 1; Sun., Dec. 5.				WOOD (242) Daily.			
8:30	7:30	6:30	5:30	11:30	10:30	9:30	8:30
WPG (299.8) Dec. 6 and 13.				KJR (384.4) Daily.			
8:45	7:45	6:45	5:45	WMAK (265.6) Tuesday.			
WHB (365.6) Mon., Wed., Fri.				12 m.	11	10	9
9	8	7	6	WHT (399.8) Daily except Monday.			
CKY (384.4) Thursday, Saturday.				WJR (516.9) Saturday.			
KPRC (296.9) Daily except Friday.				12:05 a.m.	11:05	10:05	9:05
WHT (238) Daily except Mondays.				WHK (272.6) Saturdays.			
WJR (516.9) Monday, Wednesday.				1	12	11	10
WPG (299.8) December 3 and 10.				KVOO (374.8) Mon., Thurs., Sat.			
WSM (282.8) Mon., Wed., Fri., Sat.				WHB (365.6) Sunday.			
9:15	8:15	7:15	6:15	1:15	12:15	11:15	10:15
WNAC (431) Wednesdays.				KFWB (252) Daily.			

include enough personal description (not counting the comedy) to permit the listening 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.

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 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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## Looking Ahead

**Of 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.

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Have One Left

WHEN YOU WANT

## Radio Digest

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## SHORT WAVES

By Marcella

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

ATTENTION 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 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 and Dee of Canaan. Our latest information 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 verse:

"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,  
Middin' 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 associatè 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 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 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 WBBH, 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.

Here is a picture of Julius Walter, KGW staff pianist, 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 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 BROADCAST MADE IN ST. PAUL

Regal Visitor Honors Twin City Station—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

"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."

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 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 Congress studio of Westinghouse Station 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 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 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

DENVER.—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 page 7 were in error through no fault of WMAK. 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 accuracy.

## WCFL PREPARES FOR OFFICIAL 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 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 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 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., 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-1 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 heterodyning, 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 Federation of Labor.

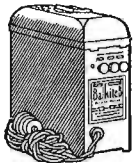
Mr. Nockels promoted and organized WCFL and is now its general manager.

# The new Balkite Combination supplies all radio

## power automatically from the light socket

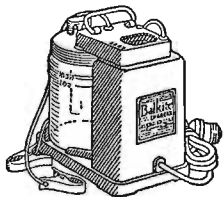


U. S. PATENT, OCT. 12, 1926



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.

Now you can operate your radio set from the light socket. Merely by adding the new Balkite Combination Radio Power Unit. Once connected to your "A" battery and set and plugged into the light socket, it supplies automatic power to both circuits. You need not even turn it off and on for it is controlled by the filament switch already on your set and is entirely automatic in operation. Whenever you turn on your set you will find it always ready to operate 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

has no tubes, nothing to replace or renew, is a permanent piece of equipment, and is built to conform with the standards of the Underwriters' Laboratories. It is noiseless in operation. It will serve any set now using either 4 or 6-volt "A" batteries and requiring not more than 30 milliamperes at 135 volts of "B" current. This includes practically all sets of 8 tubes or less, including power tubes. It operates from 110-120 volt AC current with models for 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.

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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: WEA, WEEL, WGR, WFI, WCAE, WSAI, WTAM, WWJ, WGN, WCCO, KSD, WDAF, WOC.

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

FANSTEEL  
**Balkite**  
Radio Power Units

# Lady Listeners Love Lester

## 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."  
Next time Helen (my chum) and I go out to Omaha we are going to have.....  
(know him? He's president of the.....Bank) take us up to the studio. It'll be just my luck, though, for you not to be there, I suppose.

This is personal, L. P. You may have to make an announcement of my death if you mention it out loud that I have written what I have. Most girls have ideals of some sort, but few of them have the nerve to reveal them to a man who possesses some of the desirables, and I wouldn't either if I weren't positively certain that I would never see you. Anyway, you are probably married and have a bungalow, 'n everything.

Sincerely yours,  
(Signed) SHEILA.

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 her hair.

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.

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.

Some of the girls have a hunch that L. P. is a gay deceiver. For instance, "Alice," writes from a far away state a letter in which she concludes with the wary sentence: "I want to ask you something, and then again I don't, so I suppose I had better not take any chances."

And observe this one from Gloria:  
Dear Les: I have heard you are a bachelor, and I have "fallen in love" with your voice. I have wondered if you are as handsome as your voice is "silver-tongued." Please send me your photo in the envelope I am enclosing.  
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.



By W. O. WISEMAN

Dear Miss.....:  
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 efforts.

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.

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

It's a nice polito 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 No. 2."

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—or his steno.

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 of promise!

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" replies.

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:

Dear L. P.:  
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.,

"Well, I declare," laughed petite Virginia Swanson, as she looked over this batch of mail received by "L. P."



# Better to be through a *Mershon* ELECTRIC 30 MFD—Duotype CONDENSER

## 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 mfd) 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.

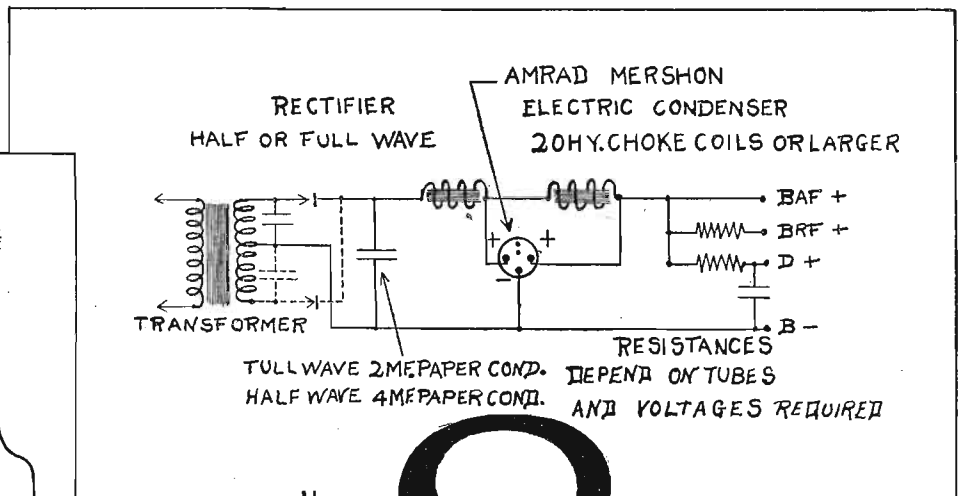
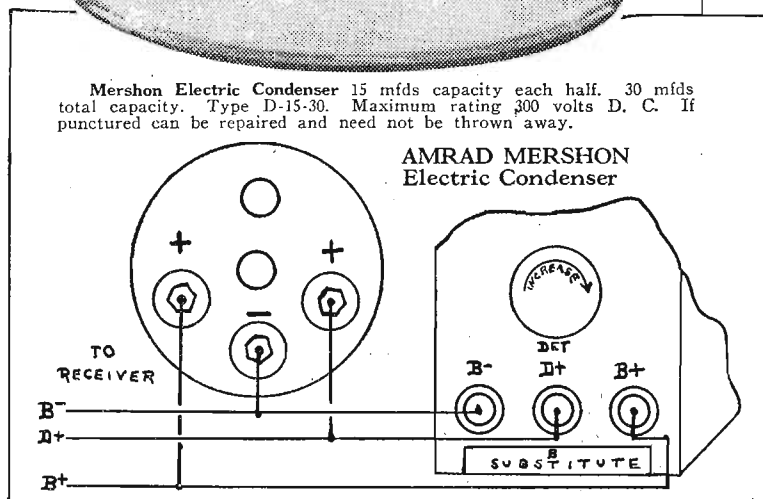


Diagram shows circuit plan for Super B battery eliminator when famous Mershon Condenser is added.

Circuit for building B eliminator using a Mershon Condenser as principal capacity.

**\$ 8.**

Write Dept. 3L6 if your dealer cannot supply

# AMRAD

Battery type and light socket operated NEUTRODYNES

# How to Eliminate Interference

**C**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.

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.

### Ways of Improving Selectivity

Again I call your attention to the fact that it is not necessary to have an expensive 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 inexpensive 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 indoor aerials, better ground connections, a stage of balanced and tuned radio frequency, wave traps (or high frequency by-pass circuits), good variable condensers, vernier controls, low loss inductances, shielded sets and a great deal of patience.

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

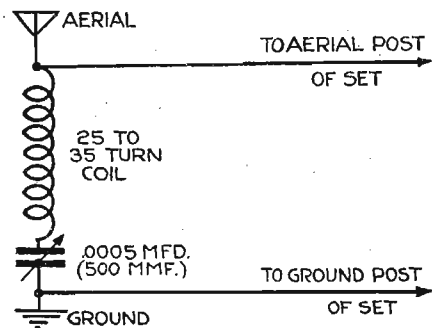


Figure 3

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 or seventy-five feet long, including the ground lead and lead-in in this length.

The ground connection is very important. 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 good.

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 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

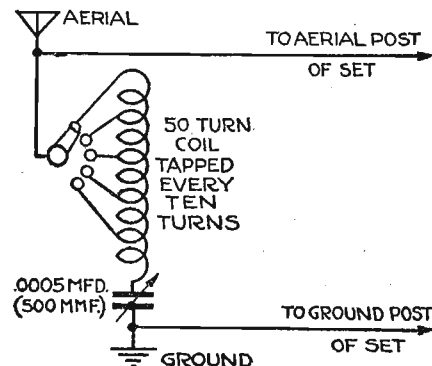


Figure 4

## THERE'S Lots of It on the Air, But These Suggestions Will Really Help You

By EVANS E. PLUMMER

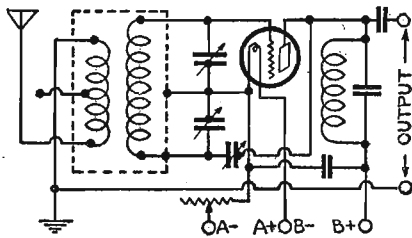
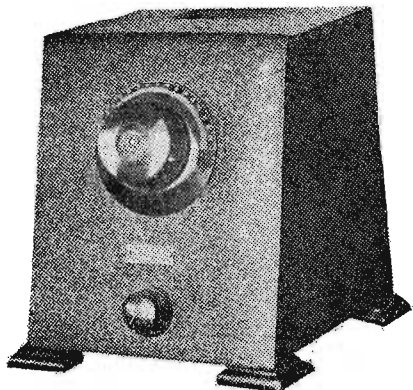


Figure 1, left, shows the Penetrola, a device which is of much help in making any receiver selective enough to tune out interfering stations. Above is figure 2, the Penetrola hook-up. The dotted line indicates shielding around coils.

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 blooming noises which your receiver may be sending out on the air without your knowledge. Penetrola also filters out the bloopings 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 receivers 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 distant 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 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 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 equivalent low loss coil inductance. The two are

possible in tuning to eliminate an interfering station.

### How to Use Trap

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 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 make it.

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.

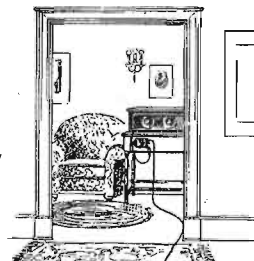
Super sensitive sets, such as the super-heterodyne or five tube Radio frequency designs, should have their cabinets (or coils inside) well shielded so as not to pick up interfering stations through the ability of the coils to act as effective aerials. Sometimes it is found good to shunt (place in parallel) 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 Congress 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.

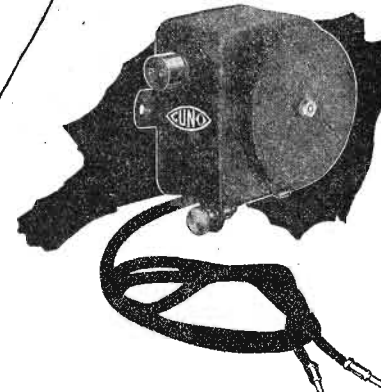
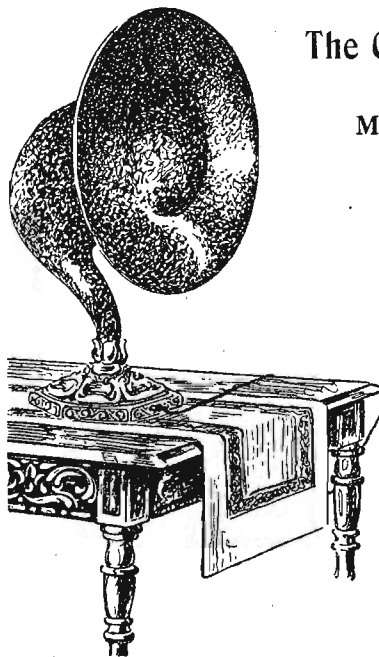
# New! RADIO CUNO REEL

## 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 . . . \$3.50

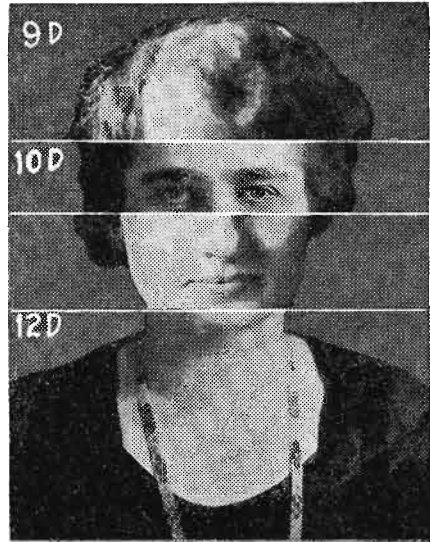
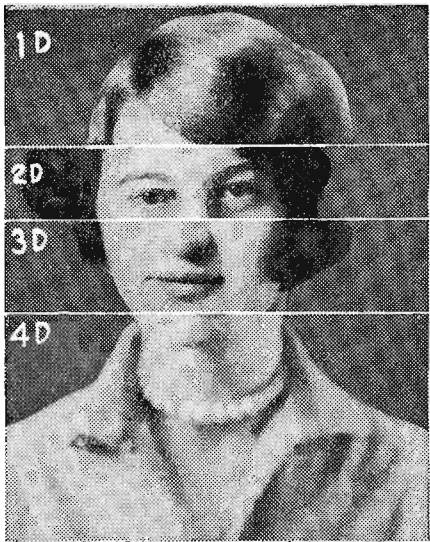


The Cuno Engineering Corporation  
90 South Vine Street  
Meriden, Connecticut

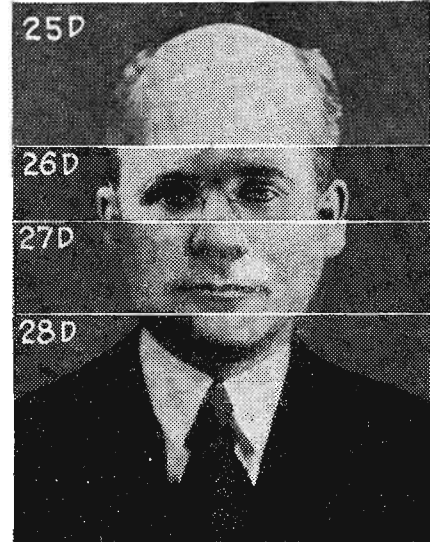
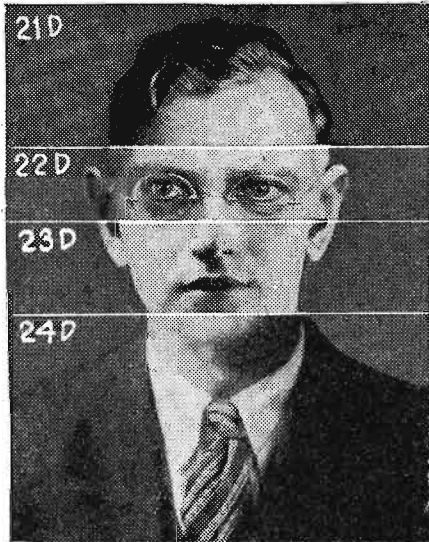


Handsomely finished in brown enamel and nickel, complete with 25 feet of high grade cord. Easy to attach with two screws. Well made and fully guaranteed.

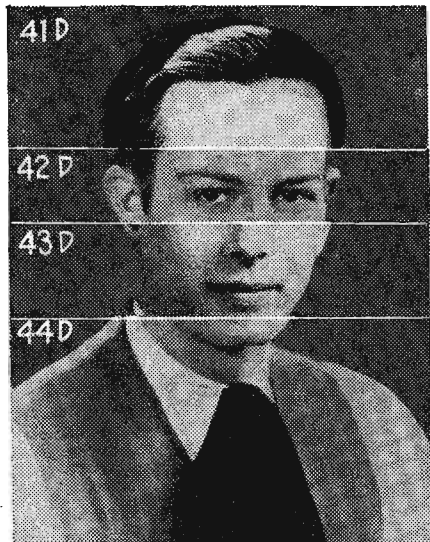
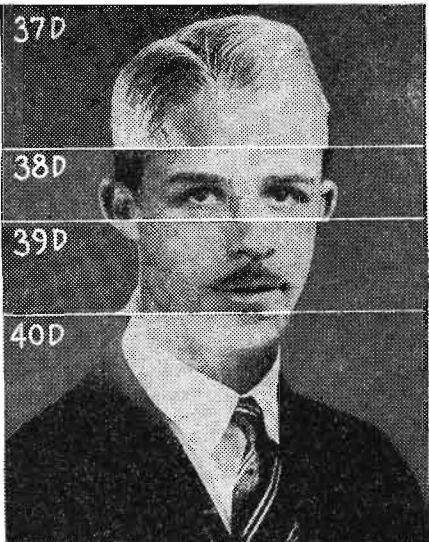
# CUT OUT AND ASSEMBLE THESE WHOZIT PICTURES



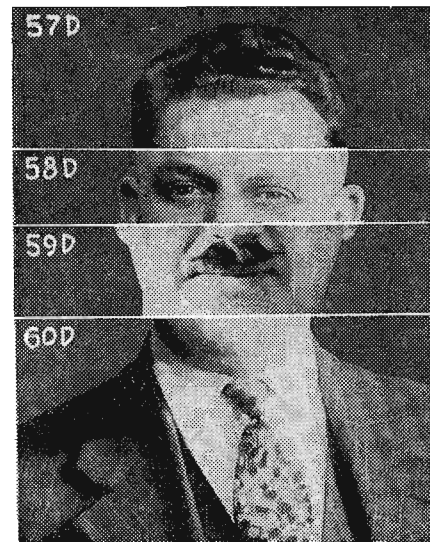
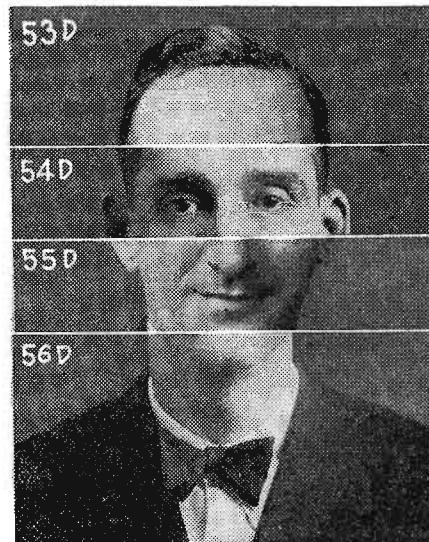
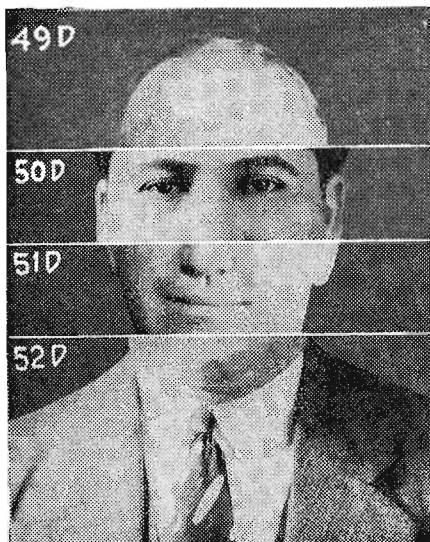
The following artists are in above panel: Ann Walsh, KMOX; Eva Thompson Jones, WSM; Elza Bloedle, WSOE; Johanna Grosse, WLW.



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



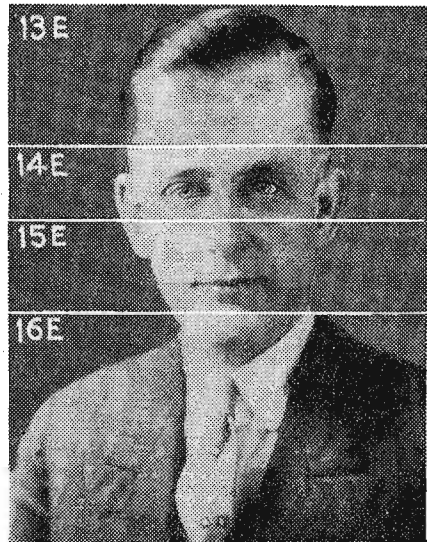
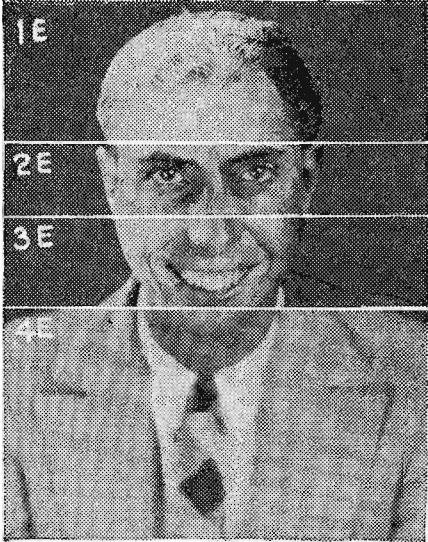
The following artists are in above panel: James Doty, WOAW; Hyman Shrier, WOAW; Eber Grubb, KOA; Stanley Hall, KOA.



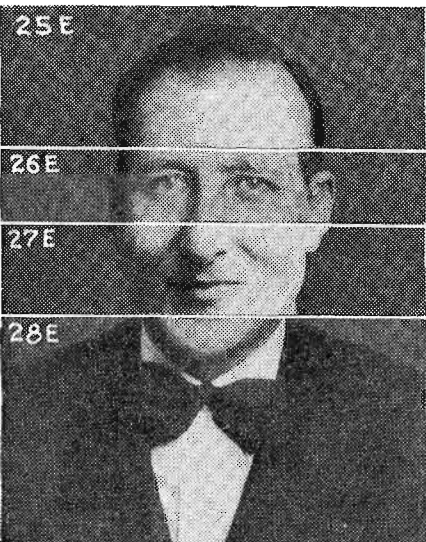
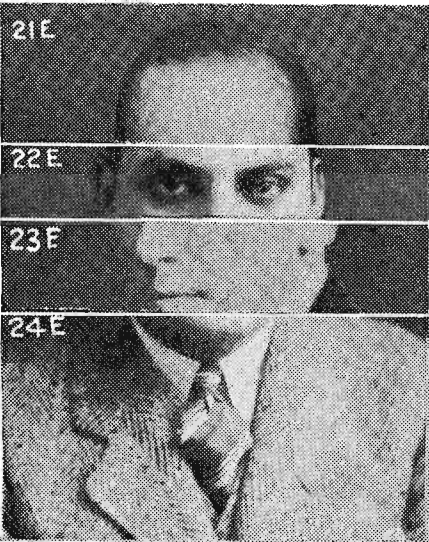
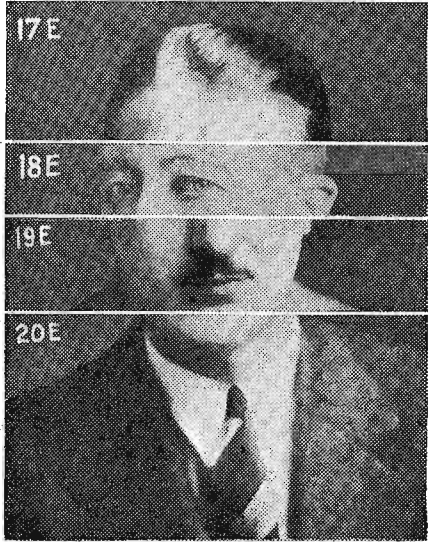
The following artists are in above panel: G. C. Arnoux, KTHS; Lon Chassy, KTHS; Harry Taylor, WHB; Don Anchors, WHB.



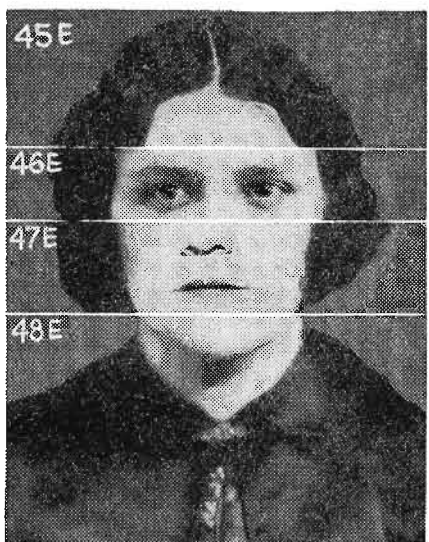
# PLAY WHOZIT AND WIN \$26,000 PRIZE AWARDS



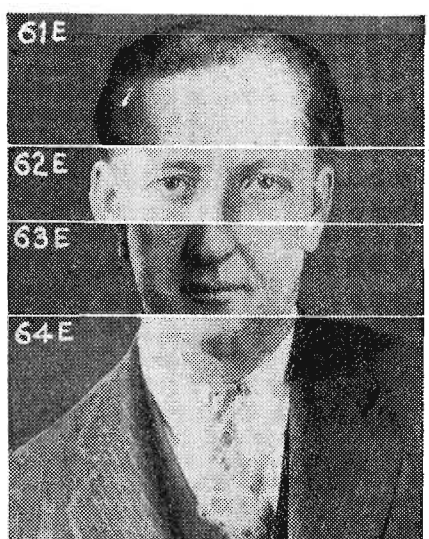
The following artists are in above panel: Ray Kellogg, KFWB; Bill Hatch, KFWB; Clyde McArdle, WNAC; Jimmy Gallagher, WNAC.



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

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

By *MERLIN MOORE TAYLOR*

WHISKED 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 escape the tyranny of an uncompromising 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 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. 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 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"

THE walrus-mustached chief indicated a chair. "Sit down. No," as Lois glanced at the barred door and questioned him with her eyes, "I guess we won't have to lock you up. I 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."

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 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 roads 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 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."

THE chief opened a drawer of the desk and extracted a heavy iron ring with four 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 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 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 bonds, I mean."

"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 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

first the pillow, then the blanket, between thumb and forefinger and dropped them upon the lower end of the bunk, then spread a tiny handkerchief upon the edge of the pad and sat down.

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.

## Directory Is Back

THOUSANDS of readers of Radio Digest have wondered 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 pressed her face close to the bars on the door that separated her from the well-lighted 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 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 filler was straw. In a corner was a stationary washstand and toilet. The whole place offended her nostrils with a sharp odor of soap and strong disinfectant.

She went back to the door into the office 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,

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. Lancaster 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 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 speeding and I wouldn't feel right—"

"Oh, all right," he broke in with an air of resignation. "Only hurry."

SHE 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 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 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—"

LOIS 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.

"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."

"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 opportunity"—flashed through her mind. Lancaster had done just that—pounced. She began struggling to release herself.

"You're hurting me," she panted, twisting her lips away from him. "You're hurting me and I'm not thrilled at all."

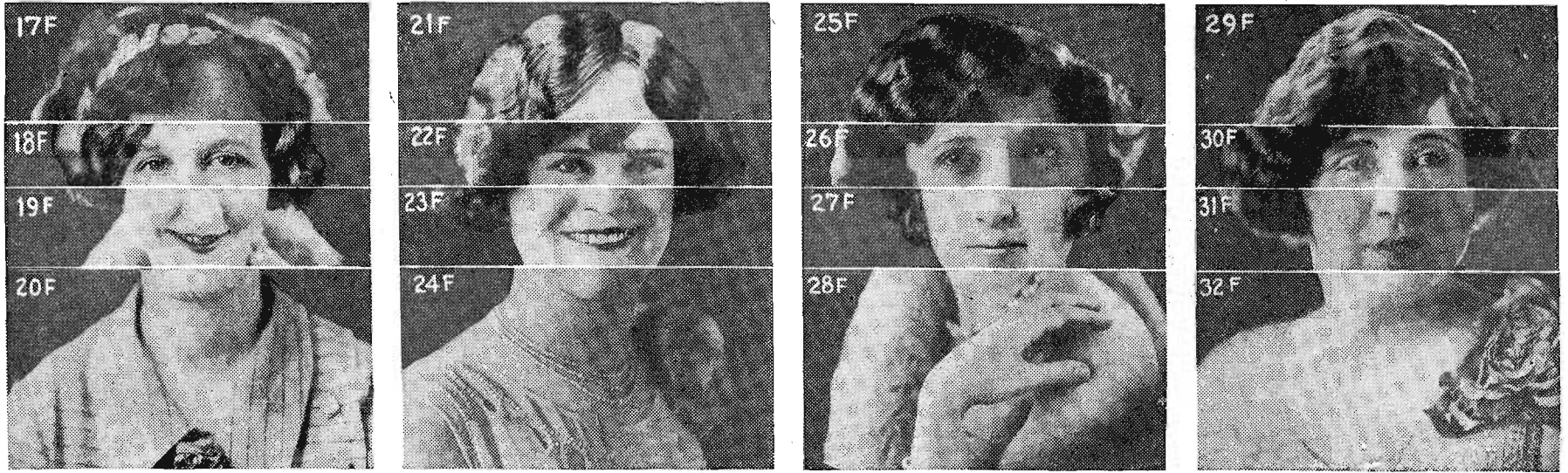
"Hurting you? Of course, I'm hurting you." He spoke savagely. "I want to hurt you. There are moments when I could murder you—when I remember how you played me for a sucker, making me think you were an innocent little country

(Continued on page 20)

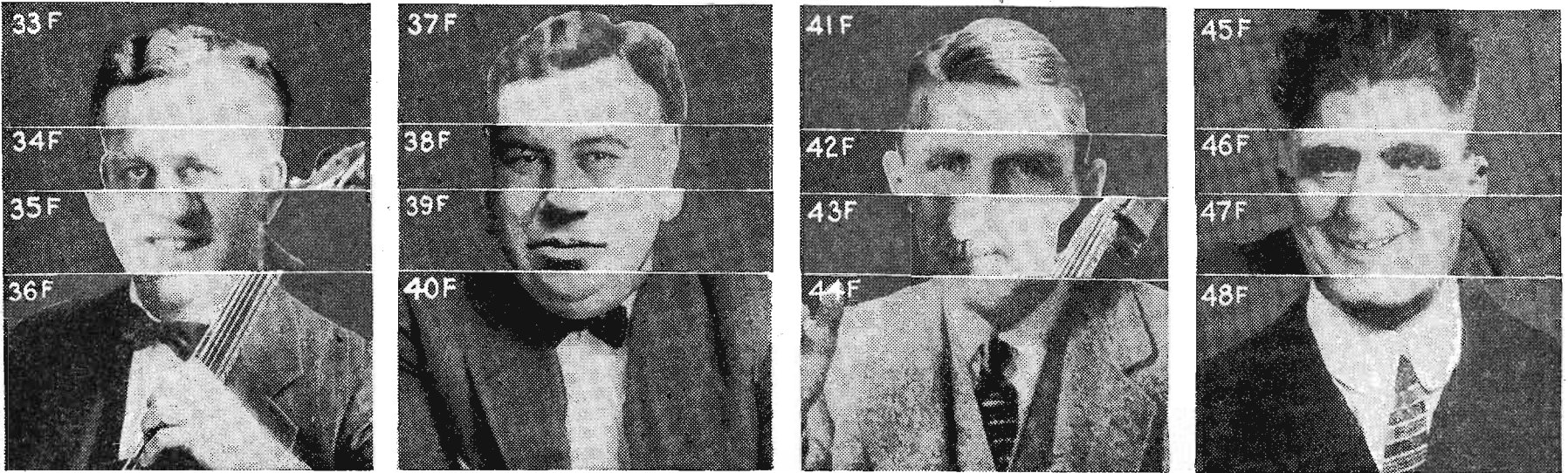
# START NOW PLAYING GREAT GAME OF WHOZIT



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.

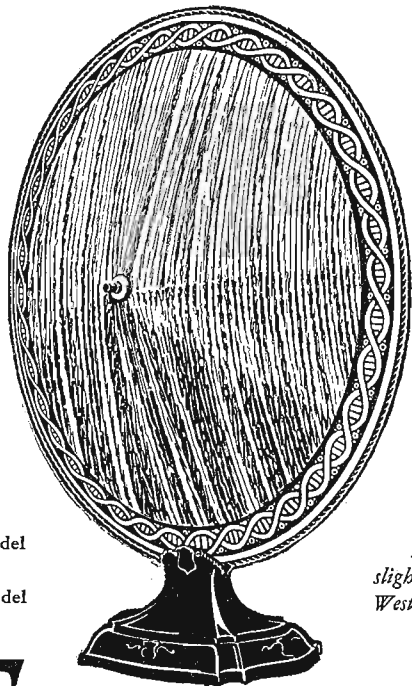


The following artists are in above panel: Charlotte Myers, WJR; Big Sister, KVOO; Mary Tudor, WJR; Grace McConnell, WJAX.

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 will gladly demonstrate the Farrand Speaker—in his store or at your home. Find out for yourself TODAY what a half-million listeners discover every night!



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Junior Model  
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slightly higher  
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**Farrand  
Speaker**

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



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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 EVEREADY 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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Canadian National Carbon Co. Limited  
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| WEEI—Boston      | WGN—Chicago    |
| WTAG—Worcester   | WOC—Davenport  |
| WFL—Philadelphia | (Minneapolis)  |
| WGR—Buffalo      | WCCO—St. Paul  |
| WCAE—Pittsburgh  | KSD—St. Louis  |
| WSAI—Cincinnati  | WRC—Washington |

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**Radio Batteries**  
—they last longer

# How to Build Bruno Regenatrol

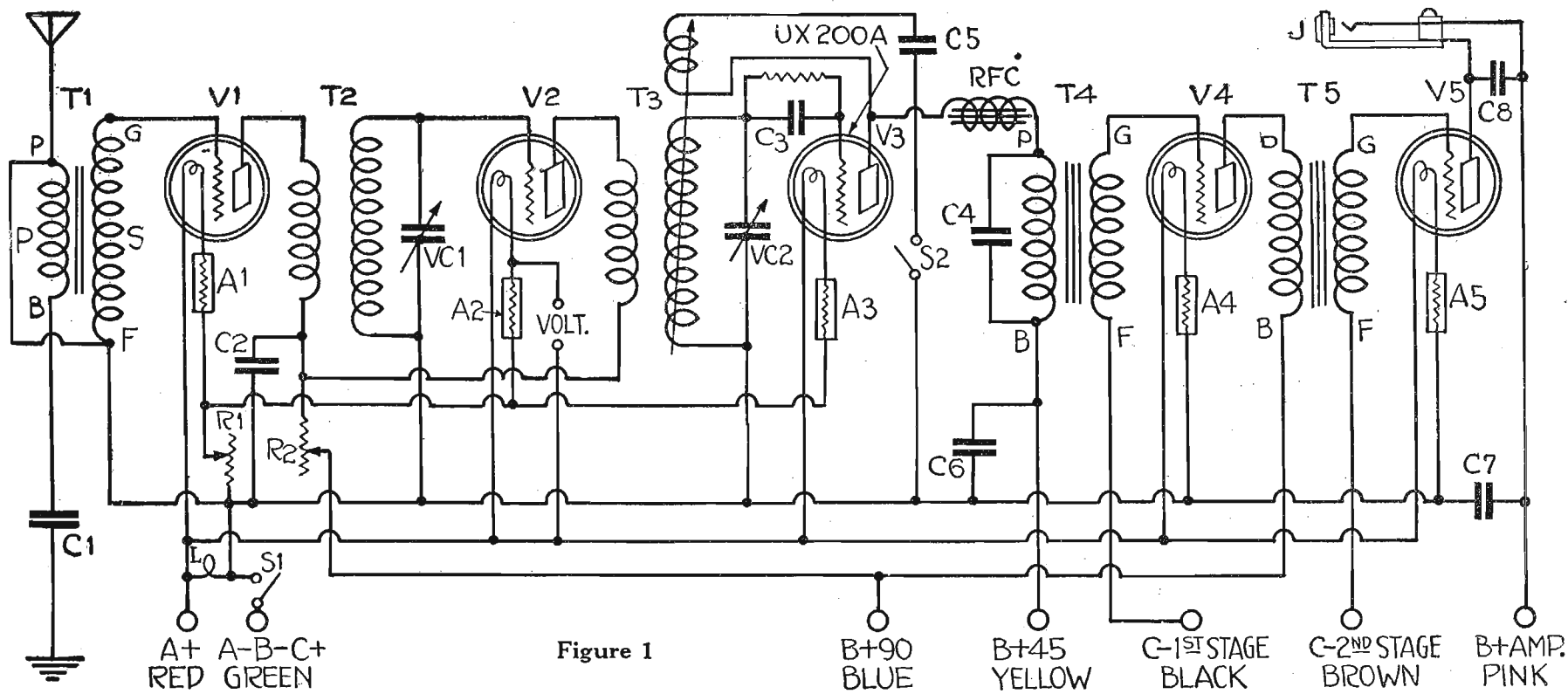


Figure 1

By JOSEPH CALCATERRA  
Part I

NOT so long ago a receiver with 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 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 ground.

### 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 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 condenser 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 include an extra control for the first stage, making the tuning of that stage independent of the other two tuning circuits. 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 Regenatrol circuit will show how 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 amplification and permits tuning of the second stage and the detector stage by the dual condensers of the Bruno

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.

These two condenser drums form the only real tuning controls and permit the use of the receiver as a single or double control receiver.

While the first stage of radio frequency

amplification is not quite as efficient as a tuned stage, it permits the use of the actual amplifying characteristics of the tube and the simplification of tuning controls. This reduction of efficiency in the first radio frequency stage is counterbalanced by the gain due to the use of regeneration in the detector.

### Control of Oscillation

The proper control of oscillation in radio frequency circuits is a subject which has been given considerable attention since tuned radio frequency circuits 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 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 tendency 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

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.

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.

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

### Tube Control Layout

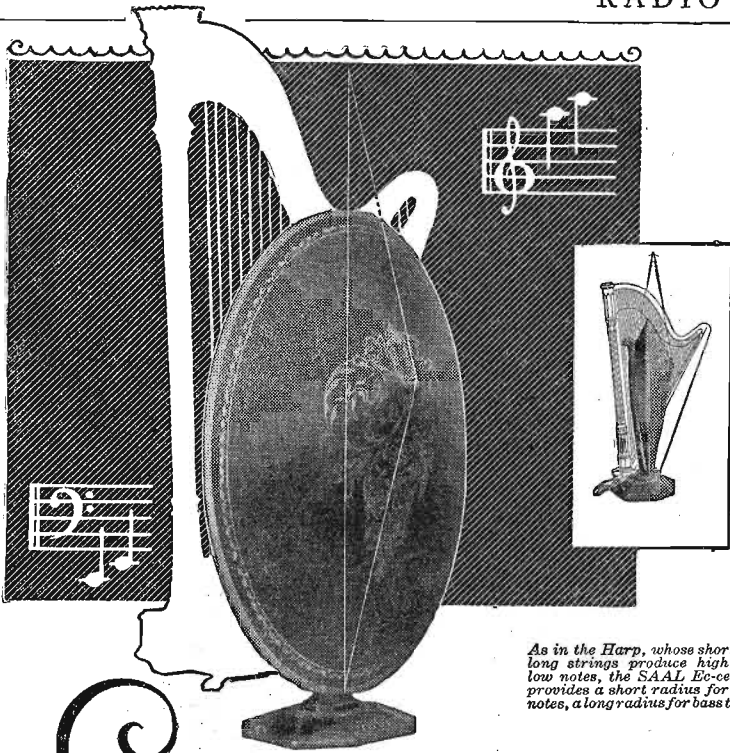
Separate Amperites are provided in each tube lead. An additional control of the filaments of the detector and radio frequency tube filaments is provided in the form of one rheostat, R1.

On first consideration this rheostat will seem 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 voltage for efficient operation than another tube which may be in better con-

(Continued on page 37)

## LIST OF PARTS

1 Bruno "TK" Unitune @ \$20.00	Bruno Radio Corp., Long Island City, N. Y.	\$20.00
1 Bruno Light Switch @ 75 cents	Bruno Radio Corp., 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 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	Samson Electric Co., Canton, Mass.	1.50
1 Carter, No. M6, 6-ohm midget rheostat @ 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 Radiohm @ \$2.00	Central Radio Laboratories, Milwaukee, Wis.	2.00
1 Lignole, No. 1-D, 7"x21" front panel @ \$6.94	The Lignole Corp., Chicago, Ill.	6.94
1 Formica, 5"x20"x3/16" subpanel	Formica Insulation Co., Cincinnati, Ohio	2.34
4 Amperites, No. 1 A, mounted @ \$1.10	Radiall Co., New York City, N. Y.	4.40
1 Amperite, No. 1 A or No. 112 (depending on tube used in last audio stage) @ \$1.10	Radiall Co., New York City, N. Y.	1.10
3 Tobe, 1 mfd. precision condensers @ \$1.25	Tobe Deutschmann Co., 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 cents	International Resistance Co., Philadelphia, Pa.	.50
1 Jones, Type PM, 4-ft. Multiplug @ \$3.00 Type S	Howard B. Jones, Chicago, Ill.	3.00
2 Electrad, .0005 mfd. fixed condensers @ 30 cents	Electrad, Inc., New York City, N. Y.	.60
2 Electrad, Type S, .006 mfd. fixed condensers @ 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 "Grnd." respectively	H. H. Eby Mfg. Co., Philadelphia, Pa.	.30
10 lengths Acme Celatsite Wire with black 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 cabinet	Corbett Cabinet Mfg. Co., St. Marys, Pa.	13.00
Miscellaneous screws, nuts, soldering lugs, etc.		1.00
<b>OPTIONAL</b>		
1 Jewell, type 135 C portable voltmeter	Jewell Electric Inst. Co., Chicago, Ill.	10.00
Total Cost		\$92.68



As in the Harp, whose short and long strings produce high and low notes, the SAAL Ec-centric provides a short radius for high notes, a long radius for bass tones.

# Ec-centric

— 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 Ec-centric 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.



The SAAL Pedestal is an ornament to the most beautiful surroundings. Its pure wooden tone chamber, three feet in length, exceptionally clear mellow reception. Price, \$38



The famous SAAL Soft Speaker, the outstanding speaker of its type, is giving satisfaction regardless of the set or equipment used. Standard with radio engineers. Price, \$22.50

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WORLD FAMOUS MAKERS OF HORNS—CONES—PEDESTALS

# SAAL

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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 Synchronphase.

For Synchronphase 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,

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Factory: Richmond Hill, N. Y.

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



"Good words gain you honor in the market place; but good deeds gain you friendship among men."

It is performance that gains the Synchronphase praise and friendship from its owner.

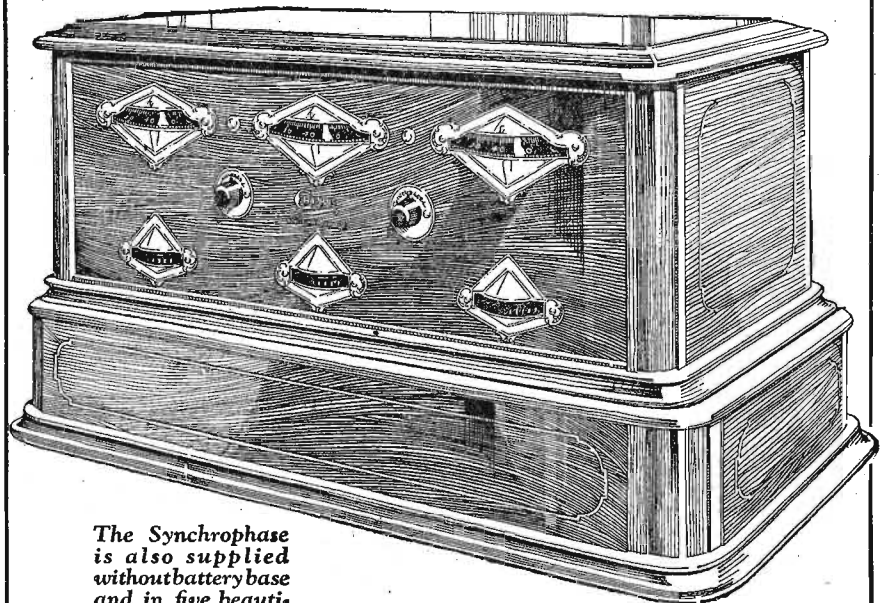
Doctor Myr

## The GREBE SYNCHROPHASE

TRADE MARK REG. U.S. PAT. OFF.



All Grebe apparatus is covered by patents granted and pending.

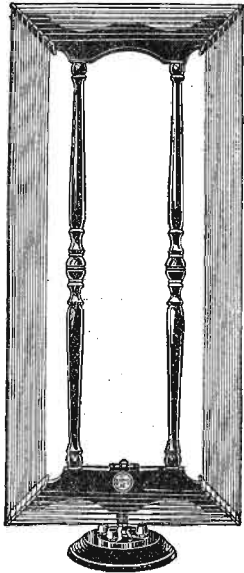


The Synchronphase is also supplied without battery base and in five beautiful console models.

# The Newest in Accessories

## Bodine Deluxe Loop

THE new Bodine DeLuxe loop aerial, shown herewith, is a beautiful piece of furniture and meets the great demand for an efficient, attractive loop requiring a small operating space. The



frame is constructed of solid walnut hand rubbed to a beautiful finish. The whole harmonizes with the most artistic home furnishings.

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

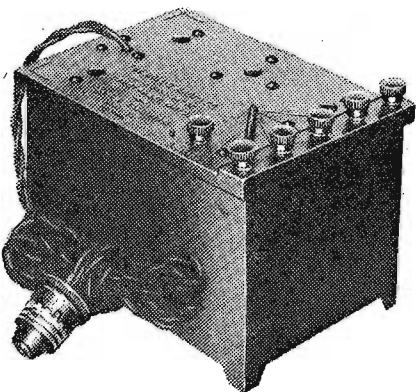
with the winding are well insulated with bakelite.

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 connecting 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 oftentimes of several stations operating on the same or close wave lengths. The De Luxe 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

FOR 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 22½, 45, 67½ and 90.



The Roll-O unit is built solidly and compactly. Its size is 6½ by 4½ by 4¼ inches. The device is contained in a well finished metal case with a Bakelite top.

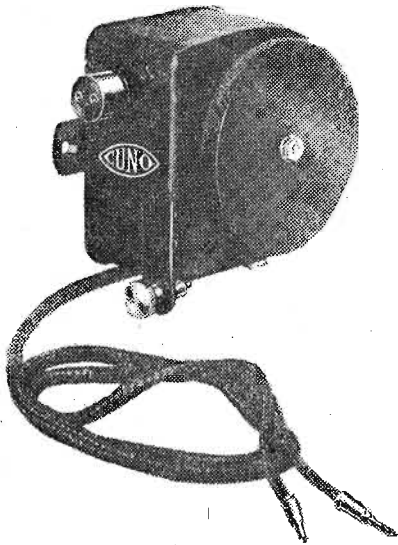
Roll-O B power is intended to be operated from 100 to 120-volt alternating current supplied from the house lighting circuit.

## Helpful Radio Book

A NEW and very helpful book, entitled, "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 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.



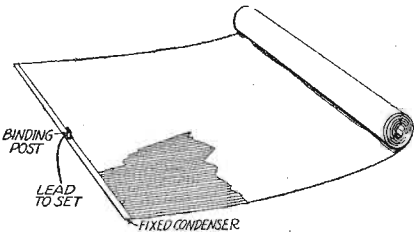
## Cuno Extension Cord Reel

NEW 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 cord.

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 itself.

## Effarsee Inside Aerial

THE 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 interference. It may be employed as a coun-

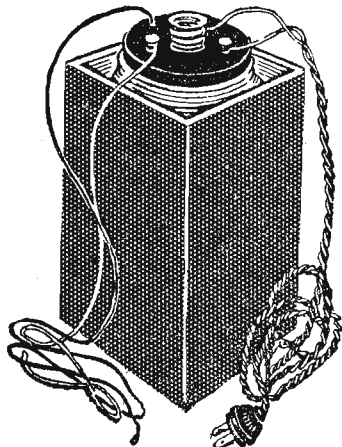


terpoise or additional ground, or when rolled up tight and connected to the regular aerial lead-in the Effarsee acts quite effectively as a static filter. Another recommended use for Effarsee is as a wave trap.

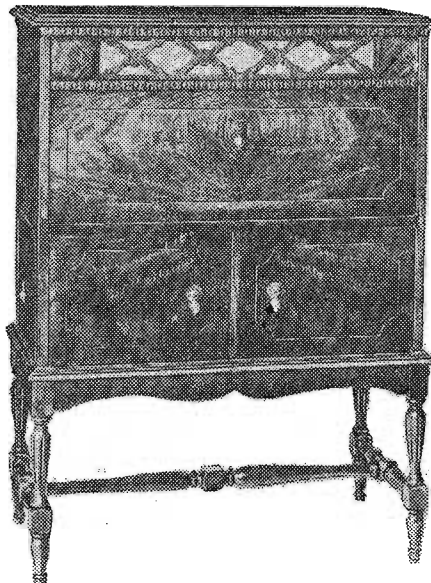
The Effarsee antenna is made by the Fishwick Radio Company, of Cincinnati, and is sold in two sizes, 3 by 10 feet and 3 by 6 feet. Where space permits, the larger model should be installed as it gives greater signal strength.

## 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 receptacle.



## 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 batteries, eliminators, speakers and tools, in a scientifically convenient arrangement and enclose everything in a beautiful piece of period furniture.

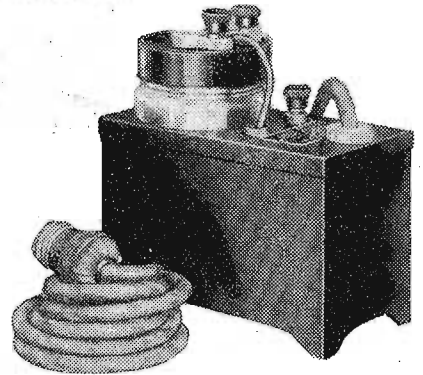
The cabinet above is the Renaissance. It is also manufactured in Sheraton and Jacobean styles. A choice of Moire mahogany or American walnut finish is given. In all three styles the receiver slips right into the section below the gridded top. The cabinet is already wired and a few connections need only be made. Storage battery, charger, hydrometer and water supply fit into a handy drawer pulling out from the left side. A switch enables charging of the battery without

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 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.

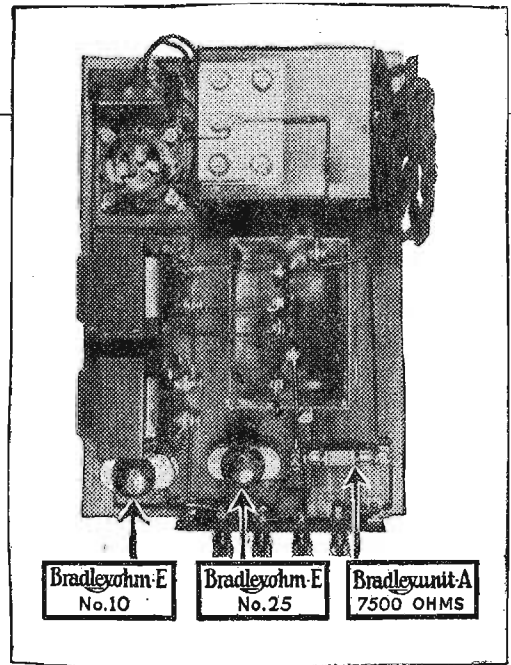
## Silite Trickle Charger

BASED upon a new discovery in rectifying elements made by Clarence E. Ogden, president of the Kodol 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 Kodol 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.

The Silite chargers incorporate the famous new metallic glass electrode known as Silitex, which is made from silica, or sand, amalgamated with certain alloys. Neither the electrodes nor the solution in which they are immersed are decomposed by the charging action.



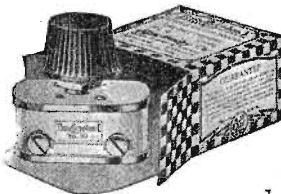
What a whale of a difference a few Bradleyohms make—in a B-Eliminator!

THE leading manufacturers of B-eliminators have adopted Bradleyohm-E as standard equipment for voltage control in their B-eliminators. 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 B-eliminator kit. You will then enjoy perfect voltage control.

Send for folder entitled "How to Build a B-eliminator" describing seven popular hookups.

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



Bradleyohm-E

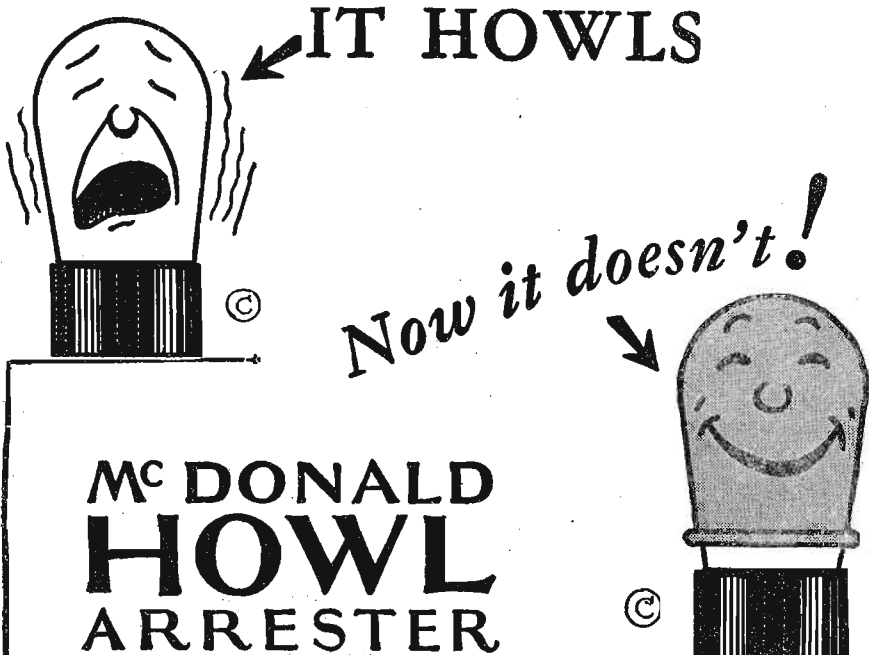
An oversize, variable resistor for plate voltage control in B-eliminators. Ask your dealer for Bradleyohm-E in the checked carton.



Bradleyunit-A

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

Use Allen-Bradley Perfect Radio Devices



**IT HOWLS**

*Now it doesn't!*

**Mc DONALD HOWL ARRESTER**  
(TRADE-MARK)

**"It Stops that Howl!"**

Slip one of these live rubber jackets over each trouble-making tube . . . and the Howl stops.

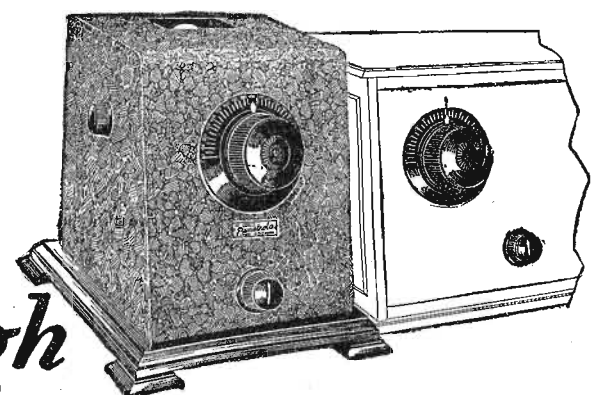
Remember the name! You can get it for every size tube. It sells for 75c each. Just ask your dealer, or write.

*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!"**



**Cut through Interference Penetrola 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 "blooming." 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.

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.



**TOBE**

**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 short-path 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.

In the characteristic TOBE silvered finish, No. 401, 1 Mfd. . . . . \$2.00  
In the characteristic TOBE silvered finish, No. 402, 2 Mfd. . . . . 2.75  
In the characteristic TOBE silvered finish, No. 404, 4 Mfd. . . . . 4.50



**The TOBE Veritas Hi-Current Resistor**

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. . . . . .90 each  
.1 meg. . . . . .80 each  
1/4, 1/2 and 1 meg. . . . . .75 each

**Tobe Deutschmann Co.**  
Engineers, Manufacturers and Importers of Technical Apparatus  
CAMBRIDGE MASSACHUSETTS

**PRICE \$35**

Prices slightly higher West of Rockies and in Canada

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**

**Walbert Penetrola**

Walbert Manufacturing Company  
911 Wrightwood Ave., Chicago

Gentlemen:  
Enclosed please find check or money order 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.

Name \_\_\_\_\_  
Address \_\_\_\_\_



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 Holiday 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 the black mammy for each member of the family to stir good luck into it. If stirring the cake brings good luck, I should think that slicing citron and cracking nuts would be even more lucky.

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.

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:

- 1 cup shortening
2 cups sugar
4 cups flour
2 tsp. baking powder
1/2 tsp. salt
1 cup water
1 lb. seeded white raisins
1/2 lb. each of citron, candied cherries, candied pineapple, candied orange peel and candied lemon peel
1 large cocoanut grated, or 1 1/2 cups
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



Miss Alice Maslin directs the palatial studios of KMOX, "Voice of the 49th State."

Bake in small loaf or round cake tins, lined with heavy greased paper. Bake 2 1/2 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.

Keeping 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

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

SHORT WAVES

By Marcella

(Continued from page 2)

peerless ether pioneer, Mr. Sen Kaney. Mr. Kaney has since been reported as gone from KYW. Lee Sims is on WBEM 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.

"Caw! Caw! Caw!" That's Jerry Sullivan, the announcer who put the CAW in Chi-CAW-go. For some weeks he has been back with that same old call but Jerry is perched on a new antenna these days. Jerry and his "Caw" are making the WIBC 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 per.



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, to remove from the pan. It should be peeled from the cake while still 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

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 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.

bet you are married and just a trifer. 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 Hindermeyer and Dusty as Earl Tucker-man."

When Leo Fitzpatrick picked up his mike and hiked, shaking the dust of Kansas 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 WBEM 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)

Table listing program schedules for Eastern, Central, Mountain, and Pacific time zones. Includes sections for Household Economics, Women's Hour, etc., and Aunt Sammy.

Table listing program schedules for Eastern, Central, Mountain, and Pacific time zones. Includes sections for Women's Clubs, Fashions and Sewing, and Aunt Sammy.

Table listing program schedules for Eastern, Central, Mountain, and Pacific time zones. Includes sections for Garden Talks, Child Care; Training, and Interior Decorating.

Table listing program schedules for Eastern, Central, Mountain, and Pacific time zones. Includes sections for Health and Beauty, Garden Talks, Child Care; Training, and Interior Decorating.

### 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; WTK, Cleveland; WFG, Atlantic City; WLW, Cincinnati; WJR, Detroit; WOOD, Grand Rapids, Mich.; WSOJ, Milwaukee; CKY, Winnipeg; WMC, Memphis; WSM, Nashville; KTHS, Hot Springs, Ark.; KMOX, St. Louis, Mo.; WOC, Davenport; WLB, Kansas City; WOAW, Omaha; KOA, Denver; KFVB, Los Angeles; KPRC, Houston, Tex.; KVOO, Bristow, Okla.; WJAX, Jacksonville, Fla.

2. \$26,000 in prizes will be distributed to the successful contestants, as follows: Twenty-four 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 "Whozit" champion who has submitted the nearest 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 nearest 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 nearest 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 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 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 and 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

be obtained from any of the offices of the broadcasting 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 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; WHOG, Huntington, Ind., 241.8m-1240kc; KRSC, Seattle, Wash., 499.7m-600kc; WCGU, Lakewood, N. J., 350.6m-855.2kc; WICC, Bridgeport, Conn., 285m-1052kc; WLBC, Muncie, Ind., 223.7m-1340kc; WLBE, Brooklyn, N. Y., 230.6m-1300kc; WFBE, Cincinnati, Ohio, 232.4m-1290kc; WOMET, Manitowoc, Wis., 254.1m-1180kc; KGDI, Seattle, Wash., 416.4m-720kc; KGDJ, Cresco, Iowa, 202.6m-1480kc.

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.; KPON, Long Beach, Calif., by Echophone Radio Shop; WCLS, Joliet, Ill., by WCLS, Inc.

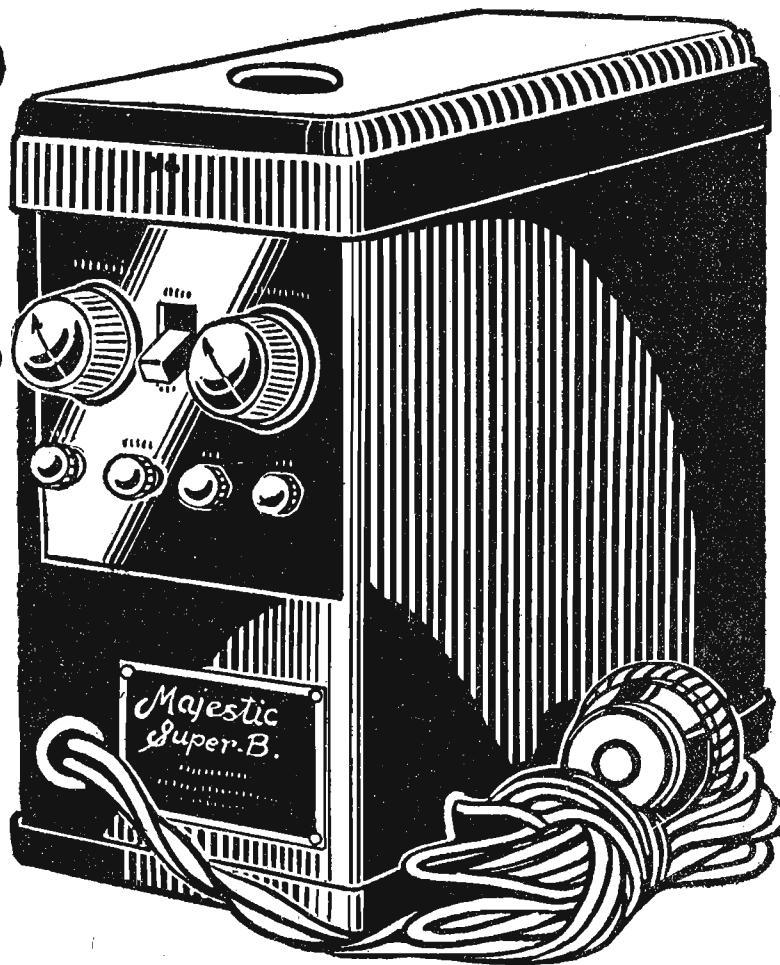
WFBE, Seymour, Ind., is marked delete. This call will be used in the near future by a new Cincinnati station.

The following stations changed wave

# 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 "B" Eliminator**  
Sent for only



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 1/4 inches deep by 5 1/2 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.

## \$5.00 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 convenient than using batteries. Judge for yourself how it will save you money, 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 month 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.

## Send Coupon

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, Dept. 4419 Chicago, Ill.**

### STRAUS & SCHRAM, Dept. R4419 Chicago

Enclosed find \$1.00. Ship special advertised Majestic "B" Battery Eliminator. 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.....

Street, R. F. D. or Box No. ....

Shipping Point.....

Post Office..... State.....

Married or Single..... Nationality or Color.....

### Make the Whole Wiring System Your Aerial

Ingenious New Device Only \$1 Postpaid

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.

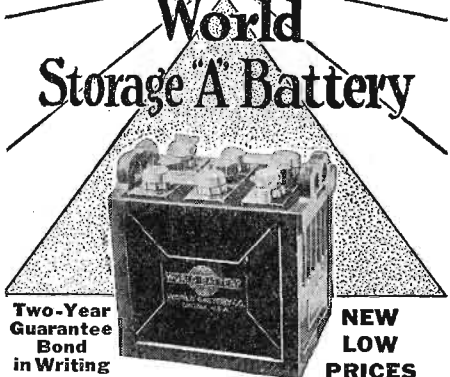
Reduce Static Using the wiring system of your house this way allows a very large proportion of the static to escape into the ground, while it picks up the radio signals perfectly. Radio experts who have tried this simple little device have been amazed by its clarity of reception and freedom from interference. 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 Just pin a dollar bill to your order, which will be filled at once. Nothing else to pay for the new Roll-O "Spirals," which will give you a new radio thrill and a new satisfaction from your set.

(Roll-O Trickle Charger, \$3.95. Send \$1.00 with order. Balance, C. O. D.—plus a few cents postage.) (Roll-O "B" Battery Eliminator, \$7.95. Send \$1.00 with order. Balance, C. O. D.—plus a few cents postage.)

**THE ROLL-O RADIO CO.**  
Dept. Q-10,  
3rd & Sycamore Sts., Cincinnati, Ohio.

### DESIGNED to OUTLAST World Storage "A" Battery



Two-Year Guarantee Bond 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.

<b>Solid Rubber Case Radio Batteries</b>	\$10.00
6-Volt, 100-Ampere	\$10.00
6-Volt, 120-Ampere	\$12.00
6-Volt, 140-Ampere	\$14.00
<b>Solid Rubber Case Auto Batteries</b>	
6-Volt, 11-Plate	\$10.00
6-Volt, 18-Plate	\$12.00
12-Volt, 7-Plate	\$14.50

Set your radio dial at 288.3 meters for the World Storage Battery Station W5BC. Variety—new talent—always interesting. Jerry Sullivan, Dir. and Announcer. Call "G-W-go"

### 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 programs.
  2. Give better programs, or cut the period on the air down and concentrate on quality instead of meaningless quantity.
  3. Begin and quit on time.
  4. Announce call letters plainly. Give letters, town and state at close of each number.
  5. 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. E. G.; Against "Chain"

In answer to P. E. G., of Mt. Pleasant, Iowa, who has it "in" for the "wave jumpers" and said that he cannot get WEAF

and other stations, I ask, what good it does 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 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 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, 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 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 worst one, I think, is WMSG, the Madison Square Garden. This station deliberately jumps the wave length while broadcasting. I was listening about two weeks ago on a Saturday night at 10 o'clock to a beautiful concert from WLW,

Cincinnati. About six times within 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. What to do?—L. H., New York, N. Y.

(The reader whose opinion is quoted above is one who won a prize for excellent reception during the 1926 international reception tests.—Editor's Note.)

# 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

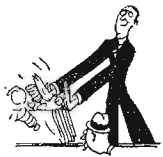
## The Westinghouse Rectigon Battery Charger

©, 1926, W. E. & M. Co.

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



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 batteries.



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



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. Westinghouse also manufactures a complete line of radio instruments, and Micarta panels and tubes.

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

No Storage Battery Radio is Complete Without a Rectigon

### DURHAM



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 Philadelphia, Pa.

### DURHAM METALLIZED RESISTORS



### 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.



**"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 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 you, no matter who or what you are."

He 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 because 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 despicable. 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, 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?"

"THAT night at the club, after you and Mrs. Gayton had gone. He stopped behind to warn me; said that for all the bad blood between us he 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?"

"Heaven help me, I do."

"Were you preparing, a few minutes ago, to 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 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 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 rage. 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-December 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 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 look upon candy—not in the sense of the word Americans, especially Northerners, are accustomed 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**

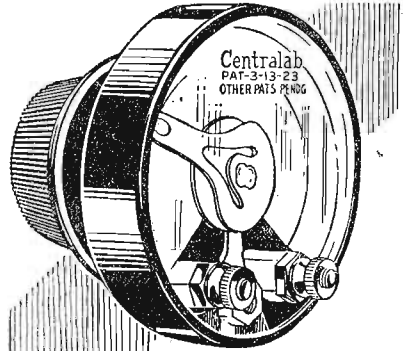
**But "Bottles" Remain Most Expensive Radio Item**

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 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 Manufacturers' association in an interview. "There have been a number of reductions during the past few years, but new types of tubes are continually 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.



**STANDARD Centralab RadiomM**

INSURES clearer, louder 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 remain exact for life of set. \$2.00 for any resistance.

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

**SWITCH TYPE Centralab RadiomM**

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.



With Switch \$2.30

CENTRAL RADIO LABORATORIES  
12 Keefe Ave., Milwaukee, Wis.

Makers of a full line of variable resistances for 69 makers of leading standard sets.



**Tower Meistersinger CONE**

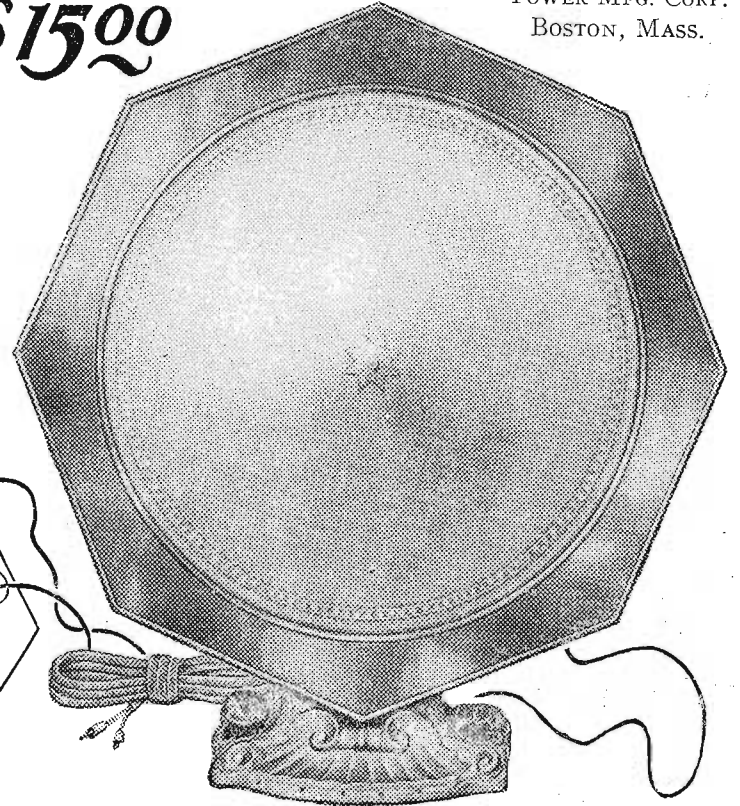
TOWER has built a new Cone—the Meistersinger—a radio speaker of dignified beauty matched only by its rare tonal capabilities. Ideal for power tube operation, the new Meistersinger can also be used as a Wall Model by detaching base. The exclusive driving mechanism and free edge cone, 16" in diameter, 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 appropriate Christmas gift.

On Sale from Coast to Coast.

\$15.00

TOWER MFG. CORP.  
BOSTON, MASS.



# 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 Westinghouse 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 violent hurricanes had taken heavy toll of life and property in Florida and the West

Indies, 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 Canadian 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 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 on 63 meters both voice and telegraph), 10 p. m. Eastern Standard Time, December 25, 1926; January 15, 1927; February 26, 1927.

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 p. m. Eastern Standard Time, December 24, 1926; January 14, 1927; February 25, 1927.

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 Charles Mangold, well known in hotel circles.

### Firm Quits Selling Bloopers

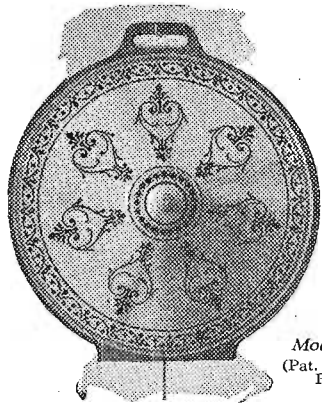
CHICAGO.—War on the Radio bloopers has gained an ally in what is one of the largest retailers of Radio sets in the world

## NOVEMBER 15 ISSUE IS STILL AVAILABLE

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 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.

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

### Windsor Wall or Table Type Cone Speaker Amazes Radio World



Model 210 (Pat. Applied For)

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 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 210 22-Inch Cone Loudspeaker with sounding board and easel back.

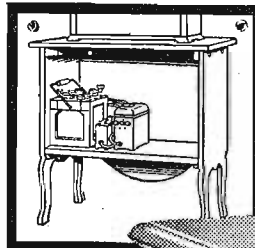
**\$15.00**  
(West of Rockies, \$18)  
(Pat. Applied For)

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



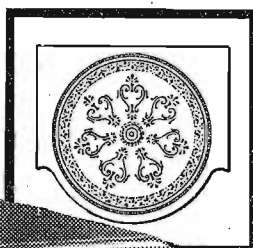
(Pat. Applied For)

In this Windsor Console 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 **\$48.00** (West of Rockies, \$55)



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.

At right is shown the Cone Loudspeaker, with its sounding board, which is quickly and easily removable, allowing instant access to all batteries, battery charger, battery eliminator or other equipment and wiring.



Model 200

**\$29**

Console with Cone Loudspeaker Ready for Set and Batteries (West of Rockies, \$35)

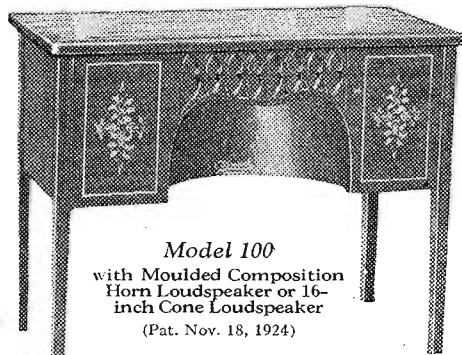
(Pat. Applied For)

Model 200

with 22-inch Cone Loudspeaker

This Windsor Cone Loudspeaker Console is equipped with a 22-inch Windsor Cone Loudspeaker. Its top is 30 in. x 17 in. and is 29 in. high. The battery shelf provides ample space for batteries, charger, battery eliminator and other equipment. Beautifully finished in either Mahogany or Walnut.

## This Is the Fastest Selling Line of Loudspeakers and Loudspeaker Consoles in the Radio World Today



Model 100 with Moulded Composition Horn Loudspeaker or 16-inch Cone Loudspeaker (Pat. Nov. 18, 1924)

Above is shown a beautiful Windsor Loudspeaker Console, finished in either Walnut or Mahogany, which provides ample space on top for any radio set. The battery shelf beneath will accommodate all necessary equipment. Equipped with either Moulded Composition Horn or 16-inch Cone Loudspeaker. Size: 38 in. x 18 in., and 29 in. high. Price **\$40.00** (West of Rockies, \$42.50)

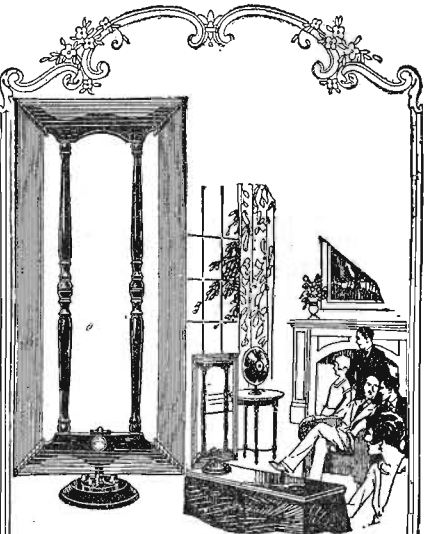
To the right is shown the newest Windsor Loudspeaker Console. It is equipped with a 22-inch Cone Loudspeaker and cabinet suitable for 7-in. radio panels up to 26 inches in length. Battery shelf provides ample space for all equipment. Beautifully finished in either Walnut or Mahogany. Price (without receiving set) **\$44.00** (West of Rockies, \$52.00)

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

Electrical Department

# WINDSOR FURNITURE COMPANY

1418 Carroll Avenue - CHICAGO, ILLINOIS  
Los Angeles Branch—917 Maple Avenue



## An Efficient Loop of Surpassing Beauty

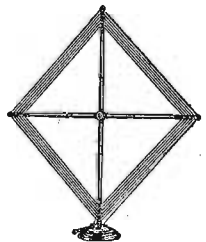
The Bodine De Luxe Loop fulfills perfectly the long felt need for a compact beautiful loop—outstandingly efficient. The symmetrical frame of solid walnut, handrubbed to a beautiful finish, black bakelite mountings, and attractive silk covered windings combine in producing a loop of outstanding beauty.

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

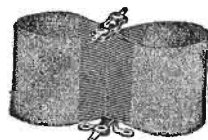
Designed for standard loop sets but can be used effectively with most aerial sets. Write for free illustrated booklet that tells how. Price, Bodine De Luxe Loop, all models, \$12.00.

### Bodine Folding Loop

Exceptionally directional, remarkably 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 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.

Not type of toroidal or doughnut coil can 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 Twin-Eight 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

BODINE ELECTRIC COMPANY  
2260 West Ohio Street  
Chicago, Illinois  
Kindly mail FREE circular describing:  
Bodine Radio Loops  
How to use a loop with aerial receiver.  
How to build the Bodine Twin-Eight Receiver.

Name \_\_\_\_\_  
Address \_\_\_\_\_

# Radio Digest Illustrated

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Vol. XIX

December 1, 1926

No. 4

## 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 course, 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.

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 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 broadcasting 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 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 otherwise. You hear the wreck. It is a whistling, howling 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

A 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.



A—The Jolly Periscope C—The Reverse English  
B—The Allay Oop

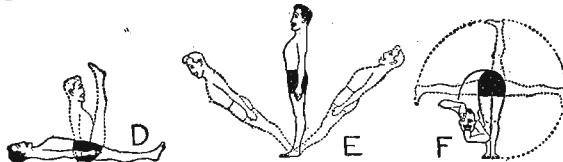
We will now cheerfully spring into lesson B. It's "The Allay-oop." We cannot insult the intelligence of our vast reading public by going into details on this simple of exercises. The professor has called this "merely a tuning up exercise, one designated to take the kinks out of muscles and hair and is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

For instance, you are walking rapidly down Broadway when suddenly someone calls you, thus:

"Hey, Skunkton," or Fuesel or 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 give. Or what have you?



D—The Cheerio F—The Entente Cordiale  
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 Zoom-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 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.

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; sopranos or tenors predominate to the practical 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 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)	Call signal	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					
<b>UNITED STATES STATIONS BY WAVE LENGTHS</b>																								
202.6	1,480	500	KFGB	B. Br Lk., Cal.	238	1,260	15	KFBS	Trinidad, Colo.	260.7	1,150	500	KFJF	Okla. C., Okla.	299.8	1,000	1,000	KSL	S. Lk. Cy., Utah	475.9	630	3,300	WBAP	Ft. Worth, Tex.
204	1,470	500	WBBS	Chicago, Ill.	239.9	1,250	10	KFHL	Oskaloosa, Ia.	263	1,140	100	KFMR	Sioux City, Ia.	300	999.4	100	KUOA	Fayet'ville, Ark.	483.6	620	5,000	WTOA	Oakland, Cal.
205.4	1,460	250	KFVD	Venice, Cal.	240	1,240	10	KFPP	Moberly, Mo.	265	1,131	500	KFMT	St. Louis, Mo.	300.8	990	1,000	WPG	Atlantic City, N.J.	485.1	618	500	WOC	Davenport, Ia.
206.8	1,450	50	KGTT	San F'nco, Cal.	241.8	1,240	50	KFXH	El Paso, Tex.	265.3	1,130	500	KFOT	Houston, Tex.	301.2	980	1,000	WFES	Wollaston, Mass.	491.5	610	1,000	WJAR	Pr'v'dnce, R.I.
209.7	1,430	30	WCBR	Providence, R. I.	242	1,239	250	KFVR	Denver, Colo.	267.7	1,120	2,500	KFJH	Indianapolis, Ind.	305.9	980	500	WMSG	N. Y., N. Y.	499.7	600	500	KFRU	Columbia, Mo.
210	1,428	500	KCNC	Chicago, Ill.	243.8	1,230	500	KGAR	Tucson, Ariz.	272.6	1,100	100	KFAD	Phoenix, Ariz.	309.1	970	10,000	KDKA	Pittsburgh, Pa.	508.2	590	3,300	KFQB	Ft. Worth, Tex.
211.1	1,420	250	KFWO	Avallon, Cal.	244	1,229	100	KDYL	S. L. Cy., Utah	278	1,098	250	KFBB	Havre, Mont.	312.3	960	1,000	KSBA	Shreveport, La.	516.9	580	5,000	WJWC	Chicago, Ill.
212.6	1,410	100	KFWV	Portland, Ore.	245.8	1,220	50	KDYL	S. L. Cy., Utah	280.2	1,071	250	KFBC	San Diego, Cal.	312.6	959	1,000	WKWH	Shreveport, La.	526	570	5,000	WNYC	N. Y., N. Y.
214.2	1,400	500	KFWF	St. Louis, Mo.	247.8	1,210	100	KFIF	Portland, Ore.	282.8	1,060	250	KGBW	Joplin, Mo.	315.6	950	250	KFDM	Beaumont, Tex.	535	560.4	1,000	WYAW	Omaha, Neb.
215	1,395	50	KFJM	Prescott, Ariz.	248.8	1,200	50	KDYL	S. L. Cy., Utah	285.5	1,050	500	KFCA	Creeley, Colo.	319	940	1,000	KOIN	Portland, Ore.	535.4	560	3,500	WYAC	Washington, D. C.
215.7	1,390	50	KFQW	Seattle, Wash.	249.9	1,200	250	KFWY	Albany, N. M.	288.3	1,040	5,000	KFKX	Hastings, Neb.	322.4	930	5,000	KOAT	Denver, Colo.	545.1	550	500	WYAG	Washington, D. C.
217.3	1,380	50	KFAF	San Jose, Cal.	250	1,199	100	KFEC	Portland, Ore.	291.1	1,030	50	KFWC	S'n Br'n'do, C.	322.9	920	1,000	WCAY	M'w'kee, Wis.	552.2	540	500	WYBB	Chicago, Ill.
218.8	1,370	50	KFRW	Olympia, Wash.	251	1,190	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	325.9	920	1,000	WKRC	Cincinnati, O.	555.2	540	500	WYOB	Chicago, Ill.
220	1,363	50	KRAC	Shreveport, La.	252	1,190	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	329.5	910	10,000	WJAZ	Chicago, Ill.	555.2	540	500	WYOB	Chicago, Ill.
220.4	1,360	50	KFUO	Oakland, Cal.	253	1,180	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	331	905.8	50	KGCB	Okla. City, Ok.	555.2	540	500	WYOB	Chicago, Ill.
222	1,350	500	KZRO	Manila, P. I.	254	1,180	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	331.1	900	100	KGBZ	York, Neb.	555.2	540	500	WYOB	Chicago, Ill.
223.7	1,340	100	KFBL	Everett, Wash.	255	1,180	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	333.1	900	100	KGBZ	York, Neb.	555.2	540	500	WYOB	Chicago, Ill.
225	1,333	10	WKBC	Birmingham, Ala.	256.3	1,170	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	336.9	890	500	KFMB	Minneapolis, Minn.	555.2	540	500	WYOB	Chicago, Ill.
225.4	1,330	10	KFBU	Juneau, Alaska	257	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	339.9	880	1,000	KNX	Los Angeles, Cal.	555.2	540	500	WYOB	Chicago, Ill.
228.9	1,310	1,000	KMMJ	Clay City, Neb.	258	1,162	250	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	340.7	880	1,000	WJAX	Jacksonville, Fla.	555.2	540	500	WYOB	Chicago, Ill.
230.6	1,300	100	KDZR	Duluth, Minn.	259	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	340.7	880	1,000	WJAX	Jacksonville, Fla.	555.2	540	500	WYOB	Chicago, Ill.
232.4	1,290	500	KFON	St. Paul, Minn.	260	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	344.6	870	5,000	WCBZ	Zion, Ill.	555.2	540	500	WYOB	Chicago, Ill.
234.2	1,280	50	KFUP	Denver, Colo.	261	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	347.8	862	50	KGBZ	York, Neb.	555.2	540	500	WYOB	Chicago, Ill.
235	1,276	100	WJBC	La Salle, Ill.	262	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	348.6	860	1,000	KBX	State College, N.M.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	263	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	350.6	855.2	50	WCGU	L'kw'd, N. J.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	264	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	352.7	850	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	265	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	357.1	839.6	1,000	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	266	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	360	833	1,000	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	267	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	362.5	827	250	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	268	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	365.6	820	1,000	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	269	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	367	817	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	270	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	271	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	272	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	273	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	274	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	275	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	276	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	277	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	278	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	279	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	280	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	281	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	282	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	283	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	284	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	285	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La Salle, Ill.	286	1,160	100	KFEC	Portland, Ore.	291.1	1,010	500	KFBC	San Diego, Cal.	372.7	810	500	WJAD	Waco, Tex.	555.2	540	500	WYOB	Chicago, Ill.
236.1	1,270	100	WJBC	La																				

# MABEL GARRISON OVER WEAF CHAIN

## HIGH LIGHTS OF THE AIR

**C**OON-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.

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 American music.

Both Saturdays, December 4 and 11, the Boston Symphony orchestra will 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 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.

Although only nineteen the young musician below, Lillian Rehberg, is one of the best cellists in the United States. She is a staff artist of the Edison studio of KYW, Chicago, and may be heard between 9 and 9:30 p. m. Central time in solo or ensemble numbers.



Here is the Mysterious Duo which is being featured over six years old and we understand with masks removed two popular artists of the air receive would do justice Both are well known Dallas artists and veter

### WEDNESDAY, DECEMBER 1

#### Headliners

Eastern	Central	Mountain	Pacific
7:30 p. m.	6:30	5:30	4:30
WOC (483.6m-620kc) Voss Vagabonds.	7	6	5
WQJ (447.5m-670kc) Operatic hour.	8	7:30	6:30
WCAU (277.6m-1080kc) Alexander Skibinsky, violinist.	8:30	7:30	5:30
WHAS (399.8m-750kc) Virginia Vetter's Entertainers.	9	8:15	7:15
WCCO (416.4m-720kc) Eleanor Poehler, soprano. Corinne Jordan, entertainer.	9:45	7:45	6:45
WDAF (365.6m-820kc) Ivanhoe band.	10	9	8
KTHS (374.8m-800kc) Folk songs favorites, ensemble.	10:15	9:15	8:15
WCAU (277.6m-1080kc) Stan Lee Broza and Dave Kolontz, comedy.	10:15	9:15	8:15
WJZ (451.3m-660kc) Record boys.	10:15	9:15	8:15
WLW (422.3m-710kc) Heerman trio.	10:15	9:15	8:15
KFUO (545.1m-550kc) "Is It Lawful to Give Tribute to Caesar?" Lyric quartet.	10:15	9:15	8:15
KOA (322.4m-930kc) Newest dance steps.	10:15	9:15	8:15
WCO (416.4m-720kc) Flute and clarinet trio.	10:15	9:15	8:15
WEAF (491.5m-610kc) "Trial by Jury," WEAF Light Opera company.	10:15	9:15	8:15
WHN (361.2m-830kc) Clarence Williams' trio.	11	10	9
WSM (282.8m-1060kc) Peabody ensemble.	11	10	9

### WEDNESDAY, DECEMBER 8

#### Headliners

Eastern	Central	Mountain	Pacific
6:30 p. m.	5:30	4:30	3:30
WGR (319m-940kc) Program of Old Gospel hymns, two pianos.	7:30	6:30	5:30
WOC (483.6m-620kc) Voss Vagabonds.	8	7	6
WEAF (491.5m-610kc) Salon concert, Augustine Jacquillard, soprano.	8:15	7:15	6:15
WHB (365.6m-820kc) Victor Herbert program.	8:15	7:15	6:15
WRVA (256m-1170kc) Smithers Hawaiian players.	8:30	7:30	6:30
WGY (379.5m-790kc) Mendelssohn club concert.	8:30	7:30	6:30
WHAS (399.8m-750kc) Joe Hillebrand and his orchestra.	8:30	7:30	6:30
WRVA (256m-1170kc) Recital, Aliene Stosberg.	9	8	7
WRVA (256m-1170kc) Original Negro songs and stories.	9:15	8:15	7:15
KPRC (296.9m-1010kc) Elaine Sawyer, Texas Bluebird.	9:30	8:30	7:30
KPRC (296.9m-1010kc) Orpheus club.	9:30	8:30	7:30
WRVA (256m-1170kc) Hazel Moses, harpist.	10	9	8
KPRC (296.9m-1010kc) Mike Gomez and Sherman Oldham.	10:05	9:05	8:05
KTHS (374.8m-800kc) Lawson Reid, organist.	10:15	9:15	8:15
KFUO (545.1m-550kc) "Which Is the Great Commandment in the Law?" Rev. Gerecke's orchestra.	10:30	9:30	8:30
KOA (322.4m-930kc) Frank Dinhaupt, baritone prize winner. Miranda trio.	10:30	9:30	8:30
WOC (483.6m-620kc) Herman Schmidt, organist; Agnes Dodeen, contralto.	11	10	9
WSM (282m-1060kc) Lawrence Goodman, pianist.	12:05	11:05	10:05
KTHS (374.8m-800kc) Mona Motor Oil twins.	12:05	11:05	10:05

#### Educational Features

#### Wednesday

Eastern	Central	Mountain	Pacific
4 p. m.	3	2	1
KFAB (340.7m-880kc) Sociology lecture.	6:30	5:30	4:30
WNYC (526.6m-570kc) Elementary Spanish lessons.	7:30	6:30	5:30
KVOO (374.8m-800kc) Law lecture, U. of T.	7:30	6:30	5:30
WDAF (365.6m-820kc) School of the Air.	7:30	6:30	5:30
WNYC (526m-570kc) Advanced Spanish lessons.	7:30	6:30	5:30
KSAC (340.7m-880kc) College of the Air.	7:45	6:45	5:45
KDKA (309.1m-970kc) University of Pittsburgh.	7:55	6:55	5:55
WDBO (239.9m-1250kc) Rollins college.	8:05	7:05	6:05
WOR (405.2m-740kc) N. Y. U. Child training, Dr. Nason.	9:10	8:10	7:10
WMAQ (447.5m-670kc) Lecture, U. of C., Prof. Fay-Cooper Cole.	10:10	9:10	8:10
KOAC (280.2m-1070kc) "Basketball Practice and Theory," home study course.	10:10	9:10	8:10
KWSC (348.6m-860kc) Dec. 1, "Hoping Is a Bad Word"; Dec. 8, "If Is a Bad Word."	11	10	9
KLX (508.2m-590kc) Educational program.	11:15	10:15	9:15
KOAC (280.2m-1070kc) Story course.	11:15	10:15	9:15

#### Regular Wednesday Features

**Eastern Time Stations**  
 CFCF 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.  
 FWX 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.  
 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 program.  
 WBZ Springfield, Mass. (333.1m-900kc) 7:15 p. m. orchestra; 7:30, nature league; 8, musicale; 9, Barnstormers; 9:30, musicale.  
 WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. orchestra; 8, recital; 8-11:30, WEAF.  
 WCAU Philadelphia, Pa. (277.6m-1080kc) 7:30 p. m. Schellenburg recital; 8, popular program; 10, Cheer-up club.  
 WCWS Bridgeport, Conn. (285.5m-1050kc) 8 p. m. 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. (239.9m-1250kc) 9 p. m. Chamber of Commerce; 10, musical travels.  
 WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner music; 7, Synagogue Services by the United Synagogue of America; 7:30, United States Army band; WTAG, WJAR, WTAM, WRC; 8, Salon concert, WCAE; 8:30, Davis Saxophone Octet, WJAR, WRC, WCAE; WEEL, WLIT, WCSH, WCR, WSAI; 9, WJZ Troubadours, WEEL, WGR, WRC, WCAE, WWT, KSD, WCO, WLII, WSAI; 9:30, Moment musicale, WEEL, WGR, WCSH, KSD, WWT; 10, Smith Bros.; WTAG, WGR, WRC, WCAE, WWT, KSD, WOC, WSAI, WCO, WDAF; 10:30, WEAF Light Opera company, WCAE; 10:30, Ben Bernie orchestra from the Hotel Roosevelt.  
 WEA Columbus, Ohio (293.9m-1020kc) 8:45 p. m. 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. Adolphia dance orchestra.  
 WJBE Clearwater, Fla. (265.3m-1130kc) 8:30 p. m. open house.  
 WCHP 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, WJZ program.  
 WHN New York, N. Y. (361.2m-830kc) 7:30 p. m. Loew's Lexington Theatre organ recital; 9:30, Loew's 7th Ave. Theatre concert; 10, Roseland dance orchestra; 11:30, Silver Slipper orchestra; 12, Cotton club 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) 8-8:30 p. m. Popular program; 8:30-9:30 classical program; 9:30-10, studio program.  
 WJR Detroit, Mich. (516.9m-580kc) 7 p. m. Jean Goldkette's Petite symphony orchestra; soloists; 7:45, Good Will Oakland and Chief Pontiac; 9, studio program; 10, Murphy Brothers, organist, tenor, baritone; 12, Merry Old Chief and his Jesters.  
 WJZ New York, N. Y. (454.3m-680kc) 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.  
 WLIT Philadelphia, Pa. (394.5m-760kc) 8 p. m. Concert orchestra; 8:30, WEAF; 9, Stanley theater hour; 10, dance orchestra.  
 WLW Cincinnati, Ohio (422.3m-710kc) 6 p. m. Robert Visconti's orchestra; 7:40, Robert Visconti's orchestra; 10, Heerman trio; 11, organ recital; Johanna Grosse.  
 WLW New York, N. Y. (288.3m-1040kc) 10 p. m. musicale.  
 WMAK Buffalo, N. Y. (265.5m-1130kc) 7:30 p. m. Eastman theater, WGY; 8:15, WHAM program; 9, musicale; 10, WFBL.  
 WMA New York, N. Y. (340.7m-880kc) 6 p. m. Ernie Golden and his Hotel McAlpin orchestra; 7:30, Finkenbergs Radio Franks; 9, Altsuhl's quartette; 10:30, Nest Club orchestra; 12, McAlpin entertainers.  
 WNYC New York, N. Y. (526m-570kc) 6:10 p. m. Piano selections.  
 WOO Philadelphia, Pa. (508.2m-590kc) 7:30 p. m. Hotel Sylvania dance orchestra; 8:10, lecture, Temple university; 8:30, Sesqui Centennial concert; 10, Fox theater orchestra; 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; 7, Studio Guild hour.  
 WRC Washington, D. C. (468.5m-640kc) 7 p. m. Lee House trio; 7:30, U. S. Army band; 8:30-9, WEAF; 9, WEAF; 9:30, staff program; 10, WEAF.  
 WRVA Richmond, Va. (256.3m-1170kc) 8 p. m. Headliners.  
 WSAI Cincinnati, Ohio (325.9m-920kc) 7:30 p. m. Bosworth artist series; 10, WEAF; 10:30, Congress Flexing string quartet.  
 WTRC Worcester, Mass. (545.1m-550kc) 7 p. m. Powers Coal Miners; 7:30, WEAF; 8, Bancroft 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 Horowitz Collegian serenaders.  
 WWT Detroit, Mich. (352.7m-820kc) 6 p. m. Dinner concert; 8, Detroit News orchestra; 9, WEAF; 10, WEAF.

#### Central Time Stations

WKY Winnipeg, Can. (384.4m-780kc) 9-10 p. m. Prof. Gregori Gorbovitsky, violinist.  
 KFAB Lincoln, Neb. (340.7m-880kc) 5:30-6:30 p. m. 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 recital; 6:30, quartet; 7:30, quartet; 8, quartet; 9, soloists; 10:15, orchestra; 12-1, dance music.  
 KPRC Houston, Texas (296.8m-1000kc) 7:30 p. m. Jack Willrich's orchestra; 8:30, evening concert; 9-11, 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. musicale; 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 DeBarby 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; 8, WEA; 8:30, musicale; 9, WEAF; 9:30, musicale; 10:30 Marigold Ball Room orchestra; 11:30, organ recital, Eddie Dunstleder.  
 WENR Chicago, Ill. (491.5m-610kc) 6 p. m. talks; 7, Brevort trio; 8, variety hour; 10, Alamo orchestra; 12, entertainers.  
 WCOA Pensacola, Fla. (252m-1190kc) 6:30 p. m. Evening program.  
 WDAF Kansas City, Mo. (365.6m-820kc) 6-7 p. m. School of the air; 8-9, musicale; 9-9:30, WEAF; 10:30-12, Nighthawk frolics.  
 WEBB Chicago, Ill. (370.2m-810kc) 7 p. m. Edgewater Beach hotel orchestra; 9-11, orchestra, artists; 12-12:30, revue.  
 WEMC Berrien Springs, Mich. (315.6m-950kc) 8:15 p. m. Dr. O. R. Cooper; recital.  
 WENR Chicago, Ill. (265.3m-1130kc) 6-7 p. m. Rauland trio; 8-10, All-American Pioneers; 12-2, frolic.  
 WGN Chicago, Ill. (302.8m-990kc) 6:45-7 p. m. Request program, Drake concert ensemble; Blackstone string quintet; 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.  
 WHB Kansas City, Mo. (365.6m-820kc) 7-8 p. m. K. C. artist string trio; 10:45-11:45, midweek musicale.  
 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, 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.  
 WIBO Chicago, Ill. (225.4m-1330kc) 6-8 p. m. dinner concert; 10-12, dance music.  
 WJAZ Chicago, Ill. (329.5m-910kc) 6:30 p. m. Shoreland hotel; 6:45-8, musicale; 8, highlights; 9, diversified program; 10:30, frolic.  
 WJLD Mooseheart, Ill. (370.2m-810kc) 8-9 p. m. child artists; 11-12, Palmer House Victorians.  
 WLII Chicago, Ill. (302.8m-990kc) 7-7:10 p. m. Dinner concert, Drake concert ensemble; Blackstone string quintet; 7:10, Old Fashioned Almanack and the Million Song; 7:22, Adventures of Oney Fred Sweet; 7:30, recital, Tommy Coates, baritone; Edward Barry, pianist; 8, WEAF; 12-1 a. m., frolic.  
 WLS Chicago, Ill. (344.6m-870kc) 5:40 p. m. Al Meigs, organist; 6, May and June; 6:40, Maurice 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, Maurice Sherman's College Inn orchestra.  
 WMAQ Chicago, Ill. (447.5m-670kc) 6 p. m. Chicago theater organ; 8, Gus Edwards orchestra; 9, music; 9:30, WMAQ air line.  
 WMBB Chicago, Ill. (249.9m-1200kc) 7-8:30 p. m. Trianon duo; Bessie Beelman, contralto; Monte Blount, tenor; 8:30-11, orchestra, artists.  
 WQAI San Antonio, Texas (394.5m-760kc) 8:30-9:30 p. m. Delaware Funnel program.  
 WOC Davenport, Iowa (483.6m-620kc) 9-9:30 p. m. 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.  
 WOOD 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 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.  
 WPC 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 entertainers.

#### Mountain Time Stations

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

#### Pacific Time Stations

KFI Los Angeles, Calif. (467m-640kc) 7 p. m. Virginia ballroom orchestra; 7:30, Nick Harris; 8-9, program, California Petroleum corp.; 9-10, semi-classical hour; 10-11, Sunset instrumental quartet.  
 KFWB Hollywood, Calif. (252m-1190kc) 6-7 p. m. Pontiac dinner hour; 7:50, news; 9-10, Bill Hatch and his orchestra; 10-11, Warner Brothers frolic.  
 KGO Oakland, Calif. (361.2m-830kc) 6-6:55 p. m. Stanislas Bem's Little symphony; 8:30, Bem's Little symphony; 9, address.  
 KGW Portland, Ore. (491.5m-610kc) 8-9 p. m. concert; 9-10, entertainment.  
 KHJ Los Angeles, Calif. (405.2m-740kc) 6:30-7:30 p. m. children's hour; 8-10, features; 10-11, Jerry Grant and his dance orchestra.  
 KLX Oakland, Calif. (508.2m-590kc) 6:30-7 p. m. Athens Athletic club orchestra; 9-10, program.  
 KMTR Hollywood, Calif. (370.2m-810kc) 7-7:50 p. m. musical program; 8-9, KMTR concert orchestra; 9-10, L. A. Ry dance orchestra; 10-12, Palais de Danse.  
 KNX Hollywood, Calif. (336.9m-890kc) 7 p. m. musicale; 8, musicale; 9, program; 10, Edgewater club orchestra; 11, Hotel Ambassador.  
 KPO San Francisco, Calif. (428.3m-700kc) 6:30-7 p. m. States Restaurant orchestra; 7-7:30, Rudy Seiger's Fairmont hotel concert orchestra; 8-9, Atwater Kent artists; 9-10, Cliff hotel dance orchestra; 10-11, States Restaurant orchestra; 11-12, Cabiria cafe orchestra.  
 KWSC Fullman, Wash. (348.6m-860kc) 7:30 p. m. Concert, talks.

### THURSDAY, DECEMBER 2

#### Headliners

Eastern	Central	Mountain	Pacific
8 p. m.	7	6	5
KDKA (309.1m-970kc) Pittsburgh Box Company Wonder-hour.	8:15	7:15	6:15
KENF (461.3m-650kc) Old familiar tunes.	8:30	7:30	6:30
WCB (344.6m-870kc) Cornet quartet, celestial bells, vocal trio.	8:30	7:30	6:30
WLW (422.3m-710kc) Special feature.	8:45	7:45	6:45
WQJ (447.5m-670kc) Band concert.	9	8	7
WPG (299.8m-1000kc) Cotter's Saturday night.	9:15	8:15	7:15
KDKA (309.1m-970kc) Famous Composers, Little symphony orchestra.	9:30	8:30	7:30
WHAS (399.8m-750kc) Mrs. C. Horne, soprano.	9:30	8:30	7:30
WCAU (277.6m-1080kc) Carl Zoehrn's songs; Frank Kienzie, pianist.	9:45	8:45	7:45
KDKA (309.1m-970kc) Little symphony orchestra. Clara Huhn, soprano; J. Lloyd Mahony, baritone.	10	9	8
KTDS (440.9m-680kc) Hazel Scott, organist.	10:15	9:15	8:15
KOHL (305.9m-980kc) Piano company program.	10:30	9:30	8:30
WSB (428.3m-700kc) Miss Daisy Cobb.	10:30	9:30	8:30
WHAS (399.8m-750kc) Honolulu Serenaders.	10:30	9:30	8:30
WFAA (475.9m-630kc) Schubert choral club.	10:30	9:30	8:30
WMC (499.7m-600kc) Vesey ensemble.	10:30	9:30	8:30
WGY (379.5m-790kc) Comic opera, "H. M. S. Pinafore."	10:30	9:30	8:30
WLW (422.3m-710kc) Latonia Melody.	10:30	9:30	8:30
KTHS (374.8m-800kc) Leona latone, pianist.	10:30	9:30	8:30
WTIC (475.9m-630kc) Helen V. Cain, soprano; Mr. Sullivan, tenor.	10:30	9:30	8:30
WMA (340.7m-880kc) Whozit contest.	10:30	9:30	





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

**WBMM Chicago, Ill.** (226m-1330kc) 8 p. m. 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. music.

**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, Brevort trio; 8, classical hour; 10, Alamo orchestra; 11-12, Alamo entertainers.

**WDAF Kansas City, Mo.** (365.6m-820kc) 6-7 p. m. school of the air; 11:45-1, Nighthawk frolic.

**WEBB Chicago, Ill.** (370.2m-810kc) 7-8 p. m. Up-ton theater; 9:30-11, music; 11, Edgewater Beach hotel orchestra; Hickey and Johnson; Rita McEwen Cook Sisters.

**WENR Chicago, Ill.** (265.3m-1130kc) 6-7 p. m. Rauland trio; 8-10, All-American Pioneers, Vin Lindhe.

**WFAA Dallas, Texas** (475.9m-630kc) 6:30-7:30 p. m. Baker hotel orchestra; 8:30-9:30, concert.

**WGN Chicago, Ill.** (302.8m-890kc) 6:45-7 p. m. request program, Drake concert ensemble; Blackstone string quartet; 8-10, WEAF; 10, Sam 'n' Henry; 10:10, The Music Box; 10:20, Mark Love, bass; Bobby Meeker's Drake hotel orchestra; 10:40-11, songs, Correll and Gosden.

**WHAD Milwaukee, Wis.** (275.1m-1090kc) 6:15 p. m. orchestra and vocal selections, Wisconsin hotel orchestra; 8:30m, classical studio program.

**WHAS Louisville, Ky.** (399.8m-750kc) 7:30-9 p. m. 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.

**WHY 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.

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

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

**WJDD Mooseheart, Ill.** (370.2m-810kc) 8-9 p. m. child artists; 11-1 a. m. Palmer House Victorians.

**WLIB Chicago, Ill.** (302.8m-890kc) 7-7:10 p. m. dinner concert, Drake concert ensemble, Blackstone string quartet; 7:10, Old Fashioned Almanack and the Million Sing; 7:22, Adventures of Oney Fred Sweet; 7:30-8, songs, Correll and Gosden; Coon-Saunders orchestra; 11-12, Ruth Farley, organist; songs, Correll and Gosden; Bobby Meeker's Drake hotel dance orchestra; 'waltz time'; 12-1 a. m. frolic.

**WLS Chicago, Ill.** (344.6m-870kc) 6:30 p. m. sports; 6:40-7:55, artists; 10:30, organist; 11-12, orchestras.

**WMAQ Chicago, Ill.** (447.5m-670kc) 6 p. m. Chicago theater organ; 6:30, Gus Edwards' orchestra; 8, orchestra; 8, program; 9:50, air line.

**WMBB Chicago, Ill.** (249.9m-1200kc) 7-8:30 p. m. Trianon ensemble; 8:30-11, orchestra; Arthur Truesdale.

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

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

**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, Ill.** (275.1m-1090kc) 7 p. m. Webster Hotel duo orchestra; 9, music.

**WQJ Chicago, Ill.** (447.5m-670kc) 7-8 p. m. Rainbo Gardens orchestra; specialty; 10-2 a. m. Rainbo 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; 9:30-11, New Jeffrey Tavern syncopators.

**WSWC Chicago, Ill.** (275.6m-1090kc) 6 p. m. dinner program; Terrace Garden orchestra; 8, production, the Magic Crystal; 10, popular airs; 12, Witching hour program.

**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.

**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; 7:30-7:30, Rudy Seiger's Fairmont hotel concert orchestra; 8-9, U. of California; 9-10, Hawaiians; 10-11, Mandarin Cafe orchestra.

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

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

FRIDAY DECEMBER 3

Headliners

Eastern	Central	Mountain	Pacific
7:30 p. m.	6:30	5:30	4:30
WEAF (491.5m-610kc), Fairyland.	WMAQ (340.7m-880kc) Whozit contest.	WTIC (475.9m-630kc) Austin organ recital.	
7:35	6:35	5:35	4:35
WGY (379.5m-790kc) Instrumental program.			



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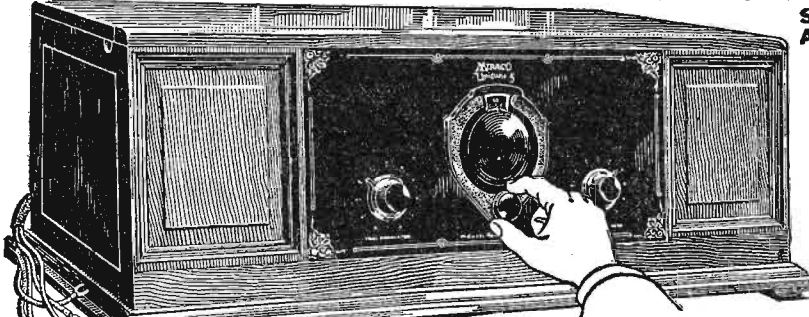
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Real Single Dial Control! Magnificent Big Powerful Miraco "Unitune-5" Get Special Offer. Amazing Low Price!

The celebrated Miraco Ultra-5—U.S. Navy type circuit, has also been adapted to Single Dial Tuning—without sacrifice of selectivity, volume, clearness, power, tone, or distance getting qualities! In the magnificent big Miraco Unitune-5, above simply one vernier knob for stations everywhere. Beautiful hand-rubbed, piano hinged, solid walnut cabinet, 28 in. long, 15 in. deep, 10 in. high. Sloping Bakelite panel is walnut finished to match. Also offered on 30 days free trial!

Coast to Coast and foreign Reception Certified by Miraco users Notice!

Enormous sales of the celebrated Miraco big fine Receivers resulting from delighted users so highly endorsing them to friends again enable us to add hosts of costly new features, latest refinements and up-to-the-minute improvements such as you might expect to find only on much higher priced sets. Miraco's this year are still better—more beautiful—more powerful—more powerful for less money than ever before.

USER-AGENTS WANTED . . . WRITE! Reports from users everywhere leave little for us to add. These are only a few of the many in our files and which we receive daily. Send coupon for plenty of additional proof and testimony of nearby users.

**HAS NO EQUAL FOR TONE VOLUME, DISTANCE.** North Wildwood, N.J. Miraco best packed set I ever saw shipped. Wonderful tone, volume, and distance. First night received 47 stations on Loudspeaker. 10 to last night, the 5th day, I have received exactly the same station, farthest KGO, Oakland, Calif., on loudspeaker. Also Porto Rico, Cuba and Canada. Francis E. Lee.

**TONE QUALITY PLEASES EVERYONE.** Philadelphia, Pa. Everyone that hears the Miraco is very pleased with it. From Cuba, Mexico, etc. Tuned in during international broadcast week, KGO, Oakland, Calif.; WYD, New York, N.Y.; 6K, Cuba; 2EB, Edinburgh, Scotland; also a station in Buenos Aires, Argentina. Geo. W. Hill, Jr.

**WISCONSIN HEARS COAST TO COAST.** Racine, Wis. I got station 2LO London last Wednesday night on my Miraco. Heard a check-out and announcement. Have also heard PWX, Havana, Cuba; CYZ, Mexico City and Los Angeles. From coast to coast. Lawrence Risberg.

**SELECTIVITY—CUTS THROUGH STRONG LOCAL STATIONS.** I am more than satisfied with my Miraco. I can cut through WWJ, WOK, WJR, West, W. Superior, local stations, and this is done with a quarter of a turn. In every way it is simply perfect. Charles Egan.

**UTAH ENJOYS COAST TO COAST PROGRAMS.** Hiber City, Utah. The Miraco sure can't be beat at any price. Coast to coast it sure does and more. I have had stations in New York and Cuba in the east, and scores of other stations on the west coast. I have logged up to date 150 stations and they all come in wonderfully. Monte Giles.

**MIRACO WINS AGAINST 3 OTHER NAMES.** Pearland, Texas. I tried three other makes and the Miraco is the best of them all. Received KFI, Los Angeles, Calif., on loudspeaker. O. H. Richards.

**Nacogdoches, Texas.** Only Miraco I have heard stations from Cuba to San Francisco and from Chicago City to Pittsburgh. Walter M. Frisbie.

**COAST TO COAST LOUD AND CLEAR.** Guthrie, Okla. No local station over 30 stations and got over 1500 miles on the loud speaker. The first night—our first experience tuning a radio. The third night we got WJAX Jacksonville, Florida and KFI Los Angeles, Calif., on the loudspeaker. Neighbors say Miraco is the best they have ever heard. O. R. Wood.

**MIRACO BEATS A SUPER EIGHT.** Cobalt, Ontario, Canada. Miraco is one of the best radios in all the north country. There is a man here who has a big Super eight and who has a Miraco beat it. W. W. Sargent.

**OUTPERFORMS SOME \$300 SETS.** Blakeslee, Ga. I am well pleased with my Miraco. It does better than machines that cost \$300 or more. J. D. Tison.

Tested and approved by all of Radio's Highest Authorities

Send Coupon for Amazing Special Offer!

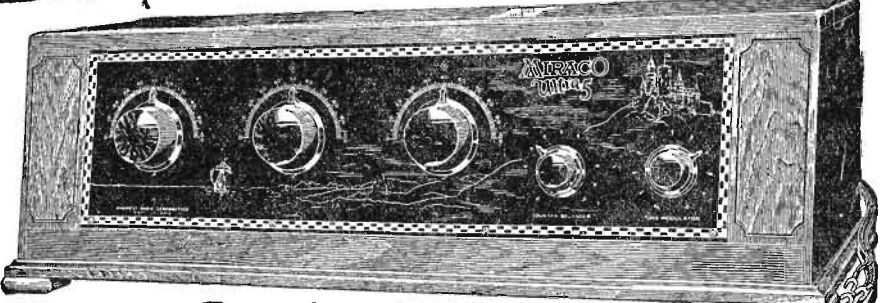
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GET SPECIAL OFFER One year GUARANTEE

to User-Agents who will allow friends to listen to their Miracos.



Big Powerful New MIRACO TRADE MARK REGISTERED

ULTRA-SELECTIVE LONG DISTANCE 5 TUBE SETS EASY ON BATTERIES Unless Trial Proves Your Miraco the Most Selective, Clearest Toned, and Most Powerful Distance Getter—Don't Buy it!

No need to wear out expensive batteries burning 6, 7 or 8 tubes when users everywhere are reporting that the big latest Miraco 5-tube sets actually are unsurpassed (even at much higher prices) for razor-edge selectivity, extreme long distance reception, clear natural tone and powerful loud speaker volume combined with great economy in use of battery current! Enjoy a powerful Miraco 30 days in your home—at our risk—and be convinced! Your verdict final—absolutely no strings to this. Save or make a lot of money on sets and accessories this season by sending IMMEDIATELY for our Amazing Special Offer!

Remember this offer is made direct to you by a big responsible manufacturing corporation—one of the oldest and most successful set-builders in the industry—a concern which has grown to immense size thru recommendations of its many thousands of satisfied customers who bought after trial.

Our Factory Prices Save You Up to One-Half! We deal direct by mail with users, agents and dealers, thereby effecting great savings which are reflected in amazingly low prices. Everything we sell is high-grade. Don't confuse Miraco's with small, cheap sets. You'll be Proud of Your Miraco

In its big, handsome, expensive-looking solid walnut cabinet with sloping front, you'll be proud to have friends examine and hear your Miraco. In construction, appearance and performance, every inch a high-priced set. Handsomely gold illustrated genuine Bakelite front panel and genuine Bakelite knobs—finished in grained walnut. Finest parts obtainable—the kind used in \$200 sets. Bakelite sub-panel. Many exclusive features. Each Miraco reaches you completely assembled, rigidly tested, splendidly packed and factory 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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An unheard-of price for a high-grade, fully guaranteed, 5-tube radio! Only \$19.95 net! We guarantee this new Miraco Compact (14 inch wide, finished in brown mahogany) can't be equaled at anywhere near the price in quality of construction, selectivity, distance-getting power, tone, ease and economy of operation. Complete with high-grade accessories—nothing else to buy—only \$49.85 net. Act quick—supply limited! Get Special Offer!

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World's Biggest Bargain Direct from factory. Coast-to-Coast range. Powerful, selective; clear, sweet tone.

All the Proof you want is waiting for You! Coupon or postal brings reports from hosts of users in your vicinity and elsewhere proving that Miraco sets at rock-bottom money-saving factory prices, outperform sets costing up to four times as much. You can also buy speakers, tubes, batteries, etc., at big savings from us! Get our proposition before spending money elsewhere.

Send coupon for Amazing Special Offer

MIDWEST RADIO CORPORATION Pioneer Builders of Sets Cincinnati, O.

437-T Miraco Building Without obligation, send free literature, testimony of users. AMAZING SPECIAL OFFER and full particulars of your big money-saving factory proposition on Guaranteed Miraco sets and all radio supplies. ( ) Agent ( ) User

NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_

Buy this new MIRACO Compact \$19.95

Table with 4 columns: Eastern, Central, Mountain, Pacific. Lists radio stations and their programs for various times.

Table with 4 columns: Eastern, Central, Mountain, Pacific. Lists radio stations and their programs for various times.

FRIDAY, DECEMBER 10 Headliners

Table with 4 columns: Eastern, Central, Mountain, Pacific. Lists radio stations and their programs for Friday, December 10.

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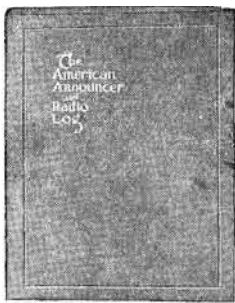
Table with 4 columns: Eastern, Central, Mountain, Pacific. Lists radio stations and their programs for various times.

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Regular Friday Features

Eastern Time Stations

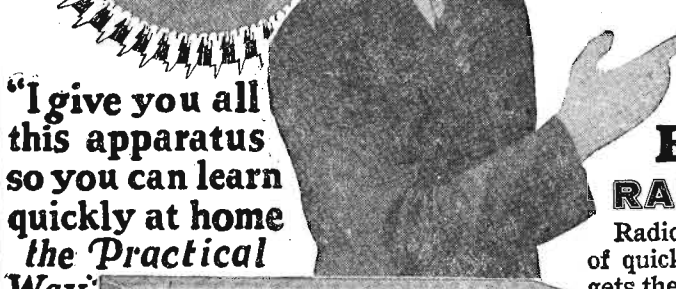
KDKA Pittsburgh, Pa. (309.1m-970kc) 6:15 p. m. string ensemble; 8, concert; 9, Teaberry time. WAHG Richmond Hill, N. Y. (315.6m-950kc) 7:30 p. m. studio program; 8, Grebe music hour; 9, artists' recital; 10:02, popular program.



THE 1926 X-MAS Gift for Every Radio Fan... A book 8 1/2" x 11 in., containing large photographs of all the chief announcers of the leading broadcasting stations in the United States, Canada and Cuba and Cuba and bubbling over with interesting items regarding their lives, personality and style of announcing.

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RADIO NEEDS TRAINED MEN! I give you all this apparatus so you can learn quickly at home the Practical Way.

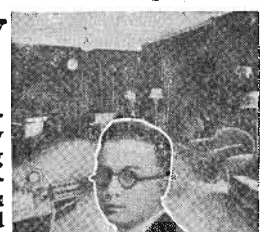
If you're earning a penny less than \$50 a week, clip coupon now. Send for AMAZING FREE BOOK, "Rich Rewards in Radio." Why go along at \$25 or \$35 or \$45 a week, when you could earn \$50 to \$250 in the same six days, as a Radio Expert? Hundreds of N. R. I. trained men are doing it—why can't you?

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So sure am I that I can train you successfully for a better future in this new Big-Pay profession, that I guarantee your training with a money-back bond. Lack of experience or education won't hold you back—common schooling all you need to start. You can stay home, hold your job, and learn quickly and pleasantly in your spare time. My practical, helpful methods enable you to start RIGHT AWAY toward one of the bigger Radio jobs paying \$50 to \$250 a week. No delay, no losing time from work—no scrimping or scraping to get your training.



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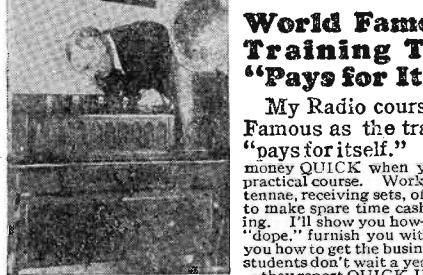
Dear Mr. Smith—Without obligating me in any way, send me your free book, "Rich Rewards in Radio" and all information about your practical, home-study Radio Course.

Form with fields for Name, Age, Street Address, Town, State.

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All instruments shown here and others sent to all my students free of extra cost under short time special offer. Clip coupon now—find out all about this big unequalled offer while you still have time to take advantage of it. This training is intensely practical—these instruments help you do the practical work. You learn workmanship and get added confidence in your ability.



\$70 In One Day For T. M. Wilcox

"I am in business for myself and RECENTLY MADE \$70 IN ONE DAY. I was an electrician of rich experience, occupying a splendid position as telephone superintendent when I enrolled with you believing it would open up greater opportunities—haven't been disappointed. Estimate Radio will be worth tens of thousands of dollars to me in next few years." T. M. Wilcox, Belle Island, Newfoundland.

World Famous Training That "Pays for Itself"

My Radio course World-Famous as the training that "pays for itself." Make more money QUICK when you take up this practical course. Work on millions of antennae, receiving sets, offers you big chance to make spare time cash while you're learning. I'll show you how—teach you the latest "dope" furnish you with business cards, show you how to get the business and make it pay. My students don't wait a year to increase their income—they report QUICK INCREASES as a result of this course—often two or three weeks after starting. Howard Luce, Friedens, Pa. made \$320 in 7 weeks during spare time. D. H. Suitt Newport, Ark., writes, "While taking the course I earned in spare time work about \$900." Earl Wright, Omaha, reports making \$400 in a short time while taking course—working at Radio in spare time! Sylvester Senso, Kaukauna, Wis., made \$500. These records not unusual—these men a few of hundreds.

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We who know the results this practical tested training gets—the increased earnings it has brought to men everywhere—stand behind it all the way with a signed guarantee bond that we give you when you enroll. On completion if you're not entirely satisfied in every way, you get back every cent you've paid us. No strings to this offer—you yourself are the only judge. Get started today! It's your big chance for one of the bigger Radio jobs—mail coupon NOW for my Big FREE BOOK and proof! No obligation.

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RADIO RECEPTOR CO., 106 Seventh Ave. New York



Price only \$49.50

WBZ Springfield, Mass. (333.1m-900kc) 6:15 p. m. ensemble; 6:30, orchestra; 7:03, concert; 8, Radio Four; 8:30, program; 10, WJZ.

WBRR New York, N. Y. (416.4m-720kc) 8 p. m. Watchtower concert trio; 8:20, Fred Twaroschek, tenor.

WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. dinner music; 8, Sunday school lesson; 8:30, Burt McMurtre's hour; 9:30-10:30, WEAF; 10:30, dance music.

WCAU Philadelphia, Pa. (277.6m-1080kc) 7:30 p. m. Snellenburg recital; 8, Barry O'Moore, Irish tenor; 8:30, Cohen's Jewels; 8:45, Curlox Girls; 9, Melody 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.

WCX Detroit, Mich. (516.9m-580kc) 6-7 p. m. dinner concert, Goldkette ensemble; 8-9, studio program.

WBBO Winter Park, Fla. (239.9m-1250kc) 9 p. m. popular program; 10:30, Newspaper trio; 11:30, jam-boree.

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; 9, WLIT, WRC, WLID, WVI, WTAM, WCAF; 9:30, South Sea Islanders, WLIT, WVI, KSD, WTAG; 9:30, La France orchestra, WEEI, WGR, WDAF; 10, WLIT, WCAE, WTAM, WVI, KSD, WOC; 10, Whittall Anglo-Persians, WRC, WIAR, WTAM, KSD, WVI, WCO, WDAF, WGR, WGN, WEEI, WTAG; WCAE, WOC, WLIT; 11:30 (headliner), orchestra.

WEEI Boston, Mass. (348.6m-860kc) 7:30 p. m. Whiting Milk company; 8, musical; 9:30-10:30, WEAF.

WFI Philadelphia, Pa. (394.5m-760kc) 6:45 p. m. Adelpheia dance orchestra.

WGBS New York, N. Y. (315.6m-950kc) 6:30 p. m. Bluebells of Long Island orchestra; 7:10, orchestra; 7:20, Bluebells of Long Island orchestra; 7:30, WGHG Clearwater, Fla. (265.3m-1130kc) 8:30 p. m. pipe organ, program.

WGHF Detroit, Mich. (270.1m-1110kc) 6-8 p. m. dinner concert, Hotel Tuller; 10-11, WGHF entertainers; 11-12, Melodymakers.

WGR Buffalo, N. Y. (319m-940kc) 7:45 p. m. evening program; 9:30-10:30, WEAF; 11-1, supper music.

WGY Schenectady, N. Y. (379.5m-790kc) 7 p. m. Hotel Van Curier dinner music; 7:35, staff program; 8, musical; 9, WGY players; 10, WJZ; 11, WJZ.

WHN New York, N. Y. (361.2m-830kc) 7 p. m. Freshman Masterpiece entertainers; 7:30, Sachs Quality entertainers; 8, Treasureland Home Owners 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. symphony; 8, Arctic flavors; 8:30, studio program.

WJZ New York, N. Y. (454.3m-660kc) 7 p. m. Hotel Commodore dinner orchestra; 8, Sundial Shoe Serenaders & Bonnie Laddies; 9, Breyer Ice Cream hour, WRC will also broadcast; 10, Baldwin 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.

WMAK Buffalo, N. Y. (265.5m-1130kc) 7:30 p. m. weather; 7:30, WGY; 7:35, WGY.

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.

WOO Philadelphia, Pa. (508.2m-590kc) 11 a. m. organ recital; 12:02 p. m. Tea Room orchestra; 4:45, organ recital; 7:30, Hotel Sylvania dance orchestra; 8:10, hygiene talk; 8:20, WOO tourists, WOO orchestra; 9:30, Fox theater orchestra; 10, Sesqui-centennial 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 strings quartet; 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; 8, musical; 9, WJZ; 10, WEAF; 10:30-12:30, Wardman Park hotel orchestra.

WRVA Richmond, Va. (256.3m-1170kc) 7 p. m. evening program.

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

WTAM Cleveland, Ohio (389.4m-770kc) 6 p. m. Jack Horvitz 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. (352.7m-820kc) 6 p. m. dinner concert; 9, WEAF; 9:30, WEAF; 10, WEAF.

**Central Time Stations**

KFAB Lincoln, Neb. (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, Drescher Brothers, Inc.; 11, frolic.

KSO Clarinda, Iowa (405.2m-740kc) 7 p. m. popular program.

KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9:10-10:45 p. m. features.

KVOO Bristow, Okla. (374.8m-800kc) 7-7:30 p. m. Walter Schloggen, tenor; 7:30-8:30, Marie Gardner Swift; 8:30-9, Chickasaw Nightingale; 11-12, Knights of the Empty Skull; 12-1, Earl Thurston, organist.

KYW Chicago, Ill. (535.4m-560kc) 6:30 p. m. Joska DeBary 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, musical.

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 p. m. St. Paul Association; 8, popular orchestra program, Nash-Finch orchestra; 9, WEAF; 9:30, program; 10:05, dance program, Nankin Cafe orchestra.

WCFL Chicago, Ill. (491.5m-610kc) 7 p. m. Brevoort concert trio; 8, hour; 10, Alamo orchestra.

WCOA Pensacola, Fla. (252m-1190kc) 6:30 p. m. musical.

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

WEBH Chicago, Ill. (370.2m-810kc) 7 p. m. Edgewater Beach hotel orchestra; 9-9:45, Edgewater Beach hotel orchestra; 10-11, Edgewater Beach hotel orchestra, specialties.

WEMC Berrien Springs, Mich. (315.6m-950kc) 9 p. m. musical.

WENR Chicago, Ill. (265.3m-1130kc) 6-7 p. m. Rau-

land lyric trio; 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.

WGCB Evansville, Ind. (256.1m-1270kc) 7 p. m. Exide entertainers; 8, orchestra.

WGN Chicago, Ill. (302.8m-990kc) 6:45-7 p. m. request program, Drake 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 Phantom violin; 10, Sam N. Henry; 10:10, The Music Box; 10:20, Bible readings; 10:30, Leon Lichtenfeld, cellist; Herbert Johnson, pianist; 10:40-11, songs, Correll and Gosden.

WHAD Milwaukee, Wis. (275.1m-1090kc) 6:10 p. m. Arthur Richter, organist; 8:30, Marquette university, WLAS, Louisville, Ky. (399.8m-750kc) 7:30-9 p. m. concert.

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

WHO Des Moines, Ia. (526m-570kc) 7:30-8 p. m. program; 8-9, Headliner; 11-12, dance program.

WHY Chicago, Ill. (399.8m-750kc) 6 p. m. Al Carney; Eleanor Gimore; Helen Raul; 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 musical; 10-1, dance program.

WJAZ Chicago, Ill. (329.5m-910kc) 7 p. m. popular program; 8, highlights; 9, Shoreland; 10:30, Club Chez Pierre.

WJJD Mooseheart, Ill. (370.2m-810kc) 8-9 p. m. child artists; 11-1 a. m. Palmer House Victorians; Jack Nelson.

WLIB Chicago, Ill. (302.8m-990kc) 11-12 midnight, songs, Correll and Gosden; Ambrose Larsen organist; Bobby Meeker's Drake hotel dance orchestra; romantic songs, Tomny 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, musical; 9:30, air line.

WMBB Chicago, Ill. (249.9m-1200kc) 7-8:30 p. m. Trio duo; Norman Hartle, baritone; Veronica Krebs, contralto; John Stamford; 8:30-11, frolic.

WMC Memphis, Tenn. (499.7m-600kc) 8 p. m. Mississippi Valley facts; 8:30, Cooper Cord entertainers.

WOAI San Antonio, Tex. (394.5m-760kc) 8:30-9:30 p. m. musical program.

WQAW Omaha, Neb. (526m-570kc) 6 p. m. Hugo Bern, marimba soloist; Emil Hofmann, pianist; 6:50, orchestra; 9, classical.

WOC Davenport, Iowa (483.6m-620kc) 7:30-8:30 p. m. Moorman Melody Makers; 8:30-9, WEAF; 9-9:30, WEAF; 9:30-10:30, lecture.

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.

WOOD Grand Rapids, Mich. (241.8m-1240kc) 8 p. m. program; 9, Van Wyck instrumental quartet.

WORD Chicago, Ill. (275.1m-1090kc) 7 p. m. North Shore line; 7:45, World News digest; 9, station program.

WOS Jefferson City, Mo. (440.9m-680kc) 7:15 p. m. Radio Bible class, talks; 8:20, musical.

WQJ Chicago, Ill. (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, Ill. (288.3m-1040kc) 6:30-8:30 p. m. dinner program; 9:30-1, New Jeffrey Tavern syncopators.

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. (275.1m-1090kc) 6 p. m. dinner hour program; Terrace Garden orchestra; 8, recital; 10, Mildred Colocio, blues singer; Terrace Garden orchestra; 12, Witching hour program; Terrace Garden orchestra.

**Mountain Time Stations**

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

KOB State College, N. M. (348.6m-860kc) orchestra.

**Pacific Time Stations**

KFI Los Angeles, Calif. (467m-640kc) 7-8 p. m. popular program; 8-9, Aeolian organ recital; 9-10, semiclassical hour; 10-11, Packard ballad hour.

KFWB Hollywood, Calif. (252m-1190kc) 6-7 p. m. Pontiac dinner hour; 7:30, 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. ensemble; 9-10, dance music; 10-12, Palais de Danse.

KNX Hollywood, Calif. (336.9m-690kc) 7 p. m. feature; 8, 9, 10, features; 11, Hotel Ambassador.

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FREQUENCY PER SECOND	AMPLIFICATION RATIO
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500	30
2000	35
8000	35

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KPO San Francisco, Calif. (428.3m-700kc) 6:30 p. m. States Restaurant orchestra; 8:30-9, Cabria cafe orchestra; 9-10, Palace Hotel Rose Room dance orchestra; 10-11, States Restaurant orchestra; 11-12, Cliff Hotel dance orchestra.

KWSC Pullman, Wash. (348.6m-860kc) 7:30 p. m. concert, talks.

SATURDAY, DECEMBER 4 Headliners

Table with columns: Eastern, Central, Mountain, Pacific. Lists radio stations and their programs for Saturday, December 4.

SATURDAY, DECEMBER 11 Headliners

Table with columns: Eastern, Central, Mountain, Pacific. Lists radio stations and their programs for Saturday, December 11.

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Table with columns: Eastern, Central, Mountain, Pacific. Lists radio stations and their programs for Saturday.

Educational Features Saturday

Table with columns: Eastern, Central, Mountain, Pacific. Lists educational radio programs for Saturday.

Regular Saturday Features

Table with columns: Eastern Time Stations. Lists regular Saturday radio features from various stations.

Table with columns: WJZ New York, N. Y. (454.3m-660kc) 7 p. m. Lists various radio programs from WJZ and other stations.

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Central Time Stations

CKY Winnipeg, Can. (384.4m-780kc) 9:30-10:30 p. m. Herbert Sadler, organist.
KFAB Lincoln, Nebr. (340.7m-880kc) 8:30-10:30, variety program.
KFNE Sheandoah, Ia. (461.3m-650kc) 7 p. m. headline; 11, old time music.
KMA Sheandoah, 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.
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; 9, Ambassadors.
KPRC Houston, Tex. (289.8m-1000kc) 7:30 p. m. Bible class; 8, Skyline studio concert; 11, frolic.
KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9:10-10 p. m. dance frolic; 10:15-10:45, Specialties.
KVOO Bristow, Okla. (374.8m-800kc) 6-7 p. m. S. S. Lesson; 7-8, Gleeman; 8-9, orchestra; 12, Southern entertainers.
KYW Chicago, Ill. (535.4m-560kc) 6 p. m. bedtime story; 6:30, Joska DeBabary and his orchestra; Johnny Hamp and his orchestra; 7, Family hour; 9-10:30, classical concert; 10:30-12, Congress carnival.
WBAF Fort Worth, Tex. (475.9m-630kc) 8-8:30 p. m. pianist; 9-10:11, orchestra.
WBBM Chicago, Ill. (226m-1330kc) 8 p. m. Coon-Saunders Night Hawks; 8:15, Log Cabin days; 8:45, supper play; 9, orchestra, artists; 11:30, supper club; 12, Nutty club.
WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 6:15 p. m. Wesley Barlow's Nicollet hotel orchestra; 8, WBAF; 9, program; 10:05, dance program, Wallie Erickson's orchestra.
WCFL Chicago, Ill. (491.5m-610kc) 7 p. m. Brevoort trio; 8, vaudeville hour; 10, Alamo orchestra; 11-12, entertainers.
WDAF Kansas City, Mo. (365.6m-820kc) 6-7 p. m. school of the air; 8-9, WDAF; 9-10, around the town; 11:45-1, Nighthawk frolic.
WEBH Chicago, Ill. (370.2m-810kc) 7 p. m. Edgewater Beach hotel orchestra; 11-2 a. m., orchestra; Sunset male quartet.
WENR Chicago, Ill. (265.3m-1130kc) 6-7 p. m. Rauland lyric trio; 8-10, All-American Pioneers; 12-2, All-American Pioneers.
WFAA Dallas, Tex. (475.9m-630kc) 6:30-7:30 p. m. Baker hotel orchestra; 8:30-9:30, concert; 11-12, concert.
WGN Chicago, Ill. (302.8m-990kc) 6:35-7 p. m. Drake concert ensemble; Blackstone string quintet; 8-9, WBAF; 9-10, Light opera period; 10, Sam H. Henry; 10:10, The Music Box; 10:20, song hour; 10:40-11, songs, Correll and Gosden.
WHAD Milwaukee, Wis. (275.1m-1090kc) 6:10 p. m., orchestra and vocal selections, Wisconsin hotel.
WHAS Louisville, Ky. (399.8m-750kc) 7:30-9 p. m. studio concert.
WHT Chicago, Ill. (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, Ill. (225.4m-1330kc) 6-7 p. m. dinner concert; 7-8, Bradley college hour.
WJAZ Chicago, Ill. (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. Sett'n 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 Almack 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. (447.5m-670kc) 6 p. m. Chicago theater organ; 6:30, Gus Edwards' orchestra; 8, photologue; 8:30, Chicago theater revue; 9:30, songs.
WMBB Chicago, Ill. (249.9m-1200kc) 7-8:30 p. m. Trianon ensemble; artists; 8:30-11, Trianon orchestra ensemble.
WMC Memphis, Tenn. (499.7m-600kc) 8:30 p. m. entertainment.
WOAW Omaha, Neb. (526m-570kc) 6 p. m. literary hour; 9, program; 10, Tracy-Brown's Oklahomans.
WOC Davenport, Iowa (483.6m-620kc) 7-8 p. m. music; 8-9, WBAF.
WOM Chicago, Ill. (238m-1260kc) 6-7:45 p. m. string ensemble; 8-9 (217.3m-1380kc), program; 9:30-12 (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.
WSEC Chicago, Ill. (288.3m-1640kc) 6:30-8:30 p. m. dinner program; 9:30-1, New Jeffrey Tavern syncopators.
WSKC Bay City, Mich. (260.7m-1150kc) 11-2 a. m. studio program.
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
KOA Denver, Colo. (322.4m-930kc) 10:30 p. m. Schuetzerman'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, headline; 10-11, Warner Brothers frolic.
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 Packard dealers; 10-11, Clift hotel dance orchestra.
KPSN Pasadena, Calif. (315.6m-950kc) 8-9 p. m. Star-News instrumental ensemble.

SUNDAY, DECEMBER 5 Headliners

Table with 4 columns: Eastern, Central, Mountain, Pacific. Lists radio stations and their programs for Sunday, December 5.



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Eastern	Central	Mountain	Pacific
7:00 p. m.	6:30	5:30	4:30
WOC (483.6m-620kc) "The World's Challenge to Christian Service."			
8:30	7:30	6:30	5:30
WLW (422.3m-710kc) "Getting Acquainted With Beethoven."			
9:15	8:15	7:15	6:15
WEAF (491.5m-610kc) Atwater-Kent radio hour.			
WEEL WGR, WRC, WWJ, WSAI, WGN, WCCO, KSD, WJAR, WTAG, WCAE, WTAM, WOC, WFI.			
Mabel Garrison, soprano, and Ernst von Dohnanyi, pianist. Atwater-Kent orchestra, Louis Edlin, conductor.			
Ario-Manon.....Massenet			
Micaela's Aria from Carmen.....Bizet			
Mabel Garrison and the Atwater Kent orchestra.			
Marche Humoresque.....Dohnanyi			
Aria.....Dohnanyi			
Presto aus Rurálin Hungarica.....Dohnanyi			
Ernst von Dohnanyi			
Danny Boy.....Old Irish			
When I was Seventeen.....Swedish			
Estrellita.....Mexican			
Mah Lindy Lou.....Strickland			
Mabel Garrison and accompanist			
Hungarian Rhapsodie.....Liszt			
Ernst von Dohnanyi			
Waltz song, "Il Bacio".....L. Arditi			
Mabel Garrison and orchestra			
George Siemonn, accompanist			
9:30	8:30	7:30	6:30
WFAA (475.9m-630kc) Songs, Dr. and Mrs. R. Thompson.			
12:15 a. m.			
WHB (365.6m-820kc) College, Fraternity and Sorority program. M. Moore, organist.			

**SUNDAY, DECEMBER 12**  
**Headliners**

Eastern	Central	Mountain	Pacific
10:15 a. m.	9:15	8:15	7:15
KFUO (545.1m-550kc) "The Purifier of His People." Musicales.			
12	10	9	
KOA (322.4m-930kc) First United Presbyterian church. Quartet, chorus.			
4 p. m.	3	2	1
WSM (282m-1060kc) Nashville symphony orchestra concert. Solon Drukenmiller, tenor.			

Eastern	Central	Mountain	Pacific
5	4	3	2
KFUO (545.1m-550kc) "In My Father's House Are Many Mansions." Musical program.			
KOA (322.4m-930kc) Denver El Jebel Shrine band.			
6	5	4	3
WSB (428.3m-700kc) Jenkins family, gospel songs.			
8:30	7:30	6:30	5:30
KOA (322.4m-930kc) Organ recital, Paul Eslinger.			
8:45	7:45	6:45	5:45
WSB (428.3m-700kc) Second Baptist church service.			
9:15	8:15	7:15	6:15
WEAF New York, N. Y. (491.5m-610kc), WEEL, WGR, WRC, WWJ, WSAI, WGN, WCCO, KSD, WJAR, WTAG, WCAE, WTAM, WOC, WFI. Atwater Kent radio hour.			
Mme. Frances Alda, soprano. Assisted by Atwater Kent Orchestra, Louis Edlin, conductor.			
I			
(Atwater Kent Orchestra)			
II			
a. A Christmas Carol.....Bax			
b. Je ne suis qu'une Bergere.....Philidor			
c. In the Time of Roses.....Reichardt			
d. Nymphs and Shepherds.....Purcell			
(Madam Alda)			
III			
Aria from La Villi.....Catalani			
(Madam Alda)			
IV			
a. J'ai Pleure en Reve (French).....Hue			
b. Mensaje (Spanish).....Feuster			
c. Polubila (Russian).....Rachmaninoff			
d. Erstes Begegnen (German).....Greig			
e. Jag Lefver (Finnish).....Merikanto			
(Madam Alda)			
V			
(Atwater Kent Orchestra)			
VI			
Aria: "Jewel Song" from Faust.....Gounod			
(Madam Alda)			
VII			
a. The Birth of Morn.....Leoni			
b. Last Night.....Kjerulf			
c. Thank God for a Garden.....Del Riego			
d. Song of the Open.....La Forge			
e. Home Sweet Home.....Payne			
(Madam Alda)			
9:15	8:15	7:15	6:15
WEAF (491.5m-610kc) Atwater Kent program, Frances Alda, see chain above.			
9:30	8:30	7:30	6:30
KOA (322.4m-930kc) First United Presbyterian church.			

Eastern	Central	Mountain	Pacific
11:30	10:30	9:30	8:30
WBAP (475.9m-630kc) 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	10:15	9:15
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 program.
KDKA Pittsburgh, Pa. (309.1m-970kc) 5:30 p. m. KDKA Little symphony orchestra; 7:30, service; 10:15, Maxwell Coffee hour of music.
PWX Havana, Cuba (599.8m-750kc) 8:30-11:30 p. m. Cuban songs and music.
WBPR 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, denominational church services; 5:25, sermon, Rev. John W. Stockwell; 6:45, orchestra; 7:45, Cathy Garden orchestra; 8:30, Bonwit Teller Ensemble; 10, Al Zemsky's orchestra.
WCWS Bridgeport, Conn. (285.5m-1050kc) 10:50 a. m. service; 2 p. m. Sunday afternoon concert.

WXC Detroit, Mich. (516.9m-530kc) 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, WEEL, KSD, WRC, WWJ, WJAR, WCAE, WTAG; 9:15, Atwater-Kent radio hour, WEEL, WGR, WRC, WWJ, WSAI, WGN, WCCO, KSD, WJAR, WTAG, WCAE, WTAM, WOC, WFI; 10:15, Shakespeare.
WEEL Boston, Mass. (348.6m-860kc) 10:50 a. m. Old South church; 2 p. m., program; 4, WEAF; 7:20, WEAF; 9:15, WEAF; 10:15, B. F. Keith's theater.
WGBS New York, N. Y. (315.6m-950kc) 4 p. m. Evening song 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.
WGY Schenectady, N. Y. (379.5m-790kc) 3 p. m., musicale; 4:30, organ recital, Elmer A. Tidmarsh; 7:30, service; 9, WJZ; 10:15, WJZ.
WHN New York, N. Y. (361.2m-830kc) 6:30 a. m. Libby's Hotel orchestra; 11:30, The Playground.
WIP Philadelphia, Pa. (508.2m-590kc) 3:30 a. m. concert.
WJAX Jacksonville, Fla. (336.9m-890kc) 11 a. m. service; 8-9, services.
WJR Detroit, Mich. (516.9m-580kc) 10 a. m. First Baptist church; 10 p. m. special song service, First Baptist church.
WJZ New York, N. Y. (454.3m-660kc) 7 p. m. Park Avenue Baptist Church, Carlton; 7:20, Hotel Ambassador trio; 8:30, Hotel Commodore concert orchestra, WGY will also broadcast; Godfrey Ludlow, violinist; 10:15, Maxwell House Coffee hour, WJZ, WRC, WGY & KDKA will also broadcast.
WKRC Cincinnati, 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.

# Leadership

with Benjamin Radio Products  
in Securing the Best Radio Results



All Benjamin Radio Products are of the same high standard as the far-famed Cle-Ra-Tone Sockets

You will find that almost every good radio set in the neighborhood has some or all Benjamin Radio Products in it. Radio experts and set makers have proved through long experience that only radio parts conscientiously and painfully made to improve delicate tonal quality, selectivity and volume can bring a leadership in securing the best radio results.

If you would have your set just as good or better than your neighbor's make sure that every component part is reliable and bears the trade mark of a manufacturer in whom you can place your full confidence. The world-wide recommendation of Benjamin Radio Products by radio authorities is the best testimonial for their scientific accuracy and uniformity in securing the best radio results.

**Rewards for Radio Reasoners**

Awards for novel and original hook-ups, modifications of existing circuits; trade names; slogans; write our nearest office for full details.

If your dealer cannot furnish you with Benjamin Radio Products send amount direct to our nearest sales office with his name and we will see that you are promptly supplied.

**Benjamin Electric Mfg. Co.**  
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Manufactured in Canada by the Benjamin Electric Mfg. Co. of Canada, Ltd., Toronto, Ontario

**Improved Tuned Radio Frequency Transformers**



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.

**2 1/4-inch Diameter Transformer**

Compact. Especially desirable for crowded assembly. Eliminates interfering "pick-ups."

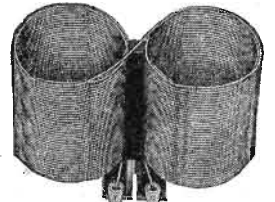
Set of Three, \$5.75  
Single Transformer, \$2.10

**3-inch Diameter Transformer**

Capacity coupling reduced to lowest degree. For use with .00035 Mfd. Condensers.

Set of Three, \$6.00  
Single Transformer, \$2.25

**"Lekeless" Transformers**



Uniform high inductance, low distributed capacity and low resistance. The external field is so slight that it permits placing coils close together without appreciable interaction.

Single Transformer, \$2.50

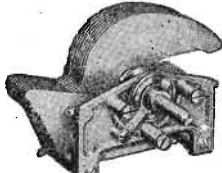
**Cle-Ra-Tone Spring Supported—Shock-Absorbing Sockets**



Spring Supported, Shock-Absorbing, Stop Tube Noises. The greatest aid to non-noisy operation. Contacts always clean.

75 cents each

**Straight Line Frequency Condensers**



Eliminates bunching of stations. Spreads the dial evenly over the log. Makes tuning easy. Adjustable turning tension. Compact. A beautiful instrument that not only improves reception, but adds to the good appearance of the set.

.00025 Mfd., \$5.00 .00035 Mfd., \$5.25  
.0005 Mfd., \$5.50



**Brackets**  
An aid to simplification in set construction. Supports the sub-panel, with room underneath for accessories and wiring.

Plain—70c pair. Adjustable—\$1.25 pair

**Battery Switch**

Quick, positive, clean-cut make and break. When it's "in" it's "off," eliminating danger of wasteful use of battery.

30 cents each



**EVERYBODY**, 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.

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 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 Make \$100.00 a Week**

**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.

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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 everybody—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.

**Territory Is Going Fast—Better Write Today**

Someone is going to get the big profit on the sale of these instruments in your community—is that someone going to be you? Write today for our 100 page book which fully describes not only this wonderful instrument but also a full line of radio at all prices. It's FREE for the asking.

**—Use This Coupon—**

C. Y. Fischer, 122 W. Austin Ave., Chicago, Ill.

I am interested in selling your 5 tube set in this territory. Please send me your 100 page radio book, FREE.

Name.....  
Address.....  
City.....  
County.....  
State.....

WLW Cincinnati, Ohio (422.3m-710kc) 11 a. m. service; 3, organ; 4, choir; 7:30, service; 8, musicale; 8:50, Croseley concert orchestra.

WMAK Buffalo, N. Y. (265.5m-1130kc) 10:25 a. m. service; 3 p. m. W.F.B.J. (340.7m-880kc) 6 p. m. Romer's Homers; 7, Ernie Golden and his Hotel McAlpin orchestra; 10, Monte Carlo orchestra.

WOO Philadelphia, Pa. (508.2m-590kc) 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, WEA; 9:15, WEA; 10:15, WJZ.

WSAI Cincinnati, Ohio (325.9m-920kc) 11 a. m. service; 4:50 p. m. WEA; 7:45-10:15, WEA.

WTAC Worcester, Mass. (545.1m-550kc) 7:20 p. m. WEA; 9:15, WEA.

WTAM Cleveland, Ohio (389.4m-770kc) 11 a. m. service; 3 p. m. musicale; 6, Hollenden hotel orchestra; 7, Stillman theater orchestra; 8, services; 9:15, WEA; 10:15, Austin Wynlie's Vocalion Recording orchestra.

WWJ Detroit, Mich. (352.7m-820kc) 10 a. m. service; 2 p. m. Detroit News orchestra; 4, vesper service; 7:30, WEA; 9:15, WEA.

### Central Time Stations

CKY Winnipeg, Can. (384.4m-780kc) 11 a. m. Wesley church; 7:30 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.

KFNE Shenandoah, Iowa (461.3m-650kc) 10:45 a. m. services; 2:30 p. m. Seed House song service; 3, headline; 6:30, Golden Rule Circle; 7:30, services.

KLD Independence, Mo. (440.8m-680kc) 8:30 a. m. Bible study; 11, Stone church; 3 p. m. Radio church; 6:30, vesper; 9:15, studio service.

KMA Shenandoah, Iowa (461.3m-650kc) 4-5 p. m. sacred program.

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

KOIL Council Bluffs, Iowa (385.9m-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. (374.8m-800kc) 11 a. m.-12:15 p. m. service; 9:45, Meyer Davis ensemble, classic hour concert; 9:45-10:30, Lawson Reid, organist; 10:30-11:30, Arkansas Traveler Radio Train.

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

WEBM Chicago, Ill. (226m-1330kc) 8 p. m. Coon-Sanders Night Hawks; 8:15, travel talk; 9-12, frolic; 12, Nutty club; Coon-Sanders 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, WEA; 9:15, musical program, Chipewa Indians; 10:30, St. Paul Municipal organ recital, Hugo Philter Goodwin.

WDAF Kansas City, Mo. (365.6m-820kc) 3-4 p. m. Star's orchestra; 4-4:45, vesper.

WEBH Chicago, Ill. (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. studio sacred service; 8:15 p. m. chapel.

WENR Chicago, Ill. (265.3m-1130kc) 2-3 p. m. chapel

hour of music; 3-4, classical program; 9:30-12, All-American Pioneers.

WFAA Dallas, Texas (475.9m-630kc) 6-7 p. m. Bible class; 7:30-8:30, services; 8:30-9:30, artists; 11-12, orchestra.

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

WGN Chicago, Ill. (302.8m-990kc) 6:45-7 p. m. Blackstone string quintet, solo artists; 7, The Million Sing; 7:20, Old Fashioned Almanack; 7:30, Drake concert ensemble, Correll and Gosden's 8, Audited Sandy; 8:15, WEA; 9:15, Our Music Room; 10, Sam 'n' Henry; 10:10, Armand Buisseret, violinist; 10:20, Bible reading; 10:30-11, Coon-Sanders orchestra.

WHAD Milwaukee, Wis. (275.1m-1090kc) 3:15 p. m. Turnverein concert.

WHAS Louisville, Ky. (399.8m-750kc) 10 a. m. services; 4:30-5:30 p. m. choral evensong.

WHB Kansas City, Mo. (365.6m-820kc) 9:40 a. m. Lincoln Blvd. Christian church; 11:10-12:30, Independence Blvd. Christian church; 7-7:45, Dr. Burtis A. Jenkins; 8-9, Westport Methodist church; 11:15-1, Morrill Moore, organist; Don Anchors, poet.

WHO Des Moines, Iowa (526m-570kc) 11 a. m. service; 5-6 p. m. Bankers Life Little symphony; 7:30-9, orchestra; 11-12, musical program.

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

WJAZ Chicago, Ill. (329.5m-910kc) 4:30-9 p. m. Sunday evening concert.

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

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

WMBB Chicago, Ill. (249.9m-1200kc) 3-6 p. m. Sunday afternoon concert; 7:40, 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, WEA; 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, Webster hotel duo orchestra; 9, I. B. S. A. choral singers.

WQJ Chicago, Ill. (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.

WSBC Chicago, Ill. (288.3m-1040kc) 5-7 p. m. Sunday concert; 9-10, concert; 10-1, New Jeffrey Taverni synopsators.

WSKC Bay City, Mich. (260.7m-1150kc) 11-12 noon services.

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.

### Pacific Time Stations

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

KFWB Hollywood, Calif. (252m-1090kc) 9-11 p. m. Warner Brothers Sunday night movie frolic.

KGO Oakland, Calif. (361.2m-830kc) 11 a. m. service; 2:45 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.

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 MacMurray, 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.

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 Pasadena, 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, KWVG, WAHG, WCFL, WDAF, WEBJ, WFI, WGBF, WGBH, WCHP, WHAD, WHAS, WJJD, WJR, WLIT, WLWL, WMAQ, WMC, WNYC, WOI, WOO, WOOD, WOR, WSMB, WRVA, WSWs, WTIC.

### MONDAY, DECEMBER 6

#### Headliners

Eastern	Central	Mountain	Pacific
7 p. m.	6	5	4
WHN (361.2m-830kc) Movie club.	7	6	5
WEAZ (379.5m-790kc) Collar City quartet.	8	7	6
WTIC (475.9m-630kc) New Departure band.	9	8	7
8:10	7:10	6:10	5:10
WEAF (491.5m-610kc) Old Timers' concert.	8:15	7:15	6:15
8:15	7:15	6:15	5:15
WRVA (256m-1170kc) The Mysterious Voice and artists, Guess Who?	9	8	7
9	8	7	6
WHAZ (379.5m-790kc) Educational address.	8:30	7:30	6:30
8:45	7:45	6:45	5:45
WHAZ (379.5m-790kc) Calvin Dater, 88-year-old singer.	9	8	7
9	8	7	6
KFUO (545.1m-550kc) "The Fear of the Lord Is the Beginning of Wisdom," Musical.	9:10	8:10	7:10
9:10	8:10	7:10	6:10
WRVA (256m-1170kc) Acca Temple Shrine band.	9:30	8:30	7:30
9:30	8:30	7:30	6:30
KFAB (340.7m-870kc) Cowbell boys, violin and guitar. Orchestra.	10	9	8
10	9	8	7
KPRC (296.9m-1010kc) Mabel Shearer, pianist, WBAP (475.9m-630kc) 9:30, "The Song Shop," a novelty request program.	10	9	8
10	9	8	7
KOIL (305.9m-980kc) "The Strange Transient Woman," play.	10	9	8
10	9	8	7
KPRC (296.9m-1010kc) El Tex temple band, D. O. K. K.	10	9	8

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This is a new Interference eliminator that limits the interfering stations from spreading all over your tuning dials. It keeps them separated from interfering with each other. Helps to bring out some stations stronger. Built with the new type low-loss cyclone coil, neatly and substantially constructed, nothing frail, everything encased. Don't confuse with anything you have ever tried. Wonderful for broad tuning sets. Works on any aerial except a loop. Try The

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MONNEY BACK IF NOT SATISFIED WITH RESULTS.

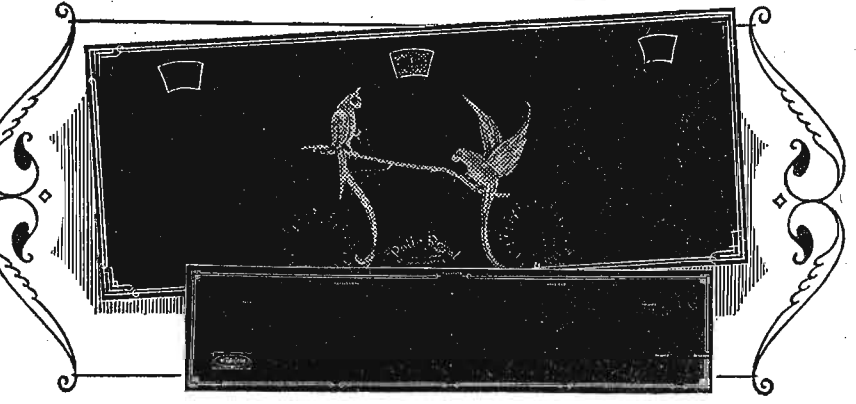
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Manufacturers are using handsomely decorated Formica panels in dull finish, some of them in two colors.

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**Radio Tube Tester**  
Operates from your radio batteries. Shows at once condition of tubes. Reads direct—no mathematics. Accurate. Guaranteed. Models for 201 A or 199 Tubes. Every set owner needs one. Send check or money order today.



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Operates from any 110 V socket, A.C. or D.C. Rejuvenates tubes perfectly or your money back. Simple to operate. Positive in results. Models for 201 A or 199 Tubes. No radio complete without one. Send check or money order.

## SAVE—SPECIAL OFFER—SAVE

A complete, simple-to-operate laboratory to keep your tubes in first class condition—maximum results from your set every time! Finds weak tubes and keeps them like new. Saves its cost in tubes. Worth double this special low price. Limited time offer. Send check or money order today. Be sure to state tubes used—201 A or 199 type. Money cheerfully refunded in five days if not satisfactory in every way. Write NOW!

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**\$7.85**

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Table with 4 columns: Eastern, Central, Mountain, Pacific. Lists radio stations and their broadcast times.

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MONDAY, DECEMBER 13 Headliners

Table with 4 columns: Eastern, Central, Mountain, Pacific. Lists radio stations and their broadcast times.

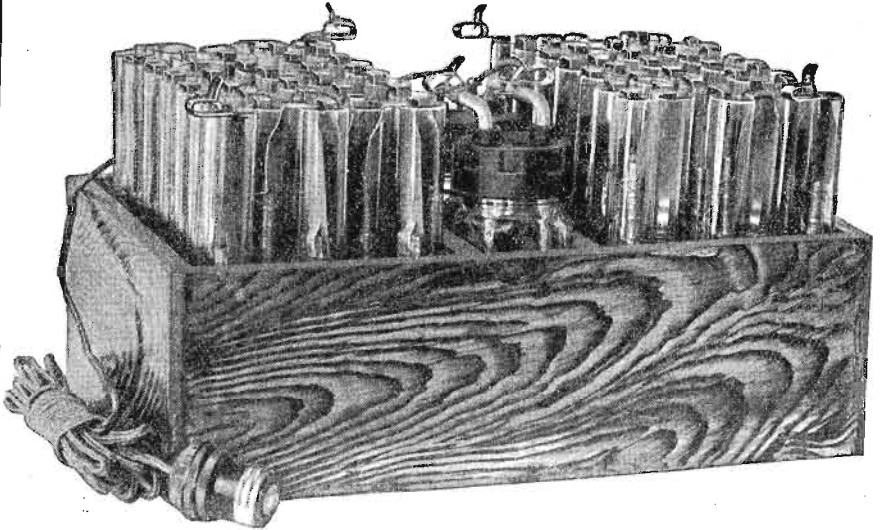
Educational Features Monday

Table with 4 columns: Eastern, Central, Mountain, Pacific. Lists educational radio programs.

Regular Monday Features Eastern Time Stations

Table with 4 columns: Eastern, Central, Mountain, Pacific. Lists regular Monday radio features.

90 Volt "B" Power Unit \$12.75



RUMOR has had it this NEW HAWLEY ADVANCED POWER UNIT was coming—and here it is. Hawley Storage "B" batteries have been standard for over 5 years and the same quality—the same standard of workmanship...

B. Hawley Smith, 325 Washington Ave., Danbury, Conn., U. S. A. Mr. of "A" Power Units, "B" Power Units, "A" Storage Batteries, "B" Storage Batteries and A & B Chargers, including Trickle-ers.

"A" Battery and Charger in One

No more dead A batteries on your radio, no more recharging, no storage battery troubles, no dry cell renewals. Major Unit "A" Battery operates from your electric light socket. "A" Battery and Trickle Charger in one compact unit. Gives constant, dependable "A" current. No noise. No adjustments.

\$1.00 Down Brings it on

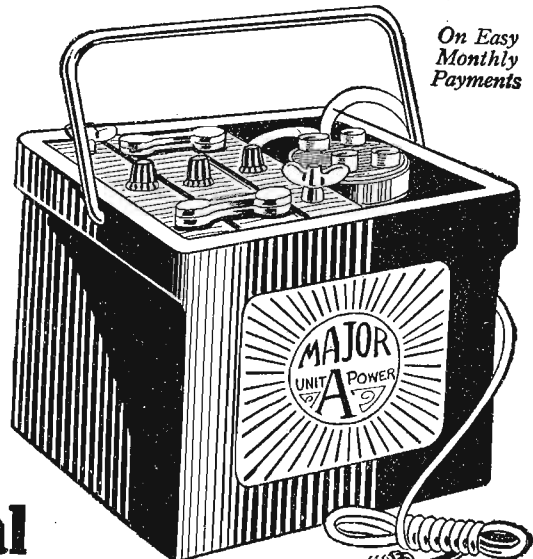
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Only \$1.00 deposit with coupon below brings this Major Unit "A" Battery on 30 days free trial. Just attach to any electric light socket. Operates from 110-115 volt A. C., 50-60 cycle house current and on radio sets using 5 to 6 volt tubes. Costs only one-tenth of a cent per hour for current. Improves reception. Requires no attention except adding water occasionally. Guaranteed: Any Major Unit "A" Battery will be replaced without cost within 90 days from date of sale if defective in workmanship or material.

If not satisfied after 30 days trial, return at our expense and your \$1.00 plus transportation will be refunded at once.

\$4.00 a Month If satisfied, pay our special sale price at the rate of only \$4.00 a month. Total rock bottom price only \$23.80. Order by No. Y8918A; \$1.00 with coupon; \$4.00 monthly; sale price, \$23.80.

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On Easy Monthly Payments

Attach to Your Light Socket

Enclosed find \$1.00. Ship special advertised Light Socket Major Unit "A" Battery. I am to have 80 days free trial. If I keep it, I will pay you \$4.00 monthly. If not satisfied, I am to return it within 90 days and you are to refund my money and any freight or express charges I paid. Major Unit "A" Battery, No. Y8918A, \$23.80.

Form with fields for Name, Street, R. F. D. or Box No., Shipping Point, Post Office, State, Married or Single, Nationality or Color.



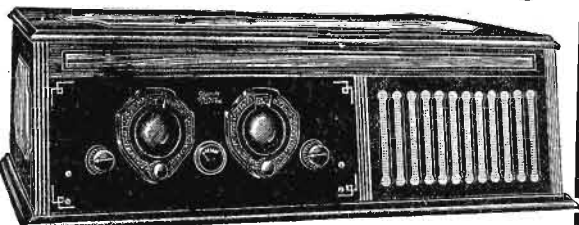
FRED W. STEIN

Steinite New 7-Tube No-Battery Radio

The Set You Have Wished for a Thousand Times. Think of the Joy of plugging into the light socket and saying goodbye forever to Batteries and most of your Radio troubles. Picture to yourself a Radio as musical as a Grand piano, and that costs 1/4 an hour to operate. No wonder everyone who hears it wants one at once. Many say "I can't believe it." You will hardly believe it yourself till you hear it. Think of the real pleasure of a radio that always brings in stations on the North American Continent, requiring no aerial for stations five hundred miles away, with a range of 8000 miles on outside aerial. So simple and highly selective a child can attach and operate it. Uses No Batteries of any kind.

\$125

High Grade Loud Speaker Built In. Operates From A. C. Lighting Circuit 100 to 125 V. No Chemical Rectifiers.



10-Day FREE Trial

1¢ An Hour To Operate

Plug into the light socket and know your operation cost will not exceed 1¢ an hour for radio pleasures. Think of the expense alone, before you buy a battery type set. The new 7-tube no-battery Steinite radio will pay for itself. From the way orders are coming in no one here can tell what sales on this popular set will run to. You at least want to know all about it; want to study this marvelously refined Fred W. Stein circuit; want to try it ten days at my absolute risk, then write your own guarantee as to its performance. Do this anyway before you buy any set. Think of the finest set you ever heard of at any price and you will know what to expect of the 7-Tube Steinite No-Battery type at the unheard of price of \$125.00. Only two controls to operate and set logs perfectly. Tremendous volume. Tone pure, full and round. Selectivity to a high degree, and range of 3,000 miles. Cabinet, solid mahogany, beautifully finished in 2-tone walnut or 2-tone mahogany. An elegant furniture setting that will harmonize with any home environment.

WRITE TODAY for complete description of this marvelous new instrument explaining the new circuit. Do This Today. Just send name—no cost—no obligation. You've always had in mind a radio free from battery trouble—IT'S HERE. We allow you to write your own guarantee after a free ten day trial in your home. This is the test to which you should put any radio before buying. Write now while this ad is before you.

Free

STEINITE LABORATORIES, 706 Radio Bldg., ATCHISON, KANSAS

**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, Christian Science services; 9:15, Headliner; 12, McAlpin entertainers.

**WNYC New York, N. Y. (526m-570kc)** 6 p. m. Piano selections; 6:20, piano selections.

**WOP Philadelphia, Pa. (508.2m-590kc)** 11 a. m. Organ recital; 12:02 p. m. Sylvania 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 Screening 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; 8:05, Hotel Shelburne dinner music; 8:30, studio program; 9, Hotel Traymore concert orchestra; 10, quartet; 10:30, President hotel dance orchestra; 11, Silver Slipper supper club dance orchestra.

**WRC Washington, D. C. (468.5m-640kc)** 7 p. m. dinner music; 8, Emerson hour; 9, WEAF; 10, WEAF; 11-12, Loew's Palace theater.

**WRVA Richmond, Va. (256.3m-1170kc)** 8:15. Evening program; 9, "Virginia Folk Lore," Dr. Douglas S. Freeman; 9:30, 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.

**WTAM Cleveland, Ohio (389.4m-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, Walter Dawley, organist.

**WWJ Detroit, Mich. (352.7m-850kc)** 6 p. m. Dinner concert; 8, musical program; 9, WEAF.

Central Time Stations

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

**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; 7:30, quartet; 8, quartet; 9, soloists; 10:15, orchestra; 12-1, orchestra.

**KOIL Council Bluffs, Iowa (305.9m-980kc)** 7:03 p. m. Hotel Lassen program, Don Hill and his ukulele; 7:30, musicale; 8, program; 9, play; 10, Crosby hour; 11, Ambassadors.

**KSO Houston, Texas (299.8m-1000kc)** 7:30 p. m. Houstonians; 8:30, concert; 9, studio concert.

**KSO Clarinda, Iowa (405.2m-740kc)** 7 p. m. old-time music.

**KTHS Hot Springs National Park, Ark. (374.8m-800kc)** 9-11:20 p. m. musicale.

**KVOO Bristow, Okla. (374.8m-800kc)** 6-7 p. m. Warner trio; 7-8, quartette; 8-9, Luckey's orchestra; 12, Earl Thurston, organist.

**WBAP Fort Worth, Texas (475.9m-630kc)** 7:30-8:30 p. m. Classical concert; 9:30-11, old time music; 11-12, midwest 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.

**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; 11:45-12, 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.

**WGFB Evansville, Ind. (236m-1270kc)** 8 p. m. musicale; 9, orchestra.

**WHAD Milwaukee, Wis. (275.1m-1090kc)** 6:10 p. m. organ recital, Arthur Richter; 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. Sweetney 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 McLaughlin, organist; 6, supperbell program; 6:40, Maurice 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, classical; 9, Nash-Finch orchestra.

**WOOD Grand Rapids, Mich. (241.8m-1240kc)** 9 p. m. popular program; 9:30, band; 9:45, Wood Revelers; 10, Woods, Whozit; 10:10, piano recital; 10:20, specialty; 11, air mail hour; 12, woodpile.

**WOS Jefferson City, Mo. (440.8m-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.

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

**WSM Nashville, Tenn. (282.8m-1060kc)** 6:45 p. m. Andrew Jackson hotel orchestra; 8, concert; 10, studio program.

Mountain Time Stations

**KOA Denver, Colo. (322.4m-930kc)** 8 p. m. Scheurman'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.

**KFWB Hollywood, Calif. (252m-1190kc)** 6-7 p. m. Pontiac dinner hour; 7:50, news; 9-10, program; 10-11, Warner Br. frolic.

**KGO Oakland, Calif. (361.2m-830kc)** 6-6:55 p. m. Stanislas Bem's Little symphony; 8-9, Gondoliers; 9, "Chats about New Books," Joseph Henry Jackson.

**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 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.

**KWSC Pullman, Wash. (348.6m-860kc)** 7:30 p. m. Students concert.

Monday, silent night for: CFC, KFDM, KFDY, KHI, KLD, KPSN, KYW, PWT, WBBM, WCB, WCLF, WEBH, WEBJ, WENR, WFI, WGBF, WGBS, WGES, WGN, WGY, WHAS, WHT, WIBO, WIP, WJAZ, WJJD, WLJB, WLS, WMAQ, WMBB, WOAI, WOC, WOK, WORD, WQJ, WSAI, WSW.

Eastern	Central	Mountain	Pacific
7:30 p. m.	6:30	5:30	4:30
KFUO (545.1m-550kc)	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	5	
WTIC (475.9m-630kc)	McCoy's Music Masters.		
	8:30	6:30	5:30
KPRC (296.9m-1010kc)	Canadian Red Jackets of Kensington Hall.		
WGHP (270m-1110kc)	Dodge Brothers concert band.		
WHAS (399.8m-750kc)	Zoeller's Melodists.		
	9	7	6
KOIL (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 quartet.		
	10	8	7
WGY (379.5m-790kc)	Cook's travelogue, "A Day in Berlin."		
	10:05	8:05	7:05
KTHS (374.8m-800kc)	Dance frolic.		
	10:30	8:30	7:30
WEAF (491.5m-610kc)	Greenwich Village Inn orchestra.		
	11:15	9:15	8:15
KUOA (374.8m-800kc)	Mona Moten Oil twins.		
	11:30	9:30	8:30
WEAF (491.5m-610kc)	Hofbrau orchestra.		

TUESDAY, DECEMBER 7

Eastern	Central	Mountain	Pacific
6:10 p. m.	5:10	4:10	3:10
WLW (422.3m-710kc)	Santa Claus.		
	6:25	5:25	4:25
WTIC (475.9m-630kc)	Ruth Patterson Stoddard, Mrs. Biago Reale, pianist.		
	6	5	4
WEAF (491.5m-610kc)	Pauline Haggard, piano-logues.		

TUESDAY, DECEMBER 14

Eastern	Central	Mountain	Pacific
7:30 p. m.	6:30	5:30	4:30
KFUO (545.1m-550kc)	Bible story, "Gabriel's Visit to Mary."		
WEAF (491.5m-610kc)	Great moments in history.		
WFAA (475.9m-630kc)	Walt Whitman orchestra.		
	8:30	7:30	6:30
WHAS (399.8m-750kc)	Studio concert.		

# Are You the Man?

to be the first and only dealer in your town to sell and demonstrate POWEROLA, the famous pioneer ELECTRIC LIGHT SOCKET RADIO RECEIVER (not an attachment), universal for D. C. or A. C. (100-120 v. 25-60 cycle) highest in quality, lowest in price, now sold thru public utility companies and radio, electric and music dealers everywhere. Absolutely dependable, fully guaranteed, powerful, practical and perfect in performance. Tested and endorsed by all leading authorities and engineers. A. C. set complete in one cabinet, the latest and best in radio. Sold on a money back basis.

**Are You the Man Who Sees Opportunities Ahead for Real Money Making?**  
You, Too, Can Make Electric Sets

Send \$1.00 for "Powerola Power Circuits," our booklet; contains 29 new diagrams and instructions, showing power parts used, and how to build or re-wire radio circuits, sets and parts at small cost, to operate, hum-free and successfully, from A. C. or D. C. power mains, without A and B batteries, chargers, chemicals, etc. System is now being used and copied by big manufacturers, and is fundamentally correct and time-proven. Invaluable for the service man, set builder and trade-ins.

*If your radio dealer does not sell Powerola, tell us, and we will advise our nearest distributor demonstrator. Write for literature, terms and prices at once.*

**Powerola Radio Corporation**  
42 Whitehall St., New York City

## SUBANTENNA!

The One Great New Thing in Radio

**Amazing New UNDERGROUND ANTENNA**  
Eliminates All INTERFERENCE  
Gets Distance Clearly.

Here you are, "Distance" fans! Install this new type underground "pick up" system. Get distant stations loud and clear like local. SUBANTENNA banishes STATIC and all other air noises. Lets the broadcast come through clean.

**Uses Filtered Ground Waves.** Power line leaks, are-light crackles, STATIC and all air noises are filtered out from the broadcast and grounded by SUBANTENNA before the broadcast reaches the set. The greater distance and clarity of your set will amaze you.

**Nothing Else Like It.** Not just a wire. Consists of special composition wire differently insulated and sheathed in a lead jacket and containing a series of three "building up" coils. Nothing else will do what SUBANTENNA does. Nothing else in the world like it.

**FREE TRIAL OFFER!** We want you to test SUBANTENNA. We want you to enjoy the thrill of loud, clear DX reception when your old aerial will give you nothing but STATIC and crackles. Write at once for FREE TRIAL OFFER and scientific explanation of SUBANTENNA. Write NOW!

**CLOVERLEAF MANUFACTURING CO.,**  
2716-A So. Canal St., Dept. 10 Chicago.

## GOLD WAVE AERIAL

**Guaranteed to:**

- 1 Give you stations not previously received.
- 2 Bring in greater distance.
- 3 Improve tone and selectivity.

**or Your Money Back**

We make these claims without reservation. This famous Gold Wave Aerial has been put to thousands of tests. Recommended by all radio engineers. Broadcasting stations use it for better results. Can't corrode. Gives remarkable results when used on any make Radio set. 7 strands - gold plated - Aerial 100 feet long. Installed like any other aerial.

**10 DAYS TRIAL - SEND NO MONEY**  
Get One at Your Dealer's or Mail Coupon

**LUXEM & DAVIS MFG. COMPANY**  
Dept. C, 6229 Broadway, Chicago

—Dealers and Agents Write for Proposition—  
Luxem & Davis Mfg. Co.,  
6229 Broadway, Dept. C, Chicago, Ill.

Please send me a GOLD WAVE AERIAL as described above. I will pay postman \$3.00 plus a few cents postage. If I am not satisfied after trial, I will return the aerial within ten days and you guarantee to refund my money.

Name .....

Address .....

# The Metrodyne

**7 Tube Set Single Dial Radio**

**30 DAYS FREE TRIAL**

**ONLY ONE DIAL TO TUNE**

**Retail Price \$75.00**  
**COMPLETELY ASSEMBLED**  
**BIG DISCOUNT TO AGENTS AND DEALERS**

**WORLD'S GREATEST RADIO!** Wonderful Offer Direct from Factory. This marvelous 7 tube single dial control radio set will be shipped on 30 days free trial anywhere in the United States, just to prove that it is the greatest long distance receiver made.

The Metrodyne Single Dial is a 7 tube Tuned Radio Frequency set, approved by America's leading radio engineers. Highest grade low loss parts, magnificent walnut cabinet. Exposed metal parts are finished in 24 karat gold. Genuine bakelite panel, artistically designed in gold. Easy to operate. **Only one dial tunes in all Stations.** Dial is electrically lighted. 1,000 to 8,000 miles on loud speaker. Powerful volume—clear, distinct reception. **Shipped to your home for 30 days free trial.**

F. L. Warnock, Greentown, Ind., writes: "I received the Metrodyne in good shape and am more than pleased with it. Got stations 2000 miles away."  
C. J. Walker, Mariposa, Calif., writes: "I believe that these one-dial sets are going to be excellent sellers. I had no trouble in tuning in stations enough to satisfy anyone, so you will please send me 10 more sets." Thousands of similar letters received.

**Big Profits to Agents and Dealers!**  
Home agents and dealers make big money selling Metrodynes. All or part time. Metrodyne radios have no competition. Lowest wholesale prices. Demonstrating set on 30 days free trial. Greatest money making opportunity.

**Write!**  
Get our offer before buying a radio. Read the hundreds of letters from users who acclaim the Metrodyne as the greatest radio set in the world. None better at any price. A postal or letter brings complete information, testimonials, wholesale prices and our liberal 30 days free trial offer.

**6 Tube Set \$48.50**  
**RETAIL PRICE Completely Assembled**

**METRODYNE SUPER SIX RADIO**  
Wonderful 6 tube, long distance radio set. Approved by America's leading Radio Engineers. Easy to operate. Dials log easily. Tune in your favorite stations instantly on the same dial numbers every time. No guessing. **30 days free trial.**  
Mr. Howard of Chicago said, "With 5 Chicago Stations on the air I tuned in 17-out-of-town stations, including New York and San Francisco on loud speaker very loud and clear."  
**2161 N. California Avenue, Chicago, Illinois**

**Write for Our Offer**  
**METRO ELECTRIC CO., Dept. 179**

# Steinite

Greatest \$1 Value in Radio Today

## Interference Eliminator

No Radio Set Complete Without It

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

**New 1927 Model**

**Fred W. Stein. Over 400,000 Sold.**

**Improved Results with Tube or Crystal**

Try entirely at my risk the wonderful improvement this inexpensive little device will make in the reception of your set. Improves results on both crystal and tube sets that use any kind of aerial except loop antenna. Clears up reception wonderfully, increases volume, and partially absorbs static. **Money-Back Guarantee.** Put this interference eliminator on your set and note amazing improvement. No tools needed—install in a moments time. Connect with set and follow simple instructions. Money back promptly if not delighted. **\$1 postpaid when cash with order.** ORDER TODAY—a dollar bill will do. REFERENCES: Exchange National Bank, Atchison Savings Bank.

**\$1 Postpaid** If you are not delighted with results you get your dollar back

The New Steinite 7-Tube Radio uses no batteries of any kind—only \$125. Loud Speaker Built In. Complete with tubes \$151 with nothing to buy. Operates from light socket 1c an hour. Write for descriptive literature before buying an expensive Battery Set. Also Steinite Long Distance Crystal Set \$6—6-Tube Battery Set \$45. **WRITE TODAY.**

**STEINITE LABORATORIES, 408 Radio Bldg., ATCHISON, KANSAS**

Eastern 9:00 p. m. KUOA (299.8m-1000kc) University of Arkansas glee club.

WBZ Springfield, Mass. (333.1m-900kc) 7:05 p. m. organ; 7:30, features; 10:05, orchestra.

WFI Philadelphia, Pa. (394.5m-760kc) 6:45, Adelpia dance orchestra; 8, WEAF; 8:30, WEAF; 9, WEAF; 10, Moment Musicale; 10:30, orchestra.

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.

Educational Features Tuesday

Eastern 1:50 p. m. WMAQ (447.5m-670kc) "The Voice in Speech."

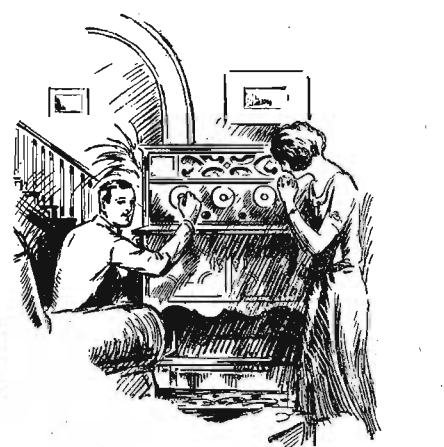
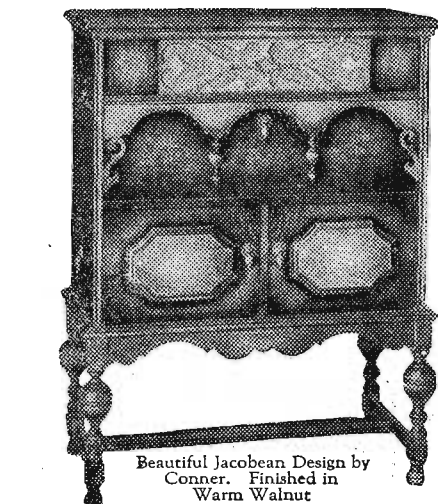
FREE LOG 64 Page Perpetual



New 64 page automatic, loose leaf Log & Data Book. We publish corrected sheets as changes in calls, wave lengths, watts, owners, addresses, etc., occur and as new data comes out.

Regular Tuesday Features

Eastern Time Stations KDKA Pittsburgh, Pa. (309.1m-970kc) 8 p. m. sacred song concert; 8:45, gems from American literature; 9, musicale; 11:35, Grand theater.



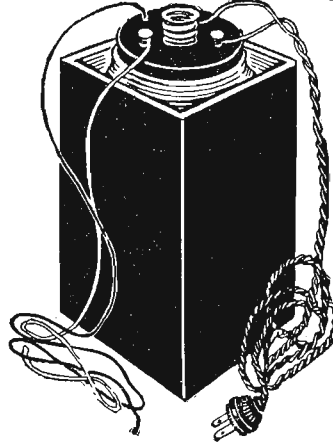
Put Your Set in a Conner Cabinet

THE MOST interesting—the most noticed piece of furniture in your home is your Radio Set—House it in a Conner Convenient Cabinet and it will then be the most attractive.

A&B Battery \$2 Charger ONLY

SATISFACTION GUARANTEED

THIS wonderful charger—the sensation of the entire radio industry—charges any type of storage A or B battery, using only a few cents worth of ordinary house current.



Cannot possibly injure your battery, and will last for years. Many radio fans find it a tremendous success as a trickle charger.

Why pay \$10.00 to \$15.00 for a charger when you can get this splendid GUARANTEED R. B. Charger by simply signing the coupon below and mailing it to us with two dollars (bills, money order, check or stamps) plus 10c in stamps or coin to pay mailing costs.

PROOF!

"I received your charger and have used same, and am very much pleased with it. It certainly does charge up a battery in quick time."

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CONNER RADIO CABINET COMPANY New Albany, Ind.

The Radigon for Ample Dependable "B" Power



YOU can depend on the RADIGON B power supply. It does more than take the place of "B" Batteries. The RADIGON is the most efficient B power unit embodying the full wave no-filament tube principal.

GUARANTEED

By actual test you will find that the RADIGON B will compare and give you results you would expect from eliminators selling at more than twice its price.

The RADIGON will operate any radio set up to twelve tubes on 105 to 120 volts, 50 to 60-cycle A. C. Current. Terminals for negative, detector and intermediate. Also a high voltage tap which will supply constant current up to 200 Volts.

PRICE COMPLETE \$23.75 F.O.B. CHICAGO 24 HOUR DELIVERY If your Dealer cannot supply you send money order for full or part of the amount and we will ship the RADIGON immediately upon receipt of order (balance C. O. D.).

The Ideal Xmas Gift—A RADIGON AMERICAN RADIGON LABORATORIES 559-561 W. Monroe St., Chicago, Ill.

**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. (285.5m-1130kc)** 6:15 p. m. dinner music; 7:30 evening program; 10:30, musicale. WGY, WHAM, WFBL; 12, Harold Runsey, 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.

**WRC Washington, D. C. (468.5m-640kc)** 7 p. m. Raleigh hotel orchestra; 8, WJZ; 9, WEAF; 10, WJZ; 10:30-11:30, Meyer Davis' Le Paradis band.

**WSAL Cincinnati, Ohio (325.9m-920kc)** 7:15 p. m. dinner concert; 7:45, music; 8, WEAF.

**WTAM Cleveland, Ohio (389.4m-770kc)** 6:15 p. m. orchestra; 8-11, WEAF; 11, Austin Wylie's Vocalion Recording orchestra.

**WTC 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, Neb. (340.7m-880kc)** 5:30-6:30 p. m. musicale; 8:05-10:30, University of Nebraska.

**KFDM Beaumont, Texas (315.6m-950kc)** orchestra.

**KFNH Shenandoah, Ia. (461.3m-650kc)** 7 p. m. program.

**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 Ethelogue; 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; 8:30, mixed quartet; 8:30-9, Dinah; 12, Rough and Ready.

**KYW Chicago, Ill. (535.4m-560kc)** 6:30 p. m. Joska DeBabay 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; 8:30-9, Fort Worth club orchestra; 9:30-11, Excel ensemble.

**WBBM Chicago, Ill. (226m-1330kc)** 8 p. m. Con-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, Garrett's Chocolate Soldiers; 10:15, Izaak Walton league.

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

**WDAF Kansas City, Mo. (365.6m-820kc)** 6-7 p. m. school of the air; 11:45-1, Nighthawk frolic.

**WEBB Chicago, Ill. (370.2m-810kc)** 7 p. m. classical hour; 9-11, Balaban and Katz Uptown theater musical hits.

**WFAA Dallas, Texas (475.9m-630kc)** 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; 8:5, 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. concert.

**WHB Kansas City, Mo. (365.6m-820kc)** 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.

**WHI Chicago, Ill. (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, Ill. (370.2m-810kc)** 8-9 p. m. child artists; 11-1, Palmer House Victorians.

**WLIB Chicago, Ill. (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, Ill. (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. Hotel Gayoso orchestra; 11, midnight frolic.

**WOAI San Antonio, Tex. (394.5m-760kc)** 8:30-9:30 p. m. Gebhardt Mexican players.

**WOAW Omaha, Neb. (526m-570kc)** 6 p. m. Henry Thornton, organist; 6:30, Lillian 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; 9:30-10:30, lecture.

**WOOD Grand Rapids, Mich. (241.8m-1240kc)** 8 p. m. studio program.

**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.

**KGO Oakland, Calif. (361.2m-830kc)** 6-6:55 p. m. Stanislas Dem's Little symphony; 8-9, Pilgrims; 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, KFUD, KLB, KOB, KSWC, KTAB, KWWG, WAHG, WAMD, WBBR, WEMC, WCCP, WOS, WRVA, WSMB, WSUL, WTAM, WTIC.

**Write For Hampton Wright's Radio Economy Catalog**

**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 purchases. Specify catalog No. C-8.

**Hampton Wright P. O. Box 181 Indianapolis, Ind.**

**Silent "B" Power with World Radio Storage "B" Battery**

**12 Cells 24 Volts**

**Lasts Indefinitely—Pays for Itself**

Dependable. Quiet. "B" power, clear without "hum." Economy you have never before thought possible. Convenience. Outstanding performance. Recharged for almost nothing. Solid rubber case insures against leakage or acid. Extra heavy glass jars. Heavy rugged plates. Approved and listed as standard by Pop. Radio Laboratories, Pop. Sci. Inst. Standards, Radio News Lab., Lefax, Inc., and other Radio authorities.

**Extra Offer: 4 Batteries in series (96 Volts) \$10.50.**

**SEND NO MONEY!** Just state number of batteries wanted and we will ship same day order is received. Pay expressman after examining batteries, 5 per cent discount for cash with order. Send your order today—NOW!

**WORLD BATTERY COMPANY**  
1219 So. Wabash Ave. Dept. 76 Chicago, Ill.  
Makers of the Famous World Radio "A" Storage Battery  
Prices: 6-volt, 100 Amp. \$10.50; 120 Amp. \$12.50; 140 Amp. \$15.25.  
All equipped with Solid Rubber Case.

**World STORAGE BATTERIES**

Set your Radio Dial for the new 100-watt World Storage Battery Station, WSBC, Chicago. Always something interesting.

**30 Days Free Trial**

Just Out—1927 Model

Yes Sir! You can put a new 1927 Westingale Radio in your home and use it to your heart's content on 30 Days' Trial. Listen to music, concerts, news, 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 \$47.00**  
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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.

**Westingale Electric Co.**  
Department 131  
1751 Belmont Av., Chicago, Ill.

**AGENTS WANTED** Buy at COST Your own Radio Free. Get demonstrator set on 30 Days' Trial—make \$100 a week easy. Full or spare time. Big discount on first set placed in each locality. Be first—write today for dealers' discount and full details.

**Super "B" Battery Eliminator**

Will Operate Any Set From Your Light Socket

**Buy Direct Save 60%**

PRICE **\$18.90** NET

F. O. B. NEW YORK OR MINNEAPOLIS

**No Hum** 50-60 CYCLE AC—OUTPUT 200 VOLTS **Power**

**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.

**SWEETONE RADIO CO.**  
3130 BUHRE AVE. NEW YORK CITY, N. Y.

**WORLD'S FINEST LOUD SPEAKER**

Genuine "ENSCO" 3 FOOT CONE KIT ONLY \$10

**MAKE YOUR OWN THREE FOOT CONE SPEAKER IN LESS THAN AN HOUR.**

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 Phonotex for big cone, with brass apex; two Sepia Prints showing cabinet or simple stand construction. All necessary instructions.

Buy this wonderful speaker under our absolute guarantee. Your money back if you are not convinced that it is the finest reproducing medium obtainable at any price. It works on any set, with ordinary tubes or with power output.

**Send No Money!** Write your name plainly in space indicated below, and complete kit will be forwarded to you. Just pay postman \$10.00 upon delivery.

Name.....  
Address.....

**Engineers' Service Co.**  
25 Church St. (Desk D) New York City.

**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

**IMPROVED Effarsee ANTENNAE**

REG. U. S. TRADE MARK PATENT PENDING

Can be hung anywhere. Don't risk your life erecting an outside aerial on already crowded roofs, when you can hang an Effarsee Antennae in your attic, cellar, spare-room or a closet—under carpets or behind pictures, drapes or furniture, in less time than it takes to tell. Special parchment covering keeps wires properly spaced, and insulated from moisture and electrical losses. Fixed condensers 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.

**SEND NO MONEY**

Just mail the coupon. We will send antennae complete with full instructions. Pay the postman \$4.00 on delivery. A Binghamton, N. Y., user writes, "Have never heard as good reception as is given on your Antennae." A Detroit user says, "Got Denver, San Antonio and others with locals going full blast." We guarantee you complete satisfaction, too, or your money will be refunded. You take no risk. Send the coupon now.

Name.....  
Address.....  
Town..... State.....

**MONEY BACK! if not Delighted**

**FISHWICK RADIO CO.**  
Dept. 52, 133 West Central Parkway, Cincinnati, Ohio

**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 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-

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)

Again  
**ELECTRAD**  
Parts are Mentioned  
Use  
**ELECTRAD**  
Certified  
Mica Condensers

**ELECTRAD**

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

At All  
Dealers  
**AMPERITE**  
The "SELF-ADJUSTING" Rheostat

**Build This New**  
**"Bruno"**  
**Regenatrol**  
**Receiver**

As Described in This Issue by  
*Joseph Calcaterra*

Complete Kit of Parts \$60.00  
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 Company exclusively for The Bruno Radio Corp.

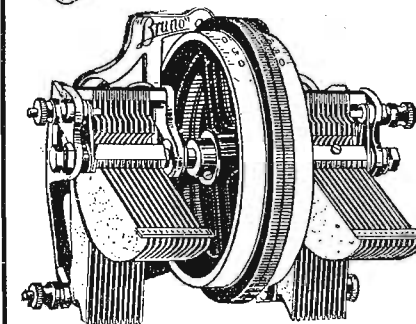
Other Popular Kits Ready for Shipment. Every Kit Includes Full Instruction Sheets for Wiring.

New Improved  
Diamond of the Air Kit  
5 Tubes  
Complete Parts, \$37.50

Radio World's Popular  
Bernard 6-Tube Kit  
Complete Parts, \$40.00

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Diamond of the Air Kit  
Complete Parts, \$30.00

*Bruno*  
Simplifies and  
Beautifies  
Any Set



**UNITUNE MODEL 2C**—This basic instrument consists of two bakelite shaft Bruno straight line frequency condensers (.0005 mfd. unless otherwise specified), mounted on an aluminum frame; a bronze panel plate and two drums, with scale. As shown above. Price, \$11.00

**UNITUNE 2CB**—Used in the BERNARD and other popular circuits consists of two BRUNO .00035 mfd. 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 TK**—This model is similar to Model RF except that the right hand condenser holds a standard BRUNO THREE-CIRCUIT TUNER. It is adaptable to a variety of circuits. Used in the Bruno Regenatrol Receiver. Price complete, assembled, \$20.00

**UNITUNE MODEL BD**—Consists of two condensers and two specially wound coils designed for use only in the BROWNING-DRAKE circuit. Price, \$21.00

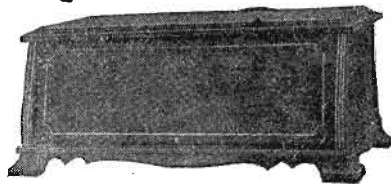
We Carry Complete Stock of  
Standard Merchandise  
and All Popular Kits

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**RADIO SERVICE CO.**  
INCORPORATED

221-D Fulton St., N. Y. C.

**Special Cabinet**



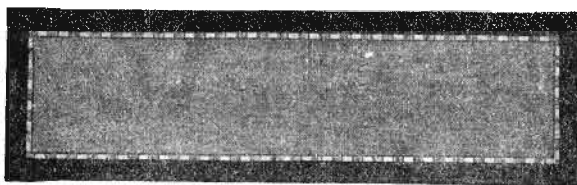
7x24 Panel, 10" deep

WALNUT ONLY . . . . \$14.50  
MOUNTING BOARD, splined and varnished. For above cabinet. 80c  
Also full line of cabinets for Infadyne LC-27 and other circuits. Write for 1927 folder.

**Corbett Cabinet Mfg., Co.**  
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**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  
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—as usual—

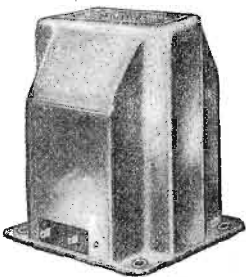
**CARTER**

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

**Carter Radio Co.**  
300 S. ENGINE AVENUE  
CHICAGO, ILL. U.S.A.



Success  
with  
Bruno  
Regena-  
trol  
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 MEMBER Sales offices in  
Canton, Mass. RMA all large cities

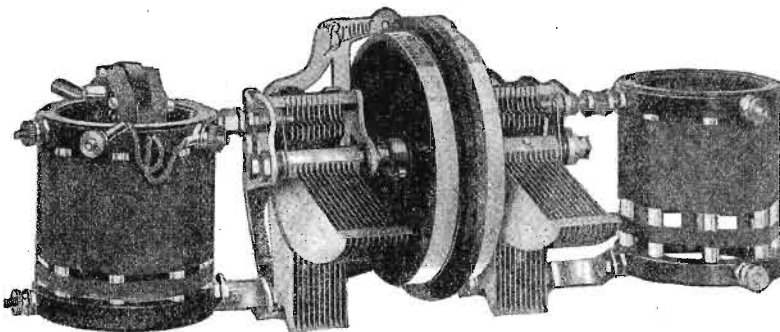


The **SIMPLICITY** of tuning  
The **EFFICIENCY** of Bakelite Shaft Condensers and Quartzite Coils  
And the **BEAUTY** of the Bronze Plate  
makes the  
**BRUNO UNITUNES**  
the ideal tuning device for those wanting the best

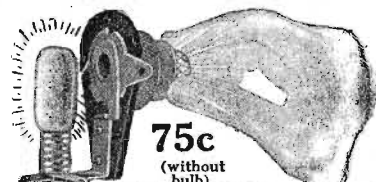
The BRUNO UNITUNE consists of an aluminum frame upon which are mounted two bakelite shaft S.L.F. condensers, insulated from each other. Each condenser may be tuned simultaneously or independently.

The two Quartzite Coils are already wired into the circuit simplifying construction to the extreme.

Only two screws are required to mount a UNITUNE on a panel.



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.

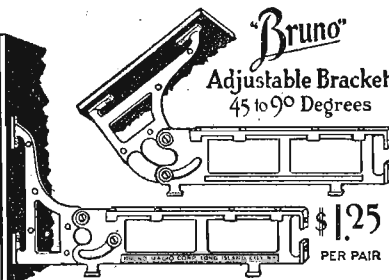


75c  
(without bulb)

**BRUNO LIGHT SWITCH** provides a visual indication when the batteries are turned on.

When mounted under the UNITUNE drum, it reflects sufficient light on the scale to make it visible in the dark.

TURN IT—IT LIGHTS! PUSH IT—IT'S OFF!



*Bruno*  
Adjustable Bracket  
45 to 90 Degrees

\$1.25  
PER PAIR

**BRUNO RADIO CORP., Long Island City, N. Y.**

(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 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

of the receiver to sharpen tuning. If a B battery 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 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 condensers, but the resultant loss in efficiency 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 herewith.

**CLASSIFIED ADVERTISEMENTS**

**DOGS**

Beautiful registered bull pups, \$15. Bull-dogs, 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 guaranteed. 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**

**NEW RADIO WITHOUT BATTERIES.** Why waste several hundred dollars when you can get all the radio you want on a Lambert costing only \$2.95 postpaid. Big stations 600 miles away come in loud. Needs no tubes or batteries. 250,000 homes already have them. Order direct from this adv. Crystal Radio Company, Wichita, Kan.

**"SOCK-ANTENNA" AERIAL WIZARD** inductive aerial works from light socket, solves aerial problem, separation of stations, reduces static and interference to minimum, increases volume, adds clarity, equals outside aerial. Sold, satisfaction guaranteed, price \$5.00. Write for bulletin "T-R-S SOCK-ANTENNA." Tidmarsh'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, Shunway, Illinois.

For Sale—7-tube super-het in beautiful walnut cabinet. Reasonable. John Wisner, 105 S. Kostner Ave., Chicago.

Will sell my factory-built 7-tube super-het cheap. Beautiful walnut cabinet. Same circuit as Ryan's Simplest Possible. 700 S. Taylor Ave., Oak Park, Ill.

**FOR SALE—Six-tube Het-Duo-Gen** receiver without cabinet for \$25. Parts alone cost over \$75. Henry Martin, 3136 Christiana 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.

**SALESMEN WANTED**

Make \$100 Weekly in spare time. Sell what the public wants—long distance radio receiving sets. Two sales weekly pays \$100 profit. No big investment, no canvassing. Sharpe of Colorado made \$955 in one month. Representatives wanted at once. This plan is sweeping the country—write today before your county is gone. Ozarka, Inc., 431 N. LaSalle Av., C, Chicago.

**WANTED**

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.

**GUARANTEED RADIO TUBES**  
By Return Mail!  
Direct from factory saving wholesale and retail dealers' profits. 201-A type with UX bakelite bases.  
**\$1**  
TRELCO SALES Prepaid  
1021 Moseley St., Owensboro, Ky.

**RADIO TOWERS**  
FOR SALE at your own price  
These towers are 106 feet high and have been in use a little more than one year, having been kept painted and are in good condition; they will be sold as they stand in Brownsville, Texas. Make an offer.  
KWWG Brownsville, Texas

**American Radio Now—**  
**50% DISCOUNT ON RADIO!**  
BIG NEW 1927 CATALOG-FREE  
Dealers, Agents, Set Builders—get our big 1927 Catalog—225 nationally advertised lines. Lowest prices in America! Largest, most complete stock. Radio's latest developments. It's FREE—send for your copy now. AMERICAN AUTO & RADIO MFG. CO., Inc. 1443-A McGee Street, Kansas City, Mo.

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BRING IN STATIONS YOU NEVER HAD BEFORE  
**RADEX**  
Tuning Charts  
Show wave length you are tuning to. Tell where to set dials for any station. Identify programs without announcement.  
BROADCASTING MAP AND DISTANCES FOR ANY SET AND ANY DIAL  
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Send for it TODAY  
MONEY BACK GUARANTEE  
Easily installed in place of your present ground. No Radio Set complete without it. Indorsed by Radio listeners everywhere.  
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DOUBLES POWER AND DISTANCE  
Marvelous newly-invented ground gives 100% improved reception. Doubles power and distance. Stops leakage. Reduces static. Stops jangling even in midsummer. Results never before equaled, users say. Satisfaction guaranteed.  
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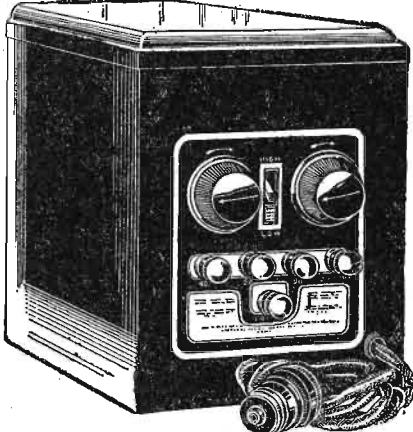
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Distributors of Nationally Advertised Radio Lines  
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**The Write Gift for Children**  
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PENCIL SETS De Luxe Set: 1 post paid  
Finest genuine sheepskin 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.  
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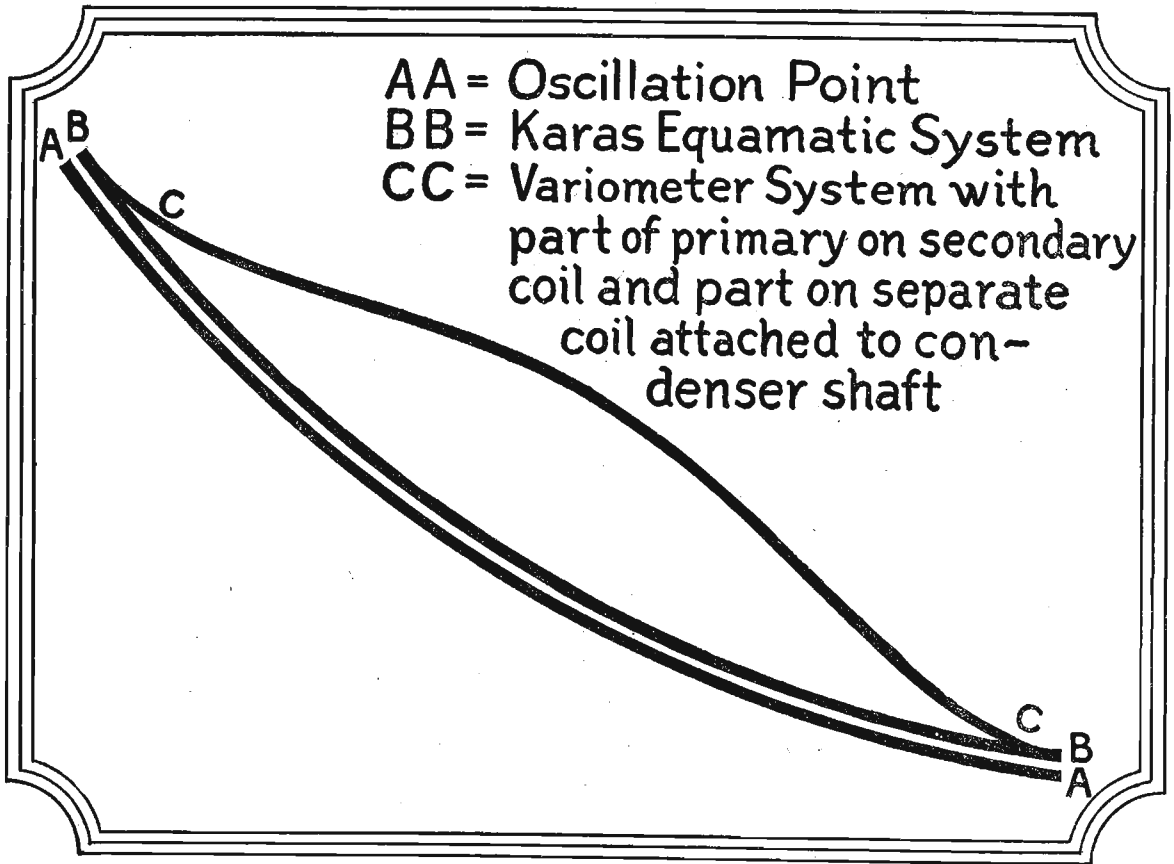
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Your Name and Address on Each Card  
Thank-You for Your Program  
Heard About 3:30 P.M. on Nov. 1, 1925  
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Enjoyed the quartette  
We would appreciate hearing of Roses of Pecan or Humorousque  
CHESTER A. WHEELER  
610 E. 47th St. No. Portland, Ore.  
Stations gladly put on numbers you request. Stations and entertainers appreciate applause cards. We print special individual cards that get immediate ATTENTION. Applaud your favorites. Quality cards and printing. Special radio design. Post card backs. All The Rage. You and your children will get many hours of pleasure. Special introductory price: \$2 for 100 cards and we include 8 coupons each good for \$1 payment on other cards. Let your friends have these coupons at 25c each and you have YOUR cards absolutely FREE or at 50c per coupon you have \$2 extra.  
SEND NO MONEY Just pay postman after you get cards and 8 coupons. Post paid if \$2 with order. Money Refunded if not delighted. Write today—NOW while offer lasts. A post card will bring these individual cards.  
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**Genuine RAYTHEON "B" Battery Eliminator**  
\$50 Value—Our Price Only  
**\$22.95**  
  
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.  
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Belmont Scientific Laboratories, 1301 Wilson Ave., Dept. RD, Chicago, Ill.  
 Ship at once, post paid, \$22.95 (check enclosed).  
 Ship at once, C. O. D., for \$22.95, plus slight express charges.  
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# 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 INDUCTANCE 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 Equamatic Receiver, have special extended shafts upon which to mount the primary coils of the Inductances. Price, each, \$7.00.

**KARAS HARMONIK AUDIO FREQUENCY AMPLIFYING TRANSFORMERS** are essential to the tone quality success of the Equamatic Receiver. Two of these are used for the two stages of audio 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-PANEL BRACKETS**. To insure the necessary exact positions of primary and secondary coils these brackets are essential. Price, set of three, 70c.

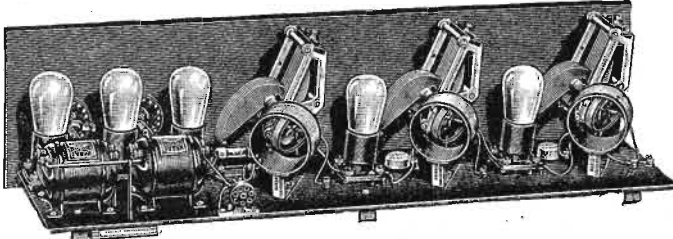
**KARAS MICROMETRIC DIAL**. It has a 63 to 1 vernier and tunes to 1/1000 of an inch. Micrometrics are made of Bakelite. They have large, comfortable knobs, gold inlay markings of unusual precision, and may be attached to your present set without drilling any additional holes in panel. To really know 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.

Karas Micrometric Dial

**T**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 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.



The Karas Equamatic 5-Tube Sensation

## What Is Meant by High Efficiency in the Equamatic?

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.

## Other Sets Vastly Less Efficient

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.

## 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 once 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 the most efficient receiver you can possibly build, but it has also a selectivity, purity of tone and a volume that you can get in no other receiver. It is also extremely simple to operate. You will be able to spend far more time listening to the programs with your Karas Equamatic and far less in locating the stations you wish to hear than with any other receiver. And last, but not least, the Equamatic is extremely easy to build.

## 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

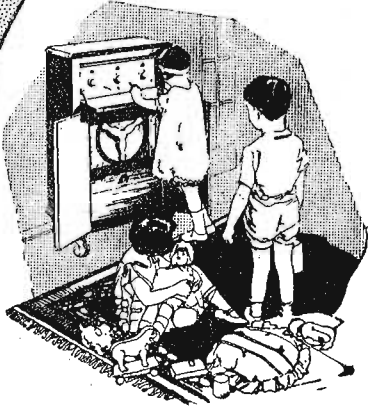
**KARAS ELECTRIC CO.**  
1079 Association Building, Chicago, Illinois.

Please send me set of 3 Equamatic Inductance Coils, \$12.00; 3 special Orthometric Condensers with extended shafts, \$7.00 each; 3 Micrometric Vernier Dials, \$3.50 each; 2 Harmonik Audio Transformers, \$7.00 each; 2 Equamatic Retard Coils, \$1.00 each; and 3 sub-panel brackets, 70c, for which I will pay postman \$60.20, plus postage, upon delivery. It is understood that I have the privilege of returning any of this apparatus for full refund any time within 30 days if it does not prove entirely satisfactory.

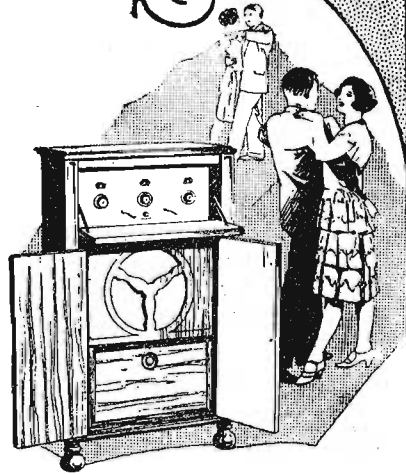
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(If cash accompanies order we will ship postpaid.)

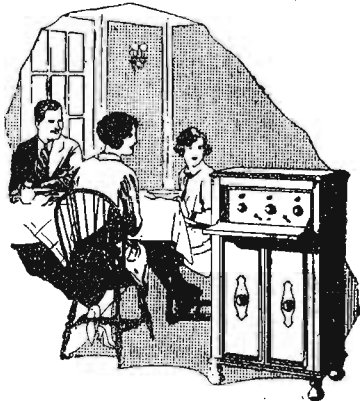
# New and Improved FRESHMAN MASTERPIECE



*Uses C-Battery  
and  
Power Tube*

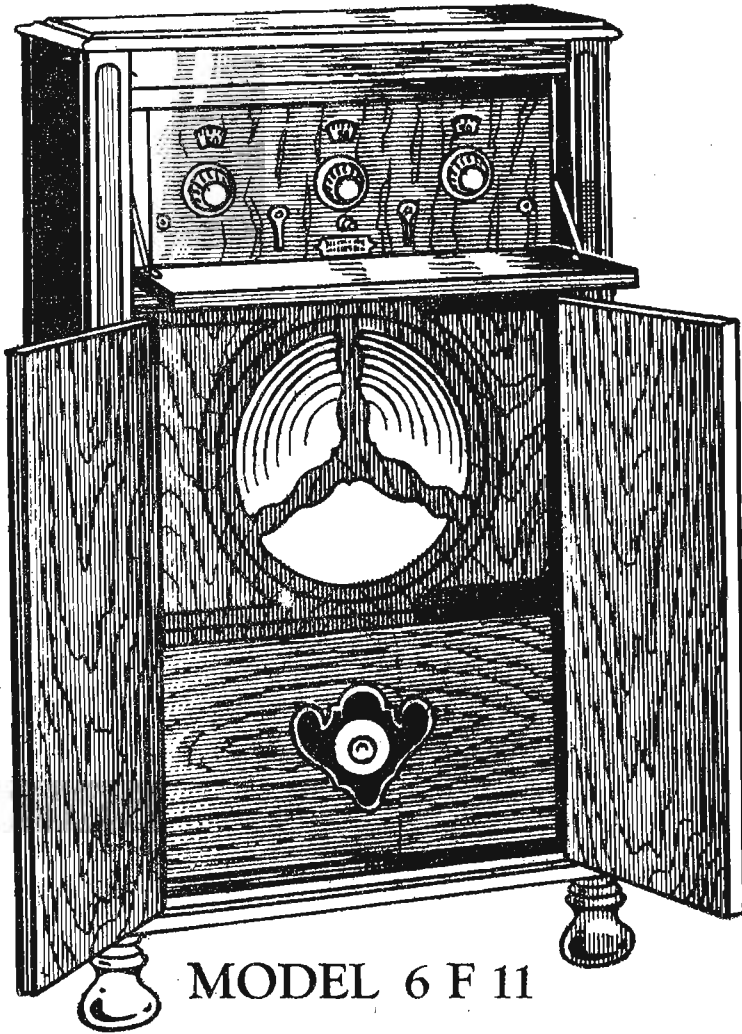


*Shielded all  
metal Front and  
Sub-panel*

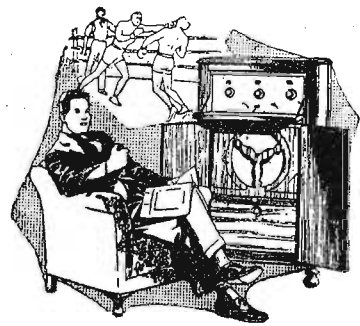


*Operates by Electricity  
if you prefer*

This new QUALITY set is so designed to operate from your light socket by installing the new Freshman "ABC" Power Supply.



MODEL 6 F 11



*Genuine R.C.A  
Radiotrons*

are recommended for use with Freshman Masterpiece Receivers. A special package containing—1 UX 112 power tube, 1 UX 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.

# \$119.50

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—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.

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