

Opening Baseball Games to Go on Air

Radio Digest

EVERY
WEEK

10

TEN
CENTS

Vol. XVII No. 1

Copyright 1926 by
Radio Digest Publications

Title Reg. U. S.
Pat. Off. &
Canada

APRIL 10, 1926



"Sunflower Girl" Vamps Texans; WDAE Steals Fish Playground; Women's Programs; Seventh Installment of "A Step On the Stairs;" Super-Torodyne, New Improved Super

No. 3 OFFICIAL BALLOT

Announcers' Contest

RADIO DIGEST THIRD ANNUAL GOLD CUP AWARD

GOLD CUP AWARD Editor, Radio Digest,
510 North Dearborn Street, Chicago, Ill.

Please credit this ballot to:

.....of Station.....
(Announcer's Name) (Call Letters)

Signed.....

Address.....

City..... State.....

4-10-26

McNAMEE AND HAY QUIT GOLD CUP RACE

CONCLUDE ONCE ENOUGH TO WIN FIRST PLACE

1924 and 1925 Victors Establish Precedent—Eighteen New Candidates Entered in Announcers' Race

Stand by for a shock, ye supporters in the Middle West of George D. Hay, WSM, and in the East of Graham McNamee, WEA, for they have philanthropically and voluntarily decided that they will not try for the Gold Cup Award this year.

The decisions not to run, tendered by the winners of the 1924 and 1925 Gold Cups, arrived by mail almost simultaneously. The two letters were but several hours apart, and each of the past champions voiced the sentiment that one cup was enough for any announcer. It was time to get out of the race and let the other fellows win.

Both McNamee and Hay feel that they would not win again this year regardless of their running, but that the votes which would be wasted upon them should go to someone else:

McNamee Describes Cup

So that ends the race as far as McNamee and George Hay are concerned. The Gold Cup Award editor accepts their withdrawal, and the precedent of "single terms" for Gold Cup announcers is thus established.

Graham is much pleased with the cup he won last year by the aid of his friend announcers and Radio fan supporters. He says:

"The cup graces the top of my Radio set and looks very beautiful in its glass case. The usual comment of friends who see it for the first time is that it is, undoubtedly, the most beautiful cup they have ever seen. I feel the same way about it myself and am very proud to be the possessor of such a beautiful piece of art work."

Nominations Come in Fast

Added to the sixteen nominations announced last issue, eighteen more candidates have been put in the race by listeners in. Old and new names, handling microphones scattered from the Mississippi's delta to the seat of the Canadian government, and from the Atlantic seaboard to the wheat belt, are found in the list. The eighteen new contestants are:

- CNRO.....A. W. Ryan
- KDKA.....George S. Ryan
- KTHS.....G. C. Arnoux
- KFNF.....Henry Field
- KYW.....Sen A. W. Kaney
- WAPI.....W. C. Wall
- WCX.....C. D. Tomy
- WDAF.....H. Dean Fitzer
- WDOD.....John T. Carter
- WGN.....Quin Ryan
- WHO.....N. Dean Cole
- WJZ.....Norman Brokenshire
- WJZ.....John B. Daniel
- WOC.....Peter McArthur
- WOL.....Andy Wolfreese

HOLLYWOOD SINGER HAS PERFECT VOICE

MISS Lilyan May Challenger, who adorns our cover this week, is the girl who sings the silver chord during the hour of the Silvertown Cord orchestra at KNX, Hollywood, California, every Monday night from ten to eleven, Pacific coast time. She cherishes a unique distinction in a compliment received from Dr. Lee De Forest, father of the modern Radiophone, who declared that she had "a perfect Radio voice." The tone is contralto and by gift of nature the quality seems to be of a precise vibration that makes transmission practically 100 per cent perfect.

- WOAW.....Lester Palmer
- WRC.....Edw. B. Husine
- WSMB.....C. R. Randall

If your favorite announcer's name is not in the list above or did not appear last issue, fill in the nomination blank at the right top of this page and get him into the running. Then SAVE your ballots for him. Don't miss a SINGLE ballot, for when these are turned in to Radio Digest in a group of CONSECUTIVE numbers, a pleasing and worth while bonus of extra votes is allowed the announcer for whom you are voting.

How Bonus Votes Are Given

The ballots, which appear weekly beginning last issue at the left top of this page, are numbered consecutively. They will appear every issue until the close of the contest. Each of these ballots will count for one vote when sent in separately.

NOMINATION CERTIFICATE

Announcers' Contest

Radio Digest Third Annual GOLD CUP AWARD

GOLD CUP AWARD Editor, Radio Digest,
510 North Dearborn Street, Chicago, Ill.

Dear Sir:

I nominate.....

Station.....
(Broadcasting Station)

Signed.....

Address.....

City..... State.....

But when held until you have four consecutively numbered ballots, and sent in at one time to Radio Digest, a bonus of eight votes, or a total of twelve votes, will be allowed the candidate for whom you are voting.

The larger the number of consecutive ballots submitted, the greater is the bonus allowed. Eight consecutive ballots receive a bonus of twenty votes, or a total of twenty-eight votes. Twelve consecutive ballots receive a bonus of thirty votes, or a total of forty-two votes. And for a complete series of ballots, including one from each issue from March 27 to and including the last, which will appear in the September 1 issue, a bonus of fifty votes will be allowed.

Send in nominations or ballots to the GOLD CUP AWARD EDITOR, Radio Digest, 510 North Dearborn street, Chicago.

The government of the Dutch East Indies has authorized the erection of a large broadcasting station and the private use of receiving sets under license.

NEWS BRIEFS FROM THE BROADCASTERS

WAR-TIME TUNES WILL BE PLAYED THROUGH WJZ

Lieut. Macready to Speak Over WLW—
KSD, St. Louis, Joins Capitol
Theater Gang

"Memories of the World War," a collection of 1917-18 tunes made by Capt. Wm. J. Stannard, U. S. army band leader, will be repeated by WRC, Washington, and WJZ, New York, during the latter part of April.

Lieut. John A. Macready, famous for his altitude and transcontinental airplane flights, will speak from Crosley WLW, Cincinnati, on Tuesday evening, April 13, at 7 o'clock Central time.

Station KSD, St. Louis, has been added to the list of broadcasters giving the Sunday evening programs from the Capitol theater, New York. The seven others on the list are WEA, WCAP, WJAR, WWJ, WCAE, WEEI and WTAG.

The North Dakota American Legion official program will be given from Station WDAY, Fargo, on April 18, from 4 to 6 p. m. Central time. The wave length is 261 meters.

President Coolidge, unable to attend in person, will be one of the many listeners hearing the party of the Exchange clubs of Connecticut, to be broadcast from WTIC, Hartford, on Saturday, April 10, at 8:30 p. m. Eastern time.

Two one-act plays, written for Radio, will be presented on Thursday evening, April 15, by the KGO Players, at Oakland, under the direction of Wilda Wilson Church.

"The Oriental Symphony" is the latest WGN attraction. It is a studio orchestra which plays special arrangements of every one of its selections of popular music.

Over \$50,000 worth of presents were given away by the Missouri State Marketing Bureau station, WOS, when an interstate old fiddlers' contest was held last week. Sixteen fiddlers from eight states participated.

Robert Hurd, well-known authority on music and entertainment, has been added to the staff of KFI as program director. His duties, KFI emphasizes, will be as large and important in scope as the leading motion picture directors are to the motion pictures.

Members of the Kittredge Glee club were heard over WGBS, New York, last week in a program of Easter carols and appropriate music aided by the ukulele section of the club. The Kittredge Glee club was founded 35 years ago by the Rev. A. E. Kittredge for the professional and business girl.

The latest "nut" club to take the air is the "Wisecracker Club" of KNX, Hollywood. It is now one month old as a weekly feature. The "Duke" and the "Count" are the "Chief Crackers."

A modern adaption of the old-fashioned almanac is heard nightly from WLIB, Chicago, at 7:20 p. m. Central time. The broadcast's nature is very similar to the type of material found in the almanac, and it precedes the weather forecast for the night and following day.

A New York Liederkrantz and a Syracuse dance orchestra entertained listeners in the African rand and veldt recently when WGY's program was rebroadcast in Johannesburg, South Africa, in what is believed to be a record relay. WGY's 32.79-meter wave was received and repeated on a higher wave by an African amateur.

CONTENTS

Radio Digest, Illustrated, Volume XVII, Number 1, published Chicago, Illinois, April 10, 1926. Published weekly by Radio Digest Publishing Co. (Incorporated), 510 N. Dearborn Street, Chicago, Illinois. Subscription rates yearly, Five Dollars; Foreign Postage One Dollar additional; single copies Ten Cents. Entered as second class matter at the post office at Chicago, Illinois, under the Act of March 3, 1879. Title Reg. U. S. Patent Office and Dominion of Canada. Copyright 1926 by Radio Digest Publishing Co. All rights reserved.

	Page
All the Live News of Radio.....	1 to 8
"Sunflower Girl" Vamps Texans.....	4
WDAE, Tampa, Steals Fish Playground.....	5
Women's Page: Index to Women's Programs.....	6
"A Step On the Stairs," Radio Digest Prize Story, Seventh Installment by Robert J. Casey.....	7
Advance Programs.....	9 to 16
An Evening at Home with the Listener In, a chart of Central Time, showing when to listen in for stations.....	17
Editorials, Indi-Gest and Condensed by Dielectric.....	18
The Super-Torodyne, An Improved 8-tube Super, Part I—Analysis of the Circuit, by Professor J. E. Owens.....	19
How to Stop Blooping and Man-Made Static, Part IX—Trouble Shooting Apparatus, by the Technical Staff.....	21
Directory of Radiophone Broadcasting Stations, Part IV (Revised).....	22

Looking Ahead

In the Next Issue of Radio Digest, readers of the thrilling Radio mystery serial, "A Step On the Stairs," will find a great many enlightening incidents. Real names and real characters will be discovered by the police motor lights. It will seem to unfold most of the mystery—and yet, will it? Draw your conclusions and get ready to write your own answer for one of the big cash prizes.

Pensacola Is One of the Old Towns on the Gulf Coast of Florida. It is one of the old forts, rich in traditions but keenly alive to the trend of modern life. It has established its own broadcasting station, municipally owned and controlled. You will be interested in reading about WCOA at Pensacola, Florida, in our next issue.

Just as Individuals Have Personalities, vivacious or serious and dignified, poised or hoity-te-toity, musical or speechy and educational, so do these characteristics identify various broadcasting stations. A bit of analysis along this line with special reference to WGCP, New York, in a forthcoming issue of Radio Digest.

The "Don't Bloop" Articles Continue. The technical staff, in the next issue, will offer timely advice for the selection of interference inspectors, together with the circuit and constant values for the construction of a portable receiver.

Interested in "Supers"? Professor Owen's second article of his series upon the Super-Torodyne will be of unusual interest to those who enjoy building the latest. Panel layouts and arrangement of parts will be described.

Newsstands Don't Always
Have One Left

WHEN YOU WANT

Radio Digest

YOU WANT IT!

BE SURE OF YOUR WEEKLY COPY
BY SUBSCRIBING NOW

SEND IN THE BLANK TODAY

Publisher Radio Digest,
510 N. Dearborn St.,
Chicago, Illinois.

Please find enclosed check M. O. for Five Dollars
(Six, Foreign) for One Year's Subscription to
Radio Digest, Illustrated.

Name

Address

City..... State.....

STATIONS READY FOR BASEBALL

BIG PAGEANT TELLS AMERICA'S HISTORY

EIGHT-HOUR PROGRAM IS GIVEN THROUGH WOAW

Listeners Ride With Columbus on "Santa Maria" and Through Events Up to World War

OMAHA, Nebr.—"America," a Radio historical pageant, lasting eight hours, was broadcast here last week by the Woodmen of the World station, WOAW. Written by Eugene Konecky, announcer, poet laureate, and well-known author of the staff of the station, "America" afforded a presentation not often heard by Radio listeners.

Twenty-three episodes revealed through their musical arrangements and dramatic scores the history of the United States since the discovery of San Salvador by Columbus. The elaborate celebration was in commemoration of the fourth anniversary of Station WOAW, the voice of the Woodmen of the World Life Insurance association.

Pageant Covers Nation's History

By means of the pageant, which is believed to be the first ever attempted over the microphone, listeners rode with Columbus on the "Santa Maria," penetrated Florida with Ponce de Leon, looked for the first time down upon the peaceful waters of the Pacific ocean and fought the Indians at Jamestown.

They again sat in on the drawing up of the historical compact aboard the "Mayflower," struck for liberty with Roger Williams at Providence, witnessed the futile dream of the Indian chief, Pontiac, as it was shattered by the white man's power, and kaleidoscopically reviewed the epochal periods of the American revolution, the Gold Rush, the Civil war, the Spanish-American war, and the great World war.

The musical arrangement included choruses, bands, quartets, and instrumental and vocal soloists. Hundreds of ingenious sound effects were created.

INSTALL RADIO SET IN LONG NON-STOP TRAIN

Arrangement Will Make Trip of 226.5 Miles Entertaining

LONDON.—The Great Western railway, one of the "Big Four" of the British railway world, has installed loud speakers in the dining car of the famous Cornish Riviera express which leaves London at 10:30 a. m. daily for Plymouth. In addition head phones will also be available for use in the coaches.

The railway's object is to make the longest non-stop run in the world—226½ miles—an entertaining one for passengers. The trains travel at the speed of seventy-seven miles per hour.

Western Stations Showing Interest in Rebroadcasts

LOS ANGELES.—Due to the great distances in the far West with the resulting prohibitive cost of telephone interconnection between broadcast stations in the various cities, a great deal of interest is being shown in rebroadcasts. The only telephone hook-up between stations in the West is the one between KFI and KPO, a distance of slightly over 525 miles.

Stations KNX, KMTR and KFWB in Hollywood each have portable short wave transmitters mounted in busses which are used to feed programs to the main stations.

The following stations have signed off: KDZB, Bakersville, Calif.; KFAJ, Boulder, Colo.; KFHV, Manhattan, Kan.; KUO, San Francisco, Calif.; WDBC, Lancaster, Pa.; WEBM, portable; WHBK, Ellsworth, Me.

KIND BANDITS GIVE VICTIM FARE HOME

CHICAGO.—J. Elliott Jenkins, wealthy Radio engineer and broadcasting station contractor, was kidnaped here in his automobile on a recent night by seven armed men. His wife, formerly Alexandria Carlisle, famous actress, gave chase but lost the bandit car. However, the kidnaper-robbers were kind and removed but \$16 from Mr. Jenkins' pockets, giving him \$1 for taxi cab fare home. "I had the time of my life," he told his wife after rejoining her.

TELEVISION WOULD END WAR—MARCONI

LONDON.—Senatore Guglielmo Marconi has declared in an interview with the "Vossische Zeitung" that television will make war impossible two years hence. By that time, in the great inventor's opinion, the problem of sight at a distance will have been completely solved, and it will thenceforth be impossible for any troops to take cover without being "spotted" by the enemy.

FOUR OF BIG LEAGUE OPENERS ON AIR WITH SEASON'S START

Broadcasters Announce Heavy Schedules Devoted to National Pastime—Many to Give Play-by-Play Results—Majors Start April 13

DOUG, MARY AND ANNE VISIT WBOQ



Mary Pickford and her husband, Douglas Fairbanks, paid A. H. Grebe Station, WBOQ, a visit recently in the company of Anne Morgan, wealthy philanthropist, and so the picture above was snapped. Mary is pouring her reasons for being a professional woman into WBOQ's mike while Doug strums an obligato on the Irish harp and Anne looks on amusedly.

Four of the eight major league baseball games surely, and possibly more, will go on the air April 13, play-by-play and direct from the diamonds when the royalty of the bats and bases, outfield and pitcher's box, once more get into swing for a grand and glorious bunch of home runs and triple baggers. Principal broadcasting stations scattered all over the country are preparing to make the ball season of 1926 the best known in history.

Ball-Radio fans will have the opportunity of their lives of hearing the diamond news first hand over their receivers. Office boys will not need to hold open season for grandmothers—all they'll need will be crystal sets.

Four Big League Games on Air

The four major league games which will be broadcast play-by-play on Tuesday, April 13, when the Nationals and Americans start their season, and the stations which will give them are:

Brooklyn at New York, WJZ, WGY.
Chicago at Cincinnati, WLW.
St. Louis at Chicago, KOA.

Philadelphia at Washington, WRC. WRC had not completed arrangements for handling the latter game as this paper went to press, but it is almost certain to be broadcast. Besides the opening game, WRC plans to give play-by-play results this season for every game the Washington American league champions play away from home, beginning on April 21 when Washington plays Philadelphia. Bulletins from other major league games will be announced between innings, and every evening this Washington station will report the complete daily scores in all leagues.

KOA to Give Western League Opener

WJZ and WGY each night throughout the season will give the results of all the major league games, and as usual will broadcast the play-by-play story of the World Series.

Following the opening game between the Chicago Cubs and the Cincinnati Reds, WLW will devote the rest of the season to giving results of all major league games every evening except Sunday at 6:50 p. m. Central time. Sunday evening the scores will be given some time during the program.

KOA, General Electric station at Denver, is going into sports broadcasting this summer very thoroughly. The Denver-St. Joseph opener of the Western league will be given play-by-play on Wednesday, April 14, following the Chicago-St. Louis game on Tuesday. Tennis, golf and other tournaments will be broadcast as they occur.

Chicago Cub Home Games Covered

WMAQ, the Chicago Daily News broadcaster, carrying the authoritative descriptions of Hal Totten, sports announcer, will give play-by-play results direct from the diamond for every home game, except those on Sundays, of the Chicago Cubs. When the Cubs are away from home, only the scores will be broadcast.

Unless one of the Chicago teams figures in the World Series, WMAQ will also broadcast the City Series between the Cubs and the White Sox. Every afternoon, except Sunday, at intervals of fifteen minutes, WMAQ will broadcast the scores by innings for the major league games.

The first home game for the Chicago (Continued on page 16)

In Moment of Weakness, Man Confesses Doing 'Slow Train Through Arkansas'

Thomas W. Jackson of Chicago, Ends Search of Years When He Breaks Down and Tells KTHS Audience He Wrote Book That Sold 7,000,000 Copies

Who wrote the "Slow Train Through Arkansas?"

That question has rankled in the breasts of Arkansians for, lo, these many moons. The author of same has often been invited back,—to be shot, but so far there has been some confusion as to just who was the "guilty" party. Some thought it was Opie Reed, the famous wit and writer of 60 published books.

But it took Radio to set the question,—and the "Slow Train Through Arkansas" has always been a tender spot down in the "Wonder State,"—to rights.

Opie Reed recently paid Hot Springs a visit on the famous golfers' pilgrimage conducted by the Golfers magazine. Opie came to KTHS, the New Arlington hotel at Hot Springs, and took up ten minutes telling the folks tuned in that he most emphatically did not write same, but that "a fellow named Jackson" did. In fact, he was so emphatic that he forgot to tell any of his famous jokes, except one,—namely that in all the 300 golfers on the pilgrimage,—only one to date had lied about his score.

Two weeks later came Thomas W. Jackson, of Chicago and he also appeared before KTHS' mike to plead guilty to the charge of writing the "Slow Train Through Arkansas,"—which by the way has the record of 7,000,000 copies sold, more than any copyrighted book in the world.

Jackson hastily pleaded guilty, but said he had no insidious intentions to reflect on

Arkansas when he wrote it. At that time, he said he used to travel the cotton belt and was a railroad man himself. In those days, he told his Radio audience, the engineers used a calendar instead of a time table and the whiskey dealers sent their shipments via Cotton Belt to prove its age.

Following his talk, which settled once and for all the burning question of the "Slow Train" and its author's purposes in writing it, the neck tie parties tuned in, took a vote and decided to dismiss the charge.

Eastern Man Listens to KFI 100 Evenings

Has Better Reception This Year Than During 1925

LOS ANGELES.—G. Edward Elwell of Bloomsburg, Pa., earned the coveted title of KFI's official listening post when he recently sent in his 100th consecutive log of a portion of KFI's programs.

During 1925, Elwell attempted to get the record of 100 night's consecutive reception of the Pacific coast station, but summer static broke in after he had logged them for 68 times straight. Starting again on November 1, 1925, Elwell has received KFI each night for 100 times and is going strong on the second hundred.

YIPE-YIPE, BOW-WOW, DOGGIE DOES IT NOW

NEW YORK.—Dogs now bark for the morning exercises! A letter just received by WEAJ, which broadcasts each morning the "Tower Health Exercises" of Arthur E. Bagley direct from the Metropolitan Tower, New York, asks for an exercise chart especially prepared for Boston Terriers. This Radio "fan's" dog insists on his "Daily Dozen" each morning. Yessiree, it's a dog's life to have to get up every morning and do those setting-up exercises, bow, wow!

Sunflower Girl Vamps Texans

SWEET Singer From Kansas Returns Soon from Short Vacation to Listeners of WBAP, Fort Worth. Hired Hand Trains Her Voice to Suit Mike.



She's very shy, extremely modest but, Boy, how this Sunflower Girl (above) can sing! She has been missed sadly during her recent vacation from WBAP.

By SUSAN HAYMES

IT ISN'T very long—only two or three months—since the Sunflower Girl of Kansas first began singing over WBAP, the Fort Worth Star Telegram and Record Telegram station at Fort Worth. It was a voice with a decidedly new lilt in it, with magnetic personality back of it, and a voice that was broadcasting to an unusual degree of clearness and naturalness. From the very beginning, it seemed to excite an unusual interest in the minds of the Radio fans.

They began even then to write letters to WBAP, asking about the new singer. "Please tell us something about the Sunflower Girl," they wrote; and they have continued to make that request with increasing frequency.

Anyone who knows her would jump at the chance of answering these queries about her! She is the kind of person you LIKE to talk about—provided you enjoy talking of people who make you feel happy. Without being in anywise a Pollyanna, she is a record-breaker when it comes to dispensing good cheer.

WE MENTIONED the power of her voice carrying clearly and naturally. There's a reason. It has been the oft-repeated contention of the Hired Hand, substitute announcer of WBAP, that Radio singers should be trained for microphone singing, and not attempt to tune the microphone to the singer. The worth of his contention is clearly established in this case, the initial one he has tried out.

It has been necessary for the Sunflower Girl to pitch her voice lower than was accustomed. She transposes all her music to meet this condition, and by virtue of playing her own accompaniments, the difficulty is not great.

Just who the Sunflower Girl is outside the studio really doesn't matter. The Hired Hand confides that she is a relative. Be that as it may, the Radio fans will wink knowingly and believe it to be just more Truth Society stuff. Her home is in Kansas City to which she has returned for a short stay but will soon be heard again from the Texas station.

The Sunflower Girl smiles and says there is quite a difference between her first record—receiving three letters a week—and two of those—bills, and getting 3,919 letters in five days, her record for one week. Invitations for prolonged visits come frequently; sometimes a proposal for her fair hand slips in; but always there is candy by every post.

NOT by any means the least appreciated of her candy gifts, was a box packed with the candies dear to the heart of childhood: lollipops and licorice and all-day suckers, candy hearts and jelly beans. "Do you know," the Sunflower Girl said, "I cried when I opened that box and the realization came to me of all that it had meant to the donor to send that dear little box to me."

Other gifts include a bear-skin rug from Radio fans in the mountains of Colorado. From Radio fans on an Ohio prison farm came a beautiful pen and ink sketch of the Sunflower Girl, seated before a piano, as visualized by them. Foreign coins are also cherished mementos, as well as the exquisite pearls she wears.

The Sunflower Girl endeavors to answer all letters, but even with the aid of an assistant, it is an impossibility. "You'll tell them that I do so love them all though," she said.

You've heard the Hired Hand say Sunflower's hair is red, haven't you? And you've heard her contradict that it is vermilion, too, haven't you? Honest Injun, it is the beautiful shade of Titian that artists rave over, and a peaches and cream complexion, with nary a freckle to mar it. She is "five foot two" and one hundred and two.

The Sunflower Girl says she received the thrill of her (Continued on page 20)



"But wouldn't you like to know her real name?" taunts Hired Hand (below) at WBAP, Ft. Worth, who discovered Miss Sunflower.

WDAE Steals Fish Playground

MILLIONAIRE BUILDS Wall Around Section of Tampa Bay and Fills It up with Florida Real Estate. Antenna Towers where Tropical Fish Once Romped in Glee.



With Miss Dorothy Mason (above) to instruct through the microphone and Isham Jones' orchestra (below) to play there should be no reason why WDAE listeners shouldn't know how to dance.

Although the roads to Florida have been glutted with touring motorists all winter long and embargoes have been placed on freight because of the surplus of shipments, there is no rest from the beckon and call on the part of those who are there and "there to stay," as they proudly declare. Only the limitation of broadcasting waves prevents Florida from bristling with antenna towers from Jacksonville to the Keyes.

But Tampa was lucky. It has the Tampa Times and the Tampa Times was foresighted enough to establish its station, WDAE, five years ago—the first in the state. During the past two years that city has seen a building growth that meant the actual expenditure of \$20,000,000. In fact the big hotels and apartments have been springing up in such close proximity that one enterprising real estate man obtained title to a section of land at the bottom of Tampa Bay, built a sea wall around his property, filled it up with a thousand acres of real estate and on this he built a Radio station.

IT WAS largely on an impulse that Dave P. Davis, the builder of the island, decided as an afterthought to add a Radio station. He had recently abandoned all other sports for the DX chase. And it was nothing at all for him to stick to the dials until the morning sun crept into his room. He figured he was not alone in this DX world, so he called in his friend "Tod" Megargle of the Tampa Times after one particularly successful night and they mapped out a 5,000-watt station. He would give those other DXers a new one to put in their log books.

There was the money, the disposition, the location and the goods, but they had not reckoned with the government wave dispensers. No wave was obtainable. Very well, Station WDAE of the Tampa Times would serve for both. A cooperative agreement was satisfactorily arranged. The engineers went to work and two 110-foot steel towers loomed up on the Davis Islands where formerly the tarpons and flying fishes sported in their tropical glee. Facilities for a 5,000-watt transmitter were installed.

While work was progressing on a new administration building and studio, temporary quarters were fitted up in the Davis Islands Country club.

But the villain still pursued them. Station WDAE was not permitted to increase its power to 5,000-watts. Donald Thompson, one of the best Radio engineers in the South, scratched his head and got out a pencil. He had a lot of expensive material on hand to play with but he didn't "durst" shoot more than 250 watts at a crack. Like a cat on a wet lawn he got into the middle of it and began to juggle the various parts around in a way no one ever had heard of before. He was in his element. When he stepped out it was something entirely different than it had originally been. Don stood back and beheld the contrivance lovingly, a child of his own. Would it work?

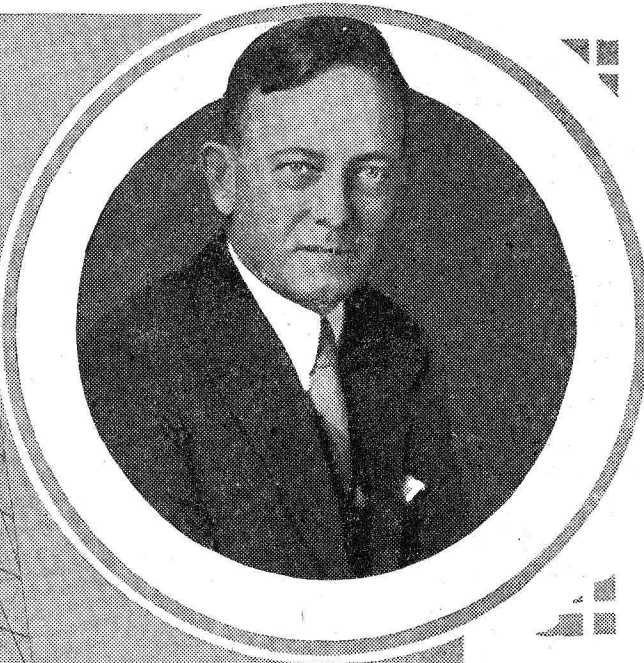
Would it? Ask Robert T. Porter of Honolulu. Ask John P. Hoyt of a town in northern Alaska. Ask a score of other persons scattered from South America to upper Canada, who responded with letters and cablegrams from these ultra DX points to WDAE, Tampa, Florida, that opening night. And WDAE did it and is continuing

(Continued on page 20)

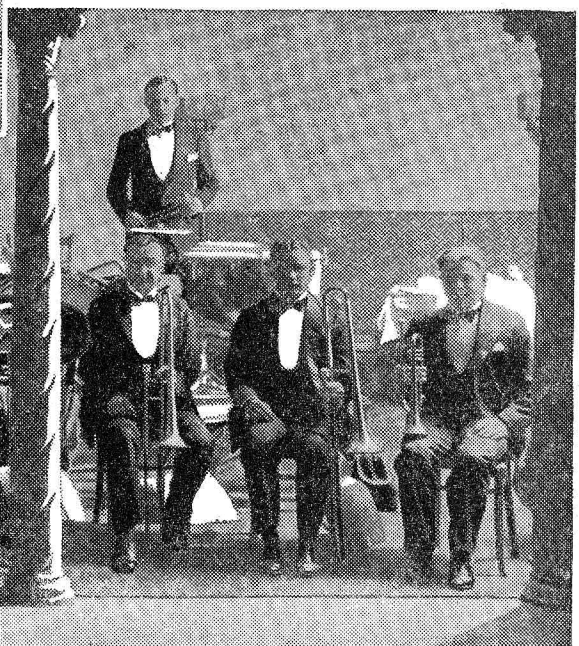
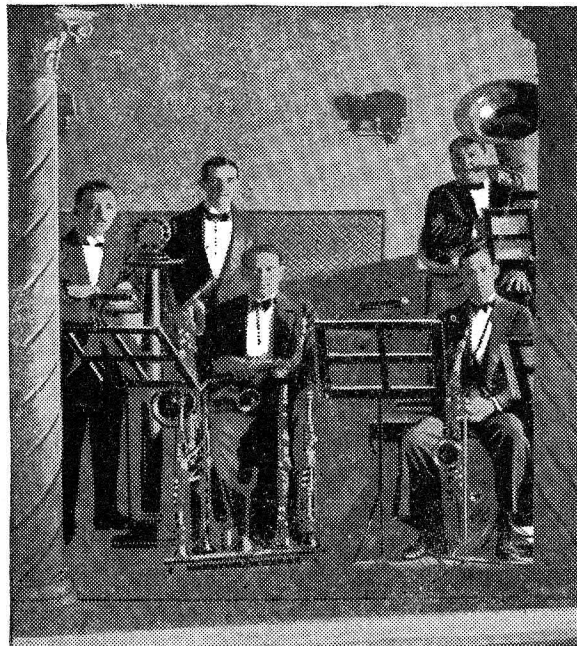
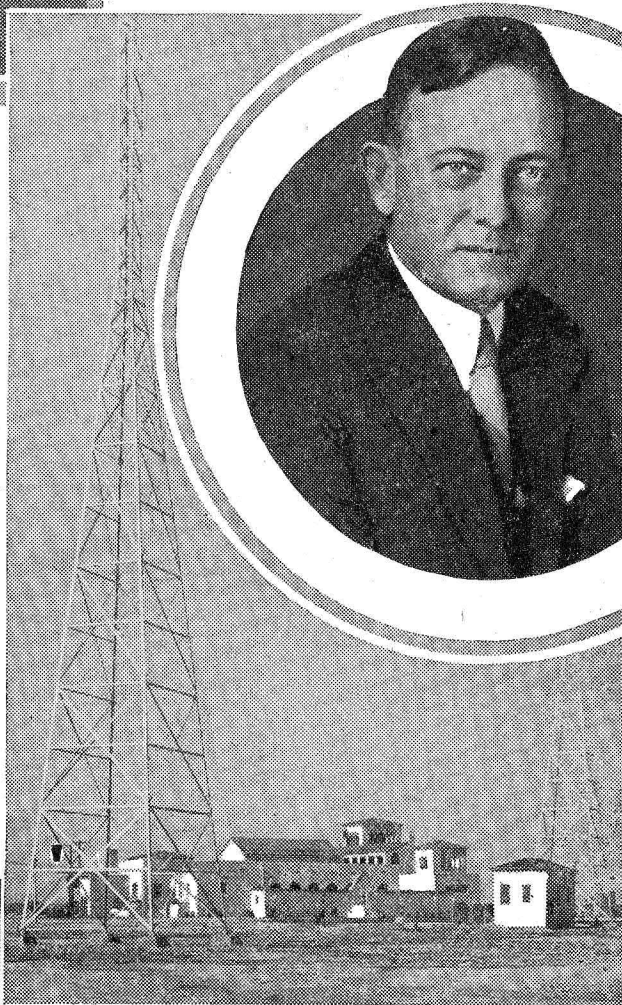
By HAROLD P. BROWN

"FLORIDA," that magic name, "Flowerland," has been in the minds and on the tongues of more people in the United States during the past two years than has the name of any other state in the Union. Yes, it seems as though even glorious California with her own private climate and beautiful scenery must make a slight though haughty bow to the fair sister at the gateway to the Gulf of Mexico.

Every Main street in the country has its local citizen who has turned a pretty penny in Florida, buying and selling lands and estates or town lots. Then there is the enticing languor of the old South, the Spanish architecture, moss draped trees, little lakes of crystal water, long stretches of hard, shell roads and the mellow warmth of a summer sun in winter. Above all, however, is the enticement of riches quickly gained, the vision of cities springing up in grandeur on fringed shores, marble palaces, business enterprises, houses with red tile roofs, great public works, ten-mile bridges, new railroads—prosperity, PROSPERITY!



Dave P. Davis (above) who built a thousand acre island in Tampa Bay and set a Radio station in its center (left).



CHOP SUEY SOLVES LIST OF PROBLEMS

DISH IS EASILY MADE OF CHEAP INGREDIENTS

Miss Betty Crocker Also Gives Recipes for Cooking Swiss Steak and Soup Stock

Have you heard, and do you regularly listen for Betty Crocker's Radio talks? Miss Crocker is nationally known as a home food specialist who is broadcasting from a dozen of the country's largest stations. By special arrangement Radio Digest has secured a series of exclusive articles by Miss Crocker dealing with her current Radio talks. These broadcasts are made through WBEI, WFAE, WCAE, WGB, WEAR, WWJ, WDAF, WJAR, WHT, WFI, KSD, KFI, and WCCO, the Gold Medal station at Minneapolis-St. Paul. All of Miss Crocker's recipes and discussions are based upon actual investigations and work of herself and her assistants in model kitchens.—Editor's Note.

By Betty Crocker

BECAUSE of the hundreds of requests coming in, it is impossible to give a whole talk on each subject requested, and so I have decided to give you a collection of recipes for which we have had many requests. The first recipe I am going to give you will answer many questions. It is a good left-over dish, a one-dish meal, and another suggestion for using a cheap cut of meat. It is American chop suey. Here is the recipe:

One-half pound lean pork, 1 onion sliced, 5 cups soup stock, 2 cups celery, 2 tablespoons chop suey sauce, 1 green pepper, 3/4 cup uncooked rice, 1 tablespoon sugar, 3 teaspoons salt, 1/2 teaspoon pepper.

Method: Cut meat in small pieces. Cook pork and onion together in the fat cut from the meat. When partially cooked add celery, green pepper, uncooked rice, soup stock and chop suey sauce. The celery and green pepper should be sliced but not finely chopped. Add seasonings. Cover and let cook slowly until tender. The total time of cooking is about 40 minutes. This amount will serve six. The chop suey sauce may be omitted if you do not care for it, and if you do not have the soup stock on hand, bouillon cubes may be substituted.

Swiss steak is another recipe for which we have had many requests. This is the

MICROPHONE SNAPS HER JOB AT DENVER



Microphone snap shots of human nature, based on colorful experiences and observations of a woman newspaper columnist, comprise the newest attraction over KOA at Denver. This new offering over the General Electric station will be launched the third week in April as a triweekly feature by Marjorie Irene Bond who writes under the pen name of "Cynthia Grey" for the Denver Express.

way we prepare it in the Gold Medal Flour kitchen: Two pounds round steak, 1/2 cup Gold Medal flour, 3 teaspoons salt, 1/2 teaspoon pepper, 3 tablespoons shortening, 2 cups tomatoes, 2 tablespoons chopped onions.

Method: Mix flour, salt and pepper together. Wipe off steak with a cloth wrung out of cold water. Pound the flour into the steak. Heat the fat in the frying pan and brown the steak on both sides. Add tomatoes and chopped onions. Cover and let simmer slowly over the fire or bake in a moderate oven, 350°F. The time required depends upon the thickness of the steak. If one-inch thick, it will require two hours cooking. This amount will serve eight. Remember that after

FROM GARDENS TO CANDY OVER WJZ

New York Station Has Extremely Wide and Varied Schedule for Women

NEW YORK.—The period of WJZ's daily broadcast devoted to the women of the listening audience is now the half hour between 4:00 and 4:30 each afternoon except Saturday and Sunday.

Mrs. Julian Heath, the president of the National Housewives league, with her excellent advice on home economics and daily menu, is an every day feature but the other subjects taken up are extremely varied. There is a shopping service for the out-of-town woman, a course on paper decorations and flowers; a course on the care of the skin and complexion and another which tells the housewife how to care for her garden.

Another regular talk tells her how to make her own clothes while another keeps her informed as to what other women are wearing. Interior decorating is another subject, while the kitchen is not forgotten in a series on the proper use of the gas stove and another series on meats.

Elinor G. Hanna, the candy expert, is conducting a course on candy making with excellent results. The mail response shows that the women are enthusiastic in their praise of the effort WJZ is making to assist them in their household work.

searing the steak, the cooking should be done slowly. The flour and tomato will cook down to a smooth paste, making a sauce to serve over the steak. If it should cook too fast and become dry, add a small amount of boiling water during the cooking.

Making Soup Stock

One of the questions that comes in very often is, "What is soup stock, consomme and bouillon?" Soup stock is the foundation soup made of meat with some bones and vegetables added. When it is clarified so that it is perfectly clear, it becomes either bouillon or consomme. The difference between the latter two is that bouillon is darker in color and stronger in flavor.

(Continued on page 17)

SHORT WAVES

By Marcella

Clyde R. Randall or "CR" of WSMB, in answer to Jean of Waterloo, is a nice plump little fellow weighing anywhere from 170 to 185 pounds, depending upon the regularity with which he finds time to eat. In addition, he has, as added physical attractions, eight good teeth, gray hair, blue eyes, some freckles but no pug nose, a trace of bow-leggedness and good arches in each foot. His height is about 5 feet 7 inches, but much shorter at times just before pay day. He does all of his announcing by the use of his mouth, various other sounds notwithstanding, and oh yes—he is happily married, although his wife does not come to the studio. His ambition? Just to run inside the first ten for the Gold Cup award. Now I must confess, Jean, that this horrid sketch is not my own. Mr. Randall did it all himself, so you see I am not so cruel to him. I think he's very nice anyway, don't you?

Jerry Sullivan is married, Ruth, but I am sure he would certainly be glad to migrate to one of the Columbus, Ohio, stations to give them "some life," as you say, if he knew how well you liked his work.

Frank Morris, former WTAS singer and entertainer, died about a year ago, I believe it was. This will answer Mrs. J. E. C. Lola and R. W. B. Lola, you did mean Morris, not Morrison, didn't you? I don't know where Eddie and Fanny Cavanaugh are. Wendell Hall is going the rounds. The last three weeks he spent in New York at WJZ. His future plans are to cover the larger southern stations and end up at Mexico City. Art Gillham, the "Whispering Pianist," was in New York for some time, but I believe he is now on tour.

Lola adds that Tommy Malie came to life recently over KYW in a piano-song act with Jimmie Snyder at the piano. So Tommy hasn't deserted Radio after all?

Gene Rouse has joined the fleeting mysteries. Haven't the slightest idea, Mrs. E. M., where he can be. I don't think,

(Continued on page 17)

WOMEN'S PROGRAMS INDEX

Saturday, April 10			
Eastern	Central	Mountain	Pacific
9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.
WWJ (352.7m-850kc)	Tonight's dinner.		
WEAR (389.4m-770kc)	Home service talk.		
WHT (399.8m-750kc)	Women's club, Jean Sargent.		
WGN (302.8m-990kc)	Household hints.		
WQJ (447.5m-670kc)	Home Economics program; "Stories about Famous Pictures," Margery Currey; "Spring Salads," E. Ransum.		
12:30 p. m.	11:30	10:30	9:30
WGN (302.8m-990kc)	Discussion of fashions.		
12:35	11:35	10:35	9:35
KYW (535.4m-560kc)	Table talk.		
1	12 n.	11	10
KGW (491.5m-610kc)	Household helps, shopping guide.		
4	3 p. m.	2 p. m.	1 p. m.
KJR (384.4m-780kc)	Tonight's dinner.		

Monday, April 12			
Eastern	Central	Mountain	Pacific
9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.
WWJ (352.7m-850kc)	Tonight's dinner.		
10	9	8	7
WTAG (268m-1120kc)	Marjorie Woodman, nurse.		
10:50	9:50	8:50	7:50
WMC (499.7m-600kc)	Home economics discussion, Miss Kitty.		
11	10	9	8
WEAR (389.4m-770kc)	Home service talk.		
WHT (399.8m-750kc)	Women's club, Jean Sargent.		
WNYC (526m-570kc)	Women's program.		
WTIC (475.9m-630kc)	"Exterior Decorating," George Hollister.		
11:30	10:45	9:30	8:30
KFAB (340.7m-1000kc)	"4-H Clubs in Summer."		
11:45	10:45	9:45	8:45
WCCO (416.4m-720kc)	"Gold Medal Omelets."		
WDAF (365.6m-820kc)	WHT (399.8m-750kc)		
WJAR (305.9m-980kc)	Home service talk, Betty Crocker.		
12 n.	11	10	9
WGN (302.8m-990kc)	Household hints.		
WQJ (447.5m-670kc)	Home Economics program.		
12:30 p. m.	11:30	10:30	9:30
WEBB (370.2m-810kc)	Fashion and household talks.		
12:45	11:45	10:45	9:45
WSWS (275.8m-1090kc)	Beauty talks.		
2	1 p. m.	12 n.	11
WGY (379.5m-790kc)	Woman's club.		
3:15	2:15	1:15 p. m.	12:15 p. m.
WHO (526m-570kc)	Recipes, household hints.		
4	3	2	1
WIP (508.2m-590kc)	Menu talk.		
WJZ (454.3m-660kc)	"Your Daily Menu," Mrs. J. Heath.		
WOC (483.6m-620kc)	Home management schedule.		
WQJ (447.5m-670kc)	"New Uses for Leftovers," Helen Downing.		
4:15	3:15	2:15	1:15
WJZ (454.3m-660kc)	"A Beautiful Skin," Elizabeth Arden.		
4:30	3:30	2:30	1:30
WLLT (394.5m-760kc)	Household helps and hints.		
5	4	3	2
KJR (384.4m-780kc)	Home helps.		
5:30	4:30	3:30	2:30
KOA (322.4m-930kc)	Housewives matinee.		
6	5	4	3
KOA (322.4m-930kc)	Culinary hints, Clara Hoover.		
6:15	5:15	4:15	3:15
KOA (322.4m-930kc)	Fashion review, Sally Dee.		
7	6	5	4
KFOA (454.3m-660kc)	Today's recipe.		
8	7	6	5
WPG (299.8m-1000kc)	Fashion Flashes.		
8:30	7:30	6:30	5:30
KGO (361.2m-830kc)	As a Woman Thinketh.		
10	9	8	7
KOWW (256.3m-1170kc)	"Home Helps and Recipes," Josephine Wright.		

Tuesday, April 13			
Eastern	Central	Mountain	Pacific
9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.
WWJ (352.7m-850kc)	Tonight's dinner.		
10	9	8	7
KDKA (309.1m-970kc)	Domestic Science. Arts for the Housewife.		
10:45	9:45	8:45	7:45
WIP (508.2m-590kc)	Menu, Anna Scott.		
10:45	9:45	8:45	7:45
WTAG (268m-1120kc)	Talks to Mothers, Rosebelle Jacobus.		
11	10	9	8
WEAR (389.4m-770kc)	Home service talk.		
WHT (399.8m-750kc)	Women's club, Jean Sargent.		
WMOA (340.7m-830kc)	Home makers' hour.		
11:30	10:30	9:30	8:30
WOL (270m-1100kc)	"Economy in Replacing Equipment and Furnishings"; "Dry Cleaning and Renovation of Clothing," Ruth Lindquist.		
12 n.	11	10	9
WGN (302.8m-990kc)	Household hints.		
WQJ (447.5m-670kc)	"Be Yourself," Lillian Russell.		
12:30 p. m.	11:30	10:30	9:30
WEBB (370.2m-810kc)	Fashion and household talks.		
12:45	11:45	10:45	9:45
WSWS (275.8m-1090kc)	Beauty talks.		
2	1 p. m.	12 n.	11
WGY (379.5m-790kc)	Woman's club.		
3:15	2:15	1:15 p. m.	12:15 p. m.
WHO (526m-570kc)	Recipes, household hints.		
4	3	2	1
WIP (508.2m-590kc)	Menu talk.		
WJZ (454.3m-660kc)	"Your Daily Menu," Mrs. J. Heath.		
WOC (483.6m-620kc)	Home management schedule.		
WQJ (447.5m-670kc)	"New Uses for Leftovers," Helen Downing.		
4:15	3:15	2:15	1:15
WJZ (454.3m-660kc)	"A Beautiful Skin," Elizabeth Arden.		
4:30	3:30	2:30	1:30
WLLT (394.5m-760kc)	Household helps and hints.		
5	4	3	2
KJR (384.4m-780kc)	Home helps.		
5:30	4:30	3:30	2:30
KOA (322.4m-930kc)	Housewives matinee.		
6	5	4	3
KOA (322.4m-930kc)	Culinary hints, Clara Hoover.		
6:15	5:15	4:15	3:15
KOA (322.4m-930kc)	Fashion review, Sally Dee.		
7	6	5	4
KFOA (454.3m-660kc)	Today's recipe.		
8	7	6	5
WPG (299.8m-1000kc)	Fashion Flashes.		
8:30	7:30	6:30	5:30
KGO (361.2m-830kc)	As a Woman Thinketh.		
10	9	8	7
KOWW (256.3m-1170kc)	"Home Helps and Recipes," Josephine Wright.		

Hughina McKay.

Wednesday, April 14			
Eastern	Central	Mountain	Pacific
9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.
WWJ (352.7m-850kc)	Tonight's dinner.		
10	9	8	7
WIP (508.2m-590kc)	Menu.		
10:45	9:45	8:45	7:45
WEAF (491.5m-610kc)	Home service talk, Betty Crocker.		
11:30	10:30	9:30	8:30
WFL (394.5m-760kc)	Gold Medal Service talk, Betty Crocker.		
11:45	10:45	9:45	8:45
WTAG (268m-1120kc)	Talk to Housewives, Mrs. Lydia Flanders.		
12 n.	11	10	9
WHT (399.8m-750kc)	Women's club, Jean Sargent.		
WNYC (526m-570kc)	Women's program.		
11:30	10:30	9:30	8:30
KFAB (340.7m-830kc)	"Flower Arrangements."		

Thursday, April 15			
Eastern	Central	Mountain	Pacific
9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.
WWJ (352.7m-850kc)	Tonight's dinner.		
10	9	8	7
WIP (508.2m-590kc)	Menu talk.		
10:45	9:45	8:45	7:45
WTAG (268m-1120kc)	Marjorie Woodman, nurse.		
10:50	9:50	8:50	7:50
WMC (499.7m-600kc)	Home economics discussion, Miss Kitty.		
11	10	9	8
WEAF (491.5m-610kc)	Talks, cookery lecture.		
WEAR (389.4m-770kc)	Home service talk.		
11:30	10:30	9:30	8:30
WHT (399.8m-750kc)	Women's club, Jean Sargent.		
12 n.	11	10	9
WGN (302.8m-990kc)	Household hints.		
WQJ (447.5m-670kc)	"Delicious Custards," Erna Bertrams.		
12:30 p. m.	11:30	10:30	9:30
WEBB (370.2m-810kc)	Household and fashion talks.		
12:35	11:35	10:35	9:35
KYW (535.4m-560kc)	Table talks.		
2	1 p. m.	12 n.	11
WGY (379.5m-790kc)	"Accessories in Spring Costumes," Beatrice Hunter.		
3	2 p. m.	1 p. m.	12 n.
WJZ (454.3m-660kc)	Your Daily Menu, Mrs. J. Heath.		
WOC (483.6m-620kc)	Home management schedule.		
WQJ (447.5m-670kc)	"A Corn Luncheon," Helen Downing.		

Friday, April 16			
Eastern	Central	Mountain	Pacific
9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.
WWJ (352.7m-850kc)	Tonight's dinner.		
10	9	8	7
KDKA (309.1m-970kc)	Domestic science and Arts for the Housewife.		
10:45	9:45	8:45	7:45
WTAG (268m-1120kc)	Food hints, Mildred Thomas.		
11	10	9	8
WHT (399.8m-750kc)	Women's hour, Jean Sargent.		
11:30	10:30	9:30	8:30
KFAB (340.7m-830kc)	"The University and the Home."		
11:45	10:45	9:45	8:45
WTIC (475.9m-630kc)	Housewives' forum.		
WDAF (365.6m-820kc)	WEAR (389.4m-770kc).		
WJAR (305.9m-980kc)	Betty Crocker's Home service talk.		
12 n.	11	10	9
WGN (302.8m-990kc)	Household hints.		
WQJ (447.5m-670kc)	Sunday Dinner Menu, Ted Wilmes.		
12:15 p. m.	11:15	10:15	9:15
KYW (535.4m-560kc)	Meat talk.		
12:30	11:30	10:30	9:30
WEBB (370.2m-810kc)	Household and fashion talks.		
12:35	11:35	10:35	9:35
WGN (302.8m-990kc)	Discussion of fashions.		
12:35	11:35	10:35	9:35
KYW (535.4m-560kc)	Table talk.		
1:45	12:45 p. m.	11:45	10:45
WOAW (526m-570kc)	Sunshine Sunday dinner menu.		
3:15			

a STEP ON the STAIRS

By ROBERT J. CASEY

Radio Dramatization by FRED SMITH

Illustrations by HILMER C. OLSON

Synopsis of Preceding Chapters

IN THE first four episodes of "A Step On the Stairs," which are now available for 25 cents in a special reprint, we find a group of a dozen members of the Turner family in the hunt-room of the old Turner manse. They are nerve-strained and very jumpy as the result of a number of weird incidents connected with the attempted seance whereby Peleg Turner, the last of the house to die, attempts to speak from beyond the grave through a Radio loud speaker and tell them who killed his brother, Jeremiah. Ardwyn, the lawyer, presides. Mary Williams seems to be involved in most of the strange events, and the finger of suspicion is pointed at her by Aunt Helen, a gabby old widow; Cousin William, companion to Aunt Helen; Hazel Stanton, a girl whose relation to the family does not seem entirely clear, and Henry Graves who offers his protection by marriage. His offer is spurned. In the last episode John Carton, apparently Mary's accepted lover, appears in the room after he others have left for refreshments in another part of the house. Mary had fainted when she thought she felt the corpse of Peleg Turner entering the room through the front door, supposed to be barred except for the passage of the dead bodies of Turners going to their final resting place. Ardwyn left to get her a sedative. Hari Singh, the East Indian servant, unexpectedly becomes an ally of Mary when Carton, who seemed to be hiding from arrest on suspicion of the crime, is about to be trapped by other members of the party. The servant lets Carton out a side door.

Before Hari Singh is able to return, the other guests enter the room and demand an explanation of Mary as to the voice that had been heard in the room. Mary evades the questions briefly, but soon Hari Singh calls for help. He is discovered dragging in the body of a man which he said he had found outside the door in the snow. It is Milford Jones, with a fractured skull. He had disappeared earlier during the seance. While suspicions for the various evil happenings are being cast about, F.Y.X. starts up. A number is rendered and F.Y.X. stands by for the ship's SOS. Suddenly—Peleg Turner's voice comes out of the loud speaker. He curses Jeremiah's murderer whom he says is in the house and will pay the price ere dawn. While pandemonium reigns and Tolliver is talking, the beam of an electric flashlight hits him full in the face. Attempts to locate the owner of the light are vain. A human chain is formed to count heads. Instead of eleven people in the room as it should be, there are thirteen! Tolliver hunts matches beneath the table and is engaged in a struggle. He finds them, places them on the table, and suddenly an unknown voice threatens to shoot to kill at the first flicker of a match.

THE STORY CONTINUES.

CHAPTER THIRTEEN

The Unseen Crypt

"WHO are you?" demanded Ardwyn.

"That makes no difference," replied the voice. "I mean what I say."

"Suppose I did strike a match—suppose you did kill me," queried the lawyer, calm enough now in the face of tangible danger. "Do you think you could get out of here with a whole skin?"

"You might try it," suggested the voice. "Your friend with the loud voice seems to be out of it and I don't think there's another man in the place."

"What do you want us to do?"

"We'll come to that. Just now all you're to do is put that box of matches back onto the table. Put 'em down hard enough so's I can hear you do it. . . That's it. . . Now step back from the table and stand there until I tell you to move."

"I've heard your voice somewhere before."

"Don't be too sure of that." The comment was cruel and incisive. "You'll never get killed for what you don't remember."

"I don't forget," returned Ardwyn with a hint of triumph in his tone. "You have something over your mouth. But I know you now. I. . ."

"Damn you keep quiet." A sudden movement in the dark told the hypnotized company that the owner of the voice had swung about toward Ardwyn. Then came silence once more. Of all the men and women in the room only two could say what had happened to Ardwyn and neither spoke.

"They've done for Mr. Ardwyn," wailed Aunt Helen Holmes. "They've murdered him. I just know they have. . . Oh, why did I come here."

"Shut up," advised Cousin William unsympathetically.

"Cousin William," gasped Aunt Helen. "Where did you get to? Why you were here just a minute ago. Cousin William."

"Keep still," came Cousin William's voice from the near distance. "Get down on the floor. If they start to shoot you'll be safer there."

"But I don't want to be shot on the floor," protested the woman. "I want to go home. I'm a good decent woman and here there's nothin' but iniquity. . ."

Her chair creaked in evidence that she had thought better of Cousin William's advice.

"Do you honestly think it will be safer here under the table?" she asked presently in smothered tones. "I'm glad nobody can see me here."

"For Heaven's sake keep quiet," admonished the unseen William.

"FOLKS," came a muttered and unrecognizable message from somewhere near the fireplace. "We're sorry to have caused you this trouble. We didn't expect to find you here, see? But we'll not harm anybody if you just sit quiet and keep out of our way. You'll all be out of here and nobody any worse off, see? Now, everybody. . ."

He broke off with a weird gurgle that blended with the crash of falling glass. "What's the matter?" queried a guarded voice from across the room.

"A woman," was the somewhat groggy reply from the fireplace. "I felt her hair. . . Stand back all of you. . . I said there'd be no trouble unless you made it, see? But if the cat who hit me with that vase comes where I can get my hands on her, I'll strangle her. . . Once more he interrupted himself, this time with a scream that had barely ceased to echo when the triumphant call of Mary Williams rose clearly over the din.

"I have a pistol now, Mr. Ardwyn," she cried. "What shall I do now?"

A whisper sounded almost in her ear. "Good," it said. "We can hold our own, now. But don't try to shoot it until you can see what you are doing."

"We shall go on, ladies and gentlemen," declared the voice that had halted Ardwyn's attempt to strike the match. "Even armed you can do nothing and there will be more deaths in this house unless you choose to keep quiet."

A dozen strained cries from all parts of the room answered him as the barred front door miraculously separated itself from the wall and stood poised momentarily in a diminishing silhouette against the glare of an automobile headlight from the road outside.

"Give in to him," murmured the unseen counsellor, "The night isn't over yet."

"Very well," replied the girl. "I don't know what you are doing here. But I can wait to find out. I shan't interfere with you while you are here providing you do not attempt to interfere with us. But I give you warning that you aren't going to get out of this room."

"We'll take our chances on that," was the hoarse rejoinder.

"Oh don't bother them, please don't irritate them," came a wail presumably from Aunt Helen. "They're murderers. They'll kill us all."

"We'll do just that if you don't shut your trap," declared the spokesman of the intruders. Then came silence, broken only by a whispering in guarded voices near the fireplace.

"If this mob will stay put we can get the stuff out," one of the mysterious conferees said at length.

"They'll stay put," said another. "Dig it out. We can't waste much more time."

Whereupon, through that tense, still atmosphere came a sound terrifying only in its associations, metal striking on brick.

"What are they doing?" demanded a male voice trembling so that it could not be identified.

"Digging for something," came an awe-stricken answer.

The metal continued to clang on the hearth as if the ghostly visitants had not heard the comments.

"GOD hurry the daylight," prayed another unseen vigilante. "What is that smell?"

The clash of iron on tile suddenly was softened and there came a scraping sound accompanied by a slight tinkling.

"Earth!" someone called out hoarsely. "That's it, the scent of earth. . . Somebody is opening a tomb."

A laugh, mirthless and inhuman, greeted this comment. It came to an end presently in a hysterical outburst from Aunt Helen Holmes.

"What a joke it all is," she chuckled crazily to herself. "I ain't goin' to have a shred of reputation left when I

get out o' this house of iniquity. My sainted husband—him as has been gone these twenty years—he always used to say to me, Helen, have 'em get my tomb ready for me before I die so's I'll kinda know where I'm goin'."

"An' right here in this house they're doin' just that but they're too late. They's a corpse right here at my feet an' the grave ain't ready for him."

Once more she screamed with laughter.

"A corpse right here on the floor at the edge o' the rug an' no place to put him. That certainly is a joke on him."

"What are you talking about Mrs. Holmes?" demanded Mary Williams.

"Is it you that's askin' me, Miss Williams?" answered Aunt Helen. "Well then mind your own business. I got enough trouble with dead men and such without worryin' about hussies like you."

"What's the row?" inquired one of the ominous whisperers at the fireplace. "Has the old girl gone crazy?"

"Sounds like it," replied another. "I didn't bring any stiffs in here."

The conversation was suddenly broken off by a sudden cry:

"Hari Singh! Hari Singh! Open the door."

"That's Ardwyn," gasped the first unknown. "I thought you had attended to him."

"I guess I was too gentle with him," said his companion. "There may be trouble now."

"Hari Singh! Hari Singh!" called Ardwyn.

"You yell again and you'll get your throat cut," one of the intruders warned him. There was a sound of moving feet.

"THE front door is covered," Mary Williams announced.

"Where is that cat?" A man snarled angrily.

"I don't know. If I could find her I'd wring her neck. She seems to be floating in the air."

"Don't bother to look," the girl advised. "Just remember what I told you. The front door is covered. . . Then came silence, a brief, palpitant silence that was broken suddenly by another call from Mary Williams:

"Watch the hall door. They're at the hall door. They have a key. . . I heard it. . ."

Almost as she spoke a streak of light appeared in the gloom at the side of the room.

"That's it. . . They're opening the door. Stop them. . . Stop them. . . Don't let them get away!"

And as if in answer to her call came a muffled curse.

"We got to jump for it. That damned Indian is out there. He's got a shot gun."

Almost simultaneously came the voice of Hari Singh!

"I have the door covered gentlemen," he said. "I'll shoot the first one who comes out."

"Look out. . . They're closing the door again. They're coming back," screamed Mary Williams.

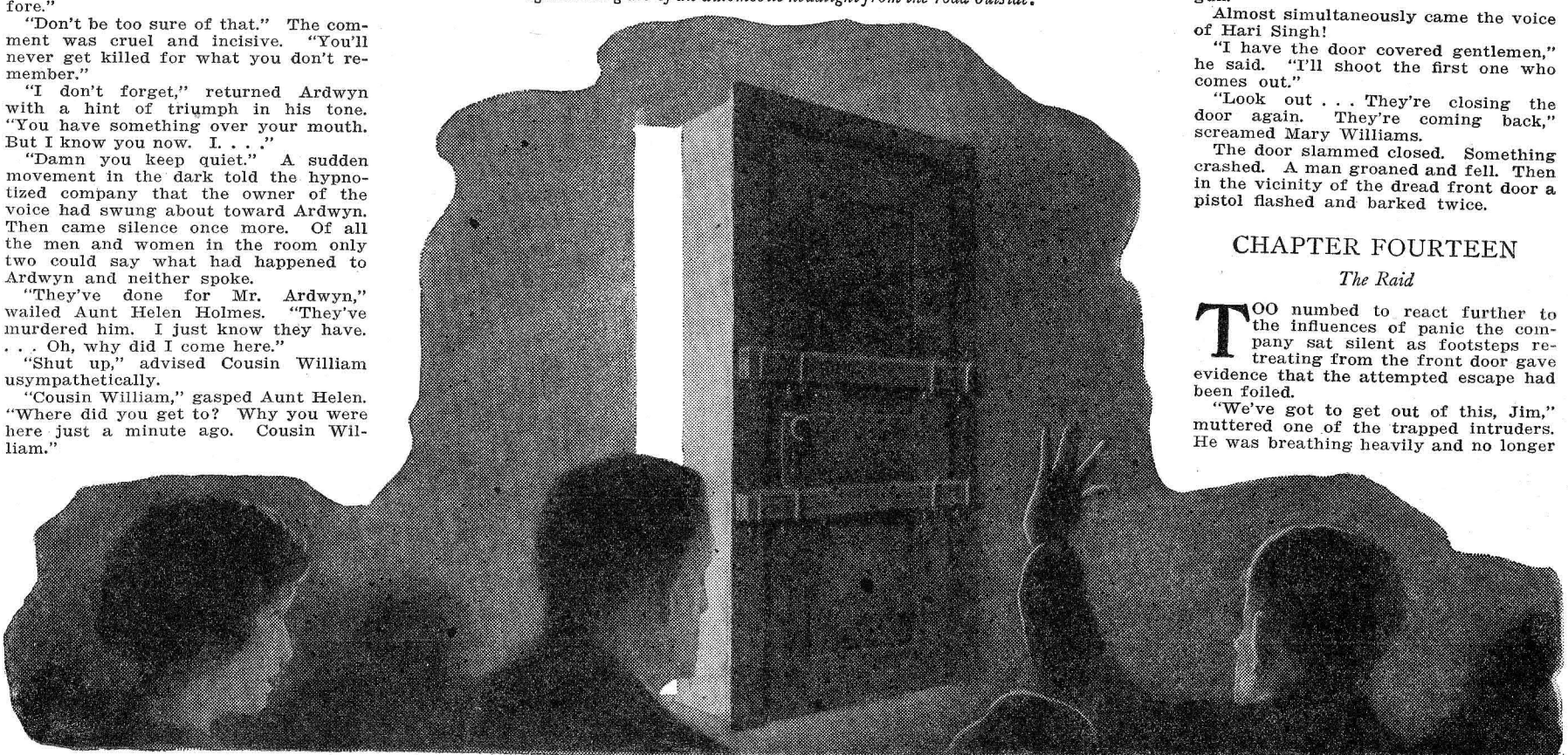
The door slammed closed. Something crashed. A man groaned and fell. Then in the vicinity of the dread front door a pistol flashed and barked twice.

CHAPTER FOURTEEN

The Raid

TOO numbed to react further to the influences of panic the company sat silent as footsteps retreating from the front door gave evidence that the attempted escape had been foiled.

"We've got to get out of this, Jim," muttered one of the trapped intruders. He was breathing heavily and no longer



as confident as he had been when a few minutes before he had threatened Frederick Ardwyn.

"I'll follow you, Doggy," agreed the strained voice of the other. "I'll do what you say but we gotta do something quick."

"Gus," roared "Jim" in a louder tone. "Gus, where are you?"

Aunt Helen's hysterical laughter was his only answer.

"Gone!" breathed "Doggy" in horror. "He's gone. That cat did for him. Jim, we gotta crash the front door."

"I overheard you, gentlemen," Mary Williams interrupted calmly. "You won't get out through the front door."

"Where is that woman?" queried "Jim" in exasperation. "Get rid of her and we can bust out."

"I'll tell the world I don't know where she is," answered "Doggy."

"You were right at the door when she spoke."

"Yes, an' I was right after her. But she ain't where her voice is."

A taunting laugh echoed about them. "There she is again. . . . Grab her."

"Grab her yourself. Look on the floor. . . . Damn! What's this?"

"It's a stiff." Neither spoke for some seconds which the clock ticked off with sonorous unconcern.

"The woman?" queried "Jim" at length. "Nope," replied "Doggy" presently. "It's a man an' dead as a doornail." It was apparent as he spoke that "Doggy" was growing angry.

"Why do we have to be the goats for this thing?" he demanded indignantly. "Why do we have to be dished up with these maniacs? Where is Gus? Where is Joe? Gone! And we're here holding the sack while that she-devil is waiting to knock us off if we attempt to get out."

"And the Indian!" retorted "Jim."

"What a fine mess he turned out to be. If I can get out of here only two minutes I'll kill him."

Once more came Mary Williams' laugh and once more the scurrying of feet as they attempted to find her. In the midst of their frantic search there came another sound, insistent as always and unidentifiable.

"What's that?" queried "Jim."

"That's the sound they been raving about all night," replied "Doggy." "It's a step on the stairs."

"But what is it?" pursued "Jim." "How could it be a step on the stairs? You know there ain't any stairs in that end of the house."

"I know that. But I know my own ears. That's somebody walking on stairs and he's walking where there aren't any stairs." His voice had sunk to a whisper.

"And I move we drop the stuff and take our chances on the door."

"She'll shoot!"

"Listen, something's going on outside the house. We've got to chance it, I tell you."

"She'll shoot!"

"Just once. When she shoots we can see where she is and I'll be glad to attend to her."

"All right, we'll rush it. . . . We'll . . ." He paused as if in sudden pain.

"NO CHANCE!" muttered "Doggy" bitterly. "Look. . . . The door is opening now. There's a crack of light underneath it. An automobile light. . . ."

"The side door," gasped "Jim."

"The Indian has a shotgun and no morals," "Doggy" reminded him.

"Who's this?"

A dozen strained cries from all quarters of the room answered him as the barred front door miraculously separated itself from the wall and stood poised momentarily in a diminishing silhouette against the glare of an automobile headlight from the road outside.

"Put down the gun, Jim," came the cool voice of "Doggy." "No use making a case for them. . . . We'll surrender and say it with lawyers."

"Step right in, coppers, and make yourselves at home. Welcome to our little madhouse."

"All of you line up against that back wall in the light where we can see you," came a gruff voice from beyond the doorway. "You are all under arrest. Lively now. . . . All of you. . . . Line up against the back wall and put up your hands."

Scurrying figures, flashes of white in the blinding glare of the lamps, hastened to comply with the command. A large man who hugged the edge of the doorway with precautionary zeal edged his way into the room and lost himself in the shadows adjoining the cone of light.

"Please make it snappy, captain; we've been up all night," urged "Doggy" cheerily as he marched with hands over head to the center of the spotlight.

"Who is that noisy one, lieutenant?" the big man inquired. "Is he one of your mob?"

"Sure, that's 'Doggy' French," laughed a guard at the door. "I thought everybody connected with the racket knew 'Doggy' French."

\$500 in Gold FOR THE SOLUTION OF "a Step On the Stairs"

REPRINTS NOW AVAILABLE

SO MANY people are attempting to win part of the \$500 in Gold prizes which are being offered for solutions to "A Step On the Stairs," a reprint of the first four installments has been printed and may be had for the nominal charge of twenty-five cents, in coin or stamps, to cover the cost of handling. Address your order to the Mystery Story Editor, care of Radio Digest.

The chosen stations, which are broadcasting "A Step On the Stairs," in Radio play form, are given on page eleven. The days and the hours are listed.

THE PRIZES

The prizes are seventeen in number. First prize is \$250; second prize is \$100; third to seventeenth prizes inclusive, are \$10 each. In the event of a tie for any prize offered, a prize identical in all respects with that tied for will be awarded to each tying contestant.

HOW TO WIN A PRIZE

Nine installments of Mr. Casey's story will be published consecutively

each week. The first appeared in the February 27 issue. His tenth and final installment will not appear until the prize winning solutions have been selected by the judges. The solution nearest correct, that is, nearest to unraveling the mystery accurately, will win. The method of preparing the solution—its neatness, legibility, etc.—shall be considered.

RULES OF CONTEST

1. Solutions must be received not later than midnight of Saturday, May 1. The ninth installment of the story will appear in the April 24 issue. The author's intended and final chapter will appear in the May 15 issue, together with the announcement of the winners' names.

2. The contest is open to everyone except employes of Radio Digest and their families.

3. Contestants pay no fee and need not be subscribers to Radio Digest. Solutions, however, must be written upon one side of paper.

4. The decision of the judges, to be named later, will be final.

And then out of nowhere echoed the startled voice of Mary Williams:

"Doggy' French! Why that's not his name! That's Henry Graves."

What were the strangers digging for and why are they at the seance? Who was shot as they started to bolt for the door? Why did the leader of the raid call Henry Graves "Doggy" French? The twisted strands of Mr. Casey's thrilling mystery story will be untangled much by next issue's installment.

Radio Club Notes

The Broadcast Listeners association of Indianapolis, one of the largest and liveliest organizations of its kind in the country, recently secured as a speaker, Prof. A. M. Wilson, dean of the engineering department at the University of Cincinnati. This meeting was open to the public and invitations were extended by mail and through the press of the state to Radio manufacturers, jobbers and dealers since Prof. Wilson is nationally recognized as an authority on scientific research in the prevention of Radio interferences. He had a prominent part in the now famous report on this subject compiled and published by the National Electric Light association and his subject before the Broadcast Listeners club was "Radio Interference and How To Locate It and Prevent It Through Cooperation Between Listeners and Public Utilities."

Copies of the report referred to should be obtained by every Radio club and can be had by sending 60 cents with a request to the National Electric Light association, 29 West 39th street, New York city, for the "Radio Interference" report.

Eastern clubs are beginning to be heard from; such is the "power of the press." At Zanesville, Ohio, a Radio club has been formed that is most active and its president is H. E. Buker; its vice-president is C. W. Fowler, and its secretary is Owen A. Davis. The city council of Zanesville recently passed an ordinance prohibiting the use of vibratory type battery chargers between 6 p. m. and 5 a. m.

The Manitoba Telephone system station at Winnipeg has commenced a systematic study of receiving conditions throughout the province of Manitoba. Observers in the employ of the company have been appointed at strategic points in the province and they report daily on receiving conditions from all points of the compass, noting interference, if any. The reports are telephoned in each morning to CKY, where a summary is made and broadcast at noon. CKY is the first station in Canada to undertake work of this kind on such a large scale. More power to them.

If you like this column and gain anything from it thank Mr. E. J. Campbell, president of the Topeka (Kansas) Radio club as it was his letter urging it that brought a slowly crystallizing idea to a head. The Topeka club meets every Tuesday evening at the Chamber of Commerce and C. A. Rowe is vice-president, while R. L. McFerren is secretary.

"MAYBE I WANT IT," SAYS SEN. WATSON

SENATE RADIO POWER NOT SURE ABOUT I. C. C.

Although Contention Is Sound, Has Not Investigated Whether Change Will Be Made or Not

WASHINGTON, D. C.—"There is very generally a feeling that the interstate commerce commission should have control of Radio," says Senator Watson, of Indiana, chairman of the committee on interstate and foreign commerce, before which Radio legislation is pending, in a communication to the National Broadcast Listeners league.

The express purpose of the communication, it is understood, was to deny that he himself was the one sponsoring such a change. In part in his communication Senator Watson says:

"I have never given out a public statement that I thought that Radio should be under the control of the interstate commerce commission instead of the secretary of commerce.

Was Freely Discussed

"That thing was freely discussed in our committee simply because a number of witnesses that appeared made the suggestion. In fact, Judge Davis, solicitor of the department of commerce, stated that aside from a formally appointed commission, no one man should have this tremendous power in his hands. All of the members agreed to that and the only question with them is as to the proper jurisdiction of the business.

"There is a very general feeling that the interstate commerce commission should have control of Radio. Logically the contention is sound, but as to whether or not congress will see fit to make the change is more than I know, because I have not investigated it at all."

Station Is Teaching Oil Painting Through Radio

Instructor Paints Picture and Tells Listeners of Method

MUSCATINE, Ia.—One never knows what is coming next, and if by chance when tuning in you come across KTNT, here, from 6:45 to 7:45 Central time, you will find that station is teaching oil painting of portraits and all kinds of art pictures by Radio, and have many hundreds of students among their listeners.

The system of oil painting is one that requires no previous experience and no brushes are used, although the pictures are painted in genuine oil paints. The instructor doing a lesson paints the picture the same as the student has before them, and keeps up a chatter as he goes along, making the instructions not only interesting, but fascinating and amusing. KTNT has been featuring their art work for some months past and the first station to teach art by Radio.

KHJ ADOPTS POLICY OF NO ADVERTISING

LATEST ANNOUNCEMENT
COMES AS SURPRISE

Los Angeles Times Will Make Annual Appropriation for Maintenance and Program Fund

LOS ANGELES.—KHJ has again done the unexpected. According to announcement made by "Uncle" John Daggett, manager of the Los Angeles Times station, effective April 1, programs put on the air over KHJ's microphone are now free from any kind of advertising, paid or unpaid, thus making the station an open forum for the people of the Southwest on a non-political, non-sectarian basis.

The plan provides for an annual appropriation for the Radio station to be used for the maintenance of the station and staff salaries as well as an additional amount to be used to hire the finest talent obtainable.

Elimination of all remote controls and absolute divorce from any and all advertising and objectionable matter is planned.

Policy Change Is Surprise

The announcement of this change in policy came as a surprise to everyone, particularly so at this time just when critics of the station were beginning to openly predict that KHJ would be forced off the air due to its unrelenting attitude towards the local musicians' union and the alleged unfair methods of the American Society of Composers, Authors and Publishers.

In addition to the much higher type of programs this new policy will bring to the listeners, it is felt by well-informed observers that it will do an even greater work by serving as a balance to other stations and act to keep the amount of advertising on their programs at a minimum.

It was also intimated that KHJ would soon be equipped with a new type high-power transmitter of latest design, capable of faithfully transmitting the kind of programs that will be given in the future.

Station WSAI Shows Playing Card Display

Greatest Collection in Existence
Placed in Reception Room

CINCINNATI.—The greatest collection of playing cards in existence will greet the eyes of visitors to the new studios of Station WSAI, of the United States Playing Card company here, when they enter the reception room.

The collection, which has been displayed at two world's expositions, was acquired some years ago, but never has been on public display before at the Playing Card company. With the great space made available in the new reception room at WSAI, officials decided to use the wall space for the display.

It will be playing cards smaller than milady's finger tips, and cards used by royal families are included in the collection, which dates back to the year 1440. Card presses, used in the days when playing cards were not made with the care they are as in modern days, will also be shown.

Humorous designs, presidential cards, historical cards, in fact every playing card made since the diversion originated are included in this marvelous collection, and will be displayed with data, so that visitors may easily understand their origin and design.

Station WBAL Copyrights Monthly Musical Scenarios

BALTIMORE.—The musical scenarios being given once a month over WBAL, Baltimore's superpower station, are being copyrighted by this station. These scenarios are different from the majority of Radio features, being musical narratives illustrated by song and instrumental selections.

Broughton Tall, Baltimore author and dramatist, is writing these scenarios especially for WBAL.

DO YOU KNOW WHERE THESE PEOPLE LIVE?

TWO contributors to Radio Digest have checks awaiting them if they may be located. Letters bearing their addresses have been returned. The two men are Allan Murphy, of Paducah, Ky., and Marvin Shreffler, of Kankakee, Ill. Friends knowing their proper addresses will please correspond with the Technical Editor, Radio Digest, 510 N. Dearborn St., Chicago.

FRIEDA HEMPEL OVER WEAF CHAIN

Thursday, April 15

WMAQ, Chicago, Ill. (447.5m-670kc), 6 p. m., Chicago theater organ; 6:30, Dana College choir; 9:55, chimes.

Mountain Time Stations
CFAC, Calgary, Can. (435.8m-688kc), 9-11 p. m., Canadian National Railway program, orchestra.

Pacific Time Stations
KFI, Los Angeles, Calif. (467m-642kc), 6:30 p. m., vest pocket program; 6:45, Radiatorial period; 7-8, program, students, University of Southern California.

KFWB, Hollywood, Calif. (252m-1190kc), 8-9 p. m., program, Phillips and Hanna; featuring Frazier Mountain Park orchestra.

Friday, April 16
Headliners Today
Eastern 8 p. m., Central 7 p. m., Mountain 6 p. m., Pacific 5 p. m.

Eastern Time Stations
CNRA, Moncton, Can. (312.4m-960kc), 8 p. m., program, Stephen McGillivray, director; 10, CNRA orchestra.

WAHG, Richmond Hill, N. Y. (315.6m-930kc), 8 p. m., organ recital; 9, Marie Johnson, soprano; Philipp A. Frey, tenor; Jean Lemaire, pianist; 10:02, Gondoliers; 10:30, Southland dance orchestra.

Atwater Kent Program, April 11, over WEAF and Chain*
FRIEDA HEMPEL
Assisted by ERNO BALOGH, pianist; LOUIS P. FRITZE, flutist

- (a) Oh! Had I Jubal's Lyre.....Handel
(b) Ave Maria.....Schubert
(c) On Wings of Song.....Mendelssohn
(d) A Joyous Easter Hymn.....17th Century

Piano solo: Scherzo in B flat Minor.....Chopin
Mr. Balogh

- (a) "Shadow Song" from DINORAH.....Meyerbeer
(b) The Last Rose of Summer.....Flotow
(c) The Cuckoo Clock.....Old French
(d) Lauterbach.....Old German
(e) Blue Danube Waltz.....Strauss

Central Time Stations
KFAB, Lincoln, Neb. (340.7m-880kc), 5:30-6:30 p. m., dinner concert; 8:30-10:30, Auburn, Neb., program.

KMA, Shenandoah, Ia. (252m-1100kc), 9-11 p. m., musical.

WMAQ, Chicago, Ill. (447.5m-670kc), 6 p. m., Chicago theater organ; 6:30, Dana College choir; 9:55, chimes.

WMAQ, Chicago, Ill. (447.5m-670kc), 6 p. m., Chicago theater organ; 6:30, Dana College choir; 9:55, chimes.



Frieda Hempel, soprano, is the Sunday headliner over the WEAF chain. She will be assisted by Erno Balogh, pianist, and Louis P. Fritze, flutist.

Mountain Time Stations
CFAC, Calgary, Can. (435.8m-688kc), 7-8 p. m., Salon broadcast.

Pacific Time Stations
CNRV, Vancouver, Can. (291.1m-1080kc), 8:30 p. m., British Columbia musical festival; 10:30, Cabaret Belmont orchestra.

Crosley Station Adds Two New Features for Farmers
CINCINNATI.—Two new Radio features have been added to the Crosley WLW broadcasting station's programs for Wednesday and Thursday afternoons.

Radio Saves Army \$48,086
WASHINGTON, D. C.—During the first half of the current fiscal year the army signal corps, by use of its Radio nets throughout the country, has been able to make a saving of \$48,086.43 for nineteen governmental departments.

Arctic Ships to Carry Full Radio Equipment

Byrd Expedition Will Broadcast With Short and Long Waves

WASHINGTON, D. C.—The Byrd arctic expedition will be equipped with the latest type of Radio equipment, according to officials of the navy department who are completing plans for the trip to the frozen north. The objects of the equipment are safety of ship, plane, fog and weather reports, entertainment by broadcasters and messages from home, and it is anticipated that many tests and experiments in communication may be carried out with both long and short waves.

The SS Chantier, with call letters KEGK, will be equipped with a 1-k. w. navy spark transmitters, sending on 300, 600 and 800 meters. It will also have a short wave transmitter, to work on 80, 40, 20 and 10 meters. The airplane is to carry a 50-watt short wave transmitter, capable of working on 61 and 44 meters.

BASEBALL GOES ON AIR

(Continued from page 3)

Cubs will be on Wednesday, April 21, when they play the Cincinnati Reds.

Saturday home games of the Chicago Cubs will also be broadcast play-by-play by WGN, The Chicago Tribune station. Quin Ryan, aided by "Sam 'n' Henry," the colored comic team, will handle the mike.

WSB, Atlanta, Already Under Way

All Fools Day, April 1, WSB began its fifth consecutive season of baseball broadcasting. This southern station, owned by the Atlanta Journal, considers baseball its most valuable summer feature. In a statement from WSB, it is said that the station would be maintained for that purpose alone, even if all nightly entertainments were discontinued.

WSB was the first station in America to report a World Series game in detail, play-by-play, through telegraphic relay. This was in 1922. Since then WSB has reported all the Southern league games played by the Atlanta Crackers team, whether at home or on the road. It is a significant fact that for each succeeding year the Atlanta club has broken all attendance records for the city and for the league.

WSB this year will again report all the Atlanta club games and likewise report the Dixie championship between the pennant winners of the Southern and Texas leagues, the baseball classic of the South. The World Series will also be broadcast. Every night at 8:30 p. m. Central time WSB announces a tabulation of all games played in the principal leagues.

Fort Worth Games Over WBAP

WBAP, the Fort Worth Star-Telegram, will broadcast all the home games of the Fort Worth nine, which is a member of the Texas league. These will be handled play-by-play direct from the ball park. The Dixie series will also be given by WBAP.

Harold Hough, WBAP official, announces that an open grandstand microphone will be used to pick up the cheering, hooting, crack of the bat and even the persuasive sales cries of the peanut vendors. He is of the opinion that such an arrangement adds much color to the play-by-play broadcast and enables Radio listeners to form a more complete and interesting picture of the game.

WDAF and WEAS Plans

WDAF, the Kansas City Star's popular station, will feed the ball fans of the great Southwest with inning scores and game results for the major leagues and American association, of which Kansas

City is a member. These will be given every afternoon at 3:30, 4:00, 4:35 and 6:00 o'clock, Central time.

Credo Harris, director of the Louisville Courier-Journal and Times broadcaster, WHAS, announces that his station will give daily results of the major league, American association, and other important games. Besides, under Mr. Harris' personal direction, his invention of 1925, in which the World Series was broadcast and re-played play-by-play by living players at the Louisville ball park, will again be put in operation at the conclusion of the 1926 season as the World Series takes all fans' attention.

WJAG and Printer's Devil Active

WJAG, the Norfolk (Nebr.) Daily News station and home of the Printer's Devil, has plans ready for giving the national pastime reports to its listeners. Along with flashes on results in the bush leagues and town teams in three states, the Printer's Devil will give a daily resume of results in the major leagues with standings of each team and in cases of important games, score by innings descriptions. The daily average and baseball diamond dust gossip will be the foundation from which the famous World Series stories will be broadcast by Karl Stefan, the Printer's Devil.

The play-by-play description of the World Series this year will again be read direct from the telegraph wire by Mr. Stefan, who will simultaneously keep a box score for listeners.

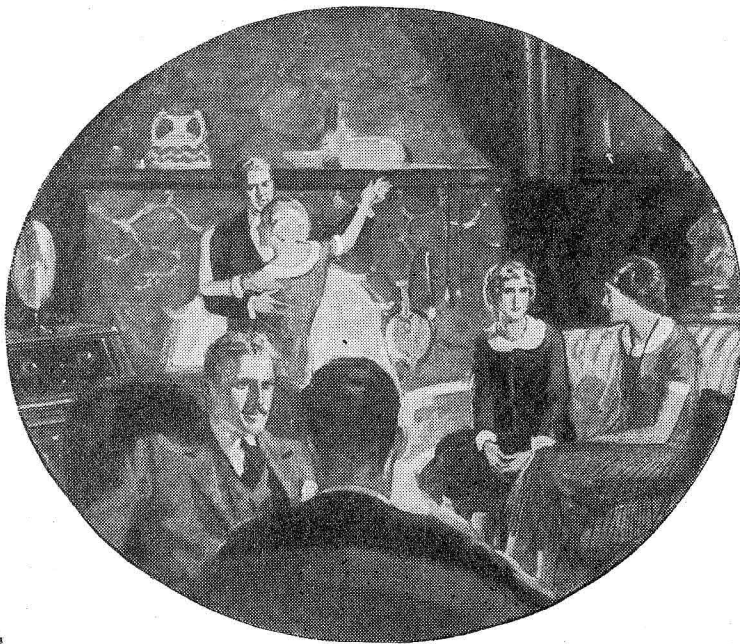
Station 6BM, Bournemouth, England, recently organized a cross-word puzzle competition. A diagram appeared in the station's published program, and listeners were asked to keep it and follow the clues read out by the announcer.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, OF RADIO DIGEST, ILLUSTRATED, PUBLISHED WEEKLY AT CHICAGO, ILL. FOR APRIL 1, 1926.

State of Illinois, County of Cook, ss.—Before me, a notary public in and for the State and county aforesaid, personally appeared E. C. Rayner, who, having been duly sworn according to law, deposes and says that he is the publisher of the Radio Digest, Illustrated, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, E. C. Rayner, 2335 Commonwealth Ave., Chicago, Ill.; Editor, Evans E. Plummer, 934 Lawrence Ave., Chicago, Ill.; Managing Editor, None; Business Manager, V. E. Huffer, 5220 Cornell Ave., Chicago, Ill.
2. That the owner is: (If the publication is owned by an individual his name and address, or if owned by more than one individual the name and address of each, should be given below; if the publication is owned by a corporation the name of the corporation and the names and addresses of the stockholders owning or holding one per cent or more of the total amount of stock should be given.) E. C. Rayner, 2335 Commonwealth Ave., Chicago, Ill.; George Seaman, 2350 Parkway, West Chicago, Ill.; F. T. Ryan, 510 N. Dearborn St., Chicago, Ill.; D. R. Seaman, 49 Cedar Ave., Chicago, Ill.; Joseph Seaman, 250 5th Ave., New York, N. Y.; V. E. Huffer, 5220 Cornell Ave., Chicago, Ill.
3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.
4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.
5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is..... (This information is required from daily publications only.)

E. C. RAYNER,
(Signature of publisher.)
Sworn to and subscribed before me this 29th day of March, 1926.
(SEAL.) A. C. MCKITTRICK.
(My commission expires October 1st, 1928.)



"Your radio is always top notch. What do you do to keep it so full of pep?"

KEEPING your "B" batteries full of pep, without frequent renewals, is simply a matter of using the right size Evereadys for your particular set with a "C" battery*.

The rule which determines the right size "B" batteries to use is so simple no one can make a mistake, and once learned it definitely settles the question of "B" battery service and economy.

On 1 to 3 tubes—Use Eveready No. 772.

On 4 or more tubes—Use the Heavy Duty "B" Batteries, either No. 770, or the even longer-lived Eveready Layerbilt No. 486.

On all but single tube sets—Use a "C" battery.

When following these rules, No. 772, on 1 to 3 tube sets, will last for a year or more, and Heavy Duties on sets of 4 or more tubes, for 8 months or longer.

These life figures are based on the established fact that the average year-round use of a set is 2 hours a day.

A pair of Eveready No. 772's for a 5-tube set instead of 2 Eveready No. 770's or

2 Eveready Layerbilts No. 486—looks at first glance like an economy because of lower first cost. But in a few months the 772's will be exhausted and have to be replaced. After the same length of time the Eveready No. 770's or the Eveready Layerbilts No. 486 will still be good for many more months of service.

We have prepared for your individual use a new booklet, "Choosing and Using the Right Radio Batteries," which we will be glad to send you upon request. This booklet also tells about the proper battery equipment for use with the new power tubes.

*NOTE: In addition to the increased life which an Eveready "C" Battery gives to your "B" batteries, it will add a quality of reception unobtainable without it.

Manufactured and guaranteed by NATIONAL CARBON Co., Inc. New York San Francisco Canadian National Carbon Co., Limited Toronto, Ontario

Tuesday night means Eveready Hour—9 P. M., Eastern Standard Time, through the following stations:

- | | |
|------------------|------------------|
| WEAF—New York | WSAI—Cincinnati |
| WJAR—Providence | WEAR—Cleveland |
| WEEI—Boston | WWJ—Detroit |
| WTAG—Worcester | WGN—Chicago |
| WFI—Philadelphia | WOC—Davenport |
| WGR—Buffalo | WCCO—Minneapolis |
| WCAE—Pittsburgh | WLS—St. Paul |
| | KSD—St. Louis |

Pacific Coast, Eveready Program KGO—San Francisco, 8 to 9 P. M.

Imagine any good 5-tube set lifted into the realm of the extraordinary—and you have the new Crosley 5-38. That's how the Crescendon, Crosley's new volume control, enhances the performance of the 5-tube 5-38 . . . \$38 without accessories.

Add 10% to all prices west of the Rockies

THE CROSLLEY RADIO CORPORATION, Cincinnati, Ohio

CROSLLEY RADIO

BETTER · COSTS LESS



LEFT—No. 486, for 4, 5 or more tubes, \$5.50.

RIGHT—Eveready Dry Cell Radio "A" Battery, 1½ volts.

EVEREADY

Radio Batteries

—they last longer

AN EVENING AT HOME WITH THE LISTENER IN IN CENTRAL TIME

Table with columns: Call, Location, Met., Saturday, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday. Lists various radio stations and their broadcast schedules.

Table with columns: Call, Location, Met., Saturday, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday. Continuation of radio station schedules.

STATIONS IN ORDER OF WAVE LENGTHS

Table with columns: Meters Call, Meters Call, Meters Call, Meters Call, Meters Call, Meters Call. Lists stations ordered by wavelength.

SHORT WAVES

By Marcella

(Continued from page 6)

however, that he is doing announcing regularly anywhere.

This much of your question I can answer, M. W. F., and that is about H. W. Arlin, former KDKA announcer. He is off the air and in the electrical appliance sales business. Akron, Ohio, I think, is his new home. I'll answer the rest later.

The Duncan Sisters, Edwin, are still on the road with "Topsy and Eva," I believe, but am not sure. Are they married? No, neither of them is. Ages? Another thing I don't know—a bad thing to guess about—a lady's age. However, I don't think they would be interested in matrimony. Gypsy and Marta, the Mona Motor Oil Twins, are billed every Tuesday at 9 p. m. Pacific time at KPO, Hale Brothers, San Francisco. Perhaps this is the other team you are seeking?

V. K. Y., an ardent "Marcellite," wants other members of the order to know that KMOX, the well-liked "Voice of St. Louis," has engaged the good-looking-but-married George Junkin as announcer. Considering George's experience as a theatrical producer, motion picture actor, and microphone star, it is too bad that a lady from the "show me" state married him away back in 1913.

Adele, J just don't know where Clyde Hager, ex-WMBB, Chicago, has gone. They tell me, however, that he is on the road—but where, for whom and doing what, I do not know.

Hah—ah and another ah. Here's the first opportunity for several weeks, girl friends. Louis John Johnen, who arranges the programs heard through WLW, Crosley station in Cincinnati, is a BACH-ELOR! He is also interlocutor of the WLW minstrel show heard every Tuesday evening, and he announces about half the time. As if that weren't enough, he sings baritone solos now and then, and during his leisure moments teaches vocal at the Cincinnati Conservatory of Music.

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.

KOA Player to Musical Comedy DENVER.—High recognition was again given the KOA dramatic players when Will Morgan, leading man and widely known in western theatricals, was recently chosen for one of the principal roles in "No, No, Nanette," famous musical comedy.

WHAT IS SOUP STOCK?

(Continued from page 6)

It is not always necessary to have new material to make soup stock. In fact, in many cases the scraggy meat and bones from roasts, chops and steaks will make all the stock you need. If you are buying meat to use for soup, buy a shank of veal or a shin of beef. These cuts come far down on the leg of the animal where there is a large amount of the tissue which makes jelly, and also some very juicy and well-flavored meat. Ordinarily a good proportion to use is one quart of water for one pound of meat. With less water the result will be a stiff jelly. For a good, rich stock, use two or three pounds of meat or meat and bone for each quart of finished stock. Any meat may be used except that which has been smoked or pickled.

In addition to the meat and bone, use several different vegetables for flavoring. From one-half to one tablespoon of each vegetable is sufficient for each quart of stock. The favorite vegetables are carrots, celery, onions and turnips. Left-over vegetables may be utilized in the soup, but the soup should never be a general dumping ground for scraps. After the soup is done, let it stand until cool, and then remove the solid layers of fat and all small particles of fat. Strain to remove all of the meat and vegetables. The soup is then ready to serve as an ordinary soup with the addition of diced vegetables, noodles, rice, macaroni or anything you like.

How to Clarify Stock

If you wish to clarify the stock for bouillon, proceed as follows: Use one egg white and shell for each quart of stock. Beat the egg slightly and crush the shell. Stir into the stock and heat slowly to the boiling point, stirring constantly. Boil without stirring from 5 to 15 minutes until all of the particles collect with the egg to form in a heavy scum. The length of time required depends upon the quantity of soup. Let stand to settle, then strain through a double cheese cloth. If any additional bubbles of the fat remain on the soup, they may be removed by touching the surface with absorbent paper. A crepe paper napkin is good for this purpose.

Soup stock is used as the foundation for many different kinds of soup. Stock that is jellied may be kept for a long time if kept in a cold place. It will keep as long as it is jellied and has a layer of solid fat on top to keep out the air, or it may be sealed in fruit jars and kept in a cool place. It is better not to cook vegetables in the stock if you expect to keep it any length of time. They may be added later as you make up the soup to serve.

Fewer Radio Stations

WASHINGTON, D. C.—The total number of broadcasting stations has been decreased to 532, according to W. D. Terrell.

Radio Digest Illustrated

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

Published by the
RADIO DIGEST PUBLISHING CO.,
(Incorporated)510 North Dearborn Street
Chicago, Illinois

Telephones: Superior 7323, 7324, 7325, 7326, 7327

E. C. RAYNER, Publisher

Eastern Office, Park-Lexington Building, 247 Park Ave.,
New York. Telephones: Ashland, 8144, 8145, 8146

Member of the Audit Bureau of Circulations

241
PUBLISHED WEEKLY

SUBSCRIPTION RATES

Yearly in U. S. and Possessions and Canada, \$5.00
Foreign postage, \$1.00 additional. Single copies, 10 cents.

Vol. XVII

Saturday, April 10, 1926

No. 1

Food for Noises

"FOUR feet of snow, plus a temperature of twelve degrees below zero, plus an open car in which to travel, plus unlimited interference, equals a happy life for the Radio inspector in the northern states," reports one of the federal Radio men who was sent from Chicago to Minnesota to make special investigations.

How would you like to trade jobs with the inspector and receive his small salary and transportation allowance? Not so pleasant to anticipate is it?

Yet congress and the budget bureau feel that they have done their best in appropriating \$335,000 with which the Radio section of the department of commerce must work during the next twelve months. This fund will buy patches for the older inspectors' last year's suits and provide enough extra money to pay the meager salaries of a few youths in the various districts who will sit at night and listen to broadcasting stations that persist in sliding their wave lengths up and down the scale and radiating their programs on anywhere from two to sixteen different wave lengths.

But the third of a million dollars won't begin to do the work necessary to police the air one hundred per cent perfect. We don't believe the fund allowed is half enough.

The Radio inspectors could be of great assistance in running down and correcting bloopers, leaking power lines and transformers, faulty broadcasting station transmitters, and interference by amateurs and boats—but the inspection force is not financed or manned enough to begin to do all of this work. As a result we sit by and tune in to every kind of noise and nuisance the electron is capable of producing or the ether of carrying.

When we said that \$500,000 annually was not too much to devote to the work of the Radio section, we meant it. Please remind your congressmen.

Listen to the Good Ads

AN AGITATION against undue advertising on the air is in progress. A number of newspapers have been carrying articles of late lamenting on the number of lottery contests and advertising announcements on the air. The complaint is that these announcements and contests are unwelcome and that they should be barred by legislation.

It is our belief that legislation is unnecessary and is ill advised. Our forefathers founded this country upon certain definite principles. It is a democracy. Personal and business liberties were not to be controlled by the government. We have enough laws. But there are always those persons who would add a few more to the already overcrowded statute books. Let's first enforce the laws we have.

The advertising situation will govern itself far better than it is within the power of the federal government to control it. Let us prove this contention.

If a station by its boring sales announcements, its nauseous telegram reading, or its monthly or more frequent lotteries, becomes unentertaining and distasteful, it is within the power of every listener to tune that station out. Of course there are certain exceptions where the receiving post is under the shadow of the bothersome station's towers—but that is an exception, and the rule will take care of the situation.

If the station is tuned out often enough, and if the advertisers paying for time on the air through that station are told, in letters from disgusted fans, what a bore their Radio advertising is proving to be, that firm will not continue to broadcast through the station—or the method of broadcast advertising therefrom will be altered greatly. No business company is going to continue long to advertise via the microphone in an unprofitable way.

And remember—the listener always has the option of twisting the dials around to another station whose program is more to his taste. That is the American privilege, the right to do as one pleases, the ability to hear what one chooses.

Who is there to say that there is not sufficient variety on the air from which to make a satisfactory selection?

RADIO INDI-GEST

Buncha Din

There's a sound of armies clashing,
There's the roar of breakers dashing
Wreakage up against a rugged dike;
There's a roll of distant thunder
As the clouds are rent asunder—
Cannons fired broadside at the mike.

There's a scream of vultures dying;
Of demented people crying;
A yelping savage beating on a drum.

There's a most discordant banging
Like the fire engines clanging
And tearing up the cobbles as they come.

There's a shriek, a scream, a clatter—
What on earth can be the matter?
Are the elements engaging in a fight?

It's the noise of all creation
Headed straightway for damnation—
Ah, go on—It's only silent night.

THE NIGHT HERD

When You Call Me That, Smile!

Dear Indi: Apropos of the argument between the linguists and purists over "Radiocasting" and "broadcasting," do you think WBAP at Fort Worth can sneak their cowboy show in under the name "Rodeocasting?"
ELOISE R

What a Dirty Dig!

Dear Indi: See in last week's issue that an unknown movie extra is to be popularized on air. Whadyu mean? Hot Air?
PABLO

My Radio

I sit me down at eventide,
My faithful radio beside,
And scour the ether, far and wide,
For music, soft and low.
And, like a million other saps,
With "DX" written on their maps,
In my ears the static snaps,
And fills my soul with woe.

Anon, I exercise my wiles,
I twist and turn the cussed dials
And think that, from a thousand miles,
I'll tear a lot of guff,
To find when I tune in a guy
And steal his skill from out the sky,
To bring the sparkle to my eye,
It's only local stuff.

My Frau assures me I'm a nut,
That bug-house is my occiput,
And a darned fool I am nothing but,
Plumb dead above the neck,
It may be so, but, I'll be cussed,
I'll have my Radio or bust,
For there are millions, who are just
As nuts as I, By Heck.

WILSON E. ROGERS

Where Men Are Men an' Women Are—Not

Dear Indi: Where is the Night Herd from? A guy couldn't dope out all he does from the "Smog" of Chicago or the cold grey of N'Yawk. Bet he's from the great open spaces.
SHOBIE



"A FLOP ON THE STAIRS"

by THE THIRD TROMBONE PLAYER

Episode 2—Is Beer All?

Synopsis.—It seems that C. Densed, a prominent writer of Radio criticisms, is plotting to re-write the dictionary as it does not agree with his spelling. He organizes a gang called the "Jazzbo Six" to destroy by means of Radio waves all existing copies of Webster's important, although somewhat unromantic, masterpiece. In this he is opposed by Marten Dirkun, a fearless copy boy with big blue eyes, rosy cheeks and a sweet temper. Now go on with the story, Pancrace.

IT WAS Dirkun who, with blazing eyes, faced the scowling C. Densed. Little did he know what was in store for him.

"Lay off that there dictionary, big boy, or I'll turn 135 volts B battery on your quivering flesh."

"You can't harm me," hissed C. Densed, "cause I'm Dielectric and don't conduct electricity." With this he smote our hero on the bean with a Whistlinghouse R. C. set.

As he was about to drag out the body, a woman's scream rent the air. Again this mysterious scream!

(Boys, this is getting serious. Wonder who that female is?)

(TO BE CONTINUED)



Found Out at Last

Dear Indi: And here, all the time, I thought you were a nice old man and, heck, you know about Ponjola, Congressional and Boy Bucks!!! How come???

KITTEE KEY

Franque's Filofee

Although Radio keeps a man at home, all the while he is trying to get as far away as possible.

Stations Were Down on the List

What do you think of the guy that wrote in and expressed indignation because a number of stations listed in the programs had "Silent Night" and, after trying to tune them all in, he failed to hear it even once?
INDI

News of the Week



Condensed

BY DIELECTRIC

When the instruments are in tune and the rhythm is maintained, dance orchestras sound very much alike to this reviewer, which may be a frank confession of ignorance. If so, the plaintiff loses. Nothing in the playing of dance music by an orchestra from Station WJJD, Moosehart, provoked me to slander nor to eulogy. It was the manner of announcing which led me to put that station down for mention. In a short time those stations failing to give call and city between numbers will be so few as to cause them to feel their own delinquency. "WJJD, Moosehart" follows so quickly each number there is always time for it. They are to be commended for their policy.

Station WGN, Chicago, hit upon a feature of duo value: presenting old-time favorites with prizes awarded to those guessing them correctly. Old-time songs are not dying out, nor are they likely to, and yet the titles of these pieces are oftentimes difficult to recall. Hence, listeners will make an effort to learn the names of all these songs and at the same time familiarize themselves anew with their beauty.

Edward Johnson, of the Metropolitan Opera company, New York, sang for the Atwater Kent concert series in a manner most pleasing. There may be some to whom this tenor's voice lacked certain wanted qualities, but to most listeners his work was highly engaging. After listening to each of the famous operatic tenors for some years back sing the well-known "Pagliacci's Lament," from the opera of that name, I hesitate to deprive Mr. Johnson of the laurels justly due him. His artistry was notable in each phrase of the aria, coloring his tones with intelligence and displaying a voice of sweetness and warmth, a truly magnificent rendition of this recital of woe.

Another dance program listened to was one presented by the Golden Pheasant orchestra through Station WTAM, Cleveland. Previous mention has been made of the good work of this musical organization and is repeated here. Something more than that is slated to be said before commencing comment on the next feature, however, and it is to the effect that the Willard station is open to censure because of the announcer's allowing several numbers to go by without announcement. I am in entire agreement with those fans would urge giving the call letters following each feature and again preceding the next.

Station WWAE, Plainfield, Ill., had a happy group of broadcasters in their studio one night a short time ago who dispensed cheer lavishly, not sparing themselves in the least. When the time came for them to depart, the announcer interrupted his standard explanation to bid Bill, Dick, Joe, etc., a fond farewell. Is he supposed to be human or merely a mechanical bulletin of past and coming events? Your votes for the world's most popular announcer should tell.

With all the excitement over prohibition enforcement it is not surprising to have a number of speakers from as many stations broadcasting their remarks on the subject. Station WLW, Cincinnati, stood fast while Senator Edwards, New Jersey, delivered a speech which included nearly all the uncomplimentary adjectives contained in the dictionary, having immediately in mind everyone supporting the latest check to freedom. His immediate audience was composed of Irishmen. I don't know how cosmopolitan was the Radio audience. Everyone with a receiving set may firmly exclaim "Amen" or "bosh" and not interrupt these meetings. That's the beauty of listening in.

Super-Torodyne: An Improved 8-Tube Super

Part I—Analysis of the Circuit

By J. E. Owen, Univ. of Okla.

THE Super-Torodyne is offered on the basis of its merit, and with a realization of the necessity for further development in the super-heterodyne circuit field for the reception of broadcast programs.

When the work was started on the Super-Torodyne, it was realized that certain factors had been utilized quite satisfactorily in other circuits that had not (for no obvious reason) been carried over into the super-heterodyne circuit. The fact was obvious, that the super-heterodyne at that date was, from the viewpoint of oscillator and antenna coupler units, considerably outranked by other circuits. Thousands of dollars had been spent in experimental work on tuned radio frequency circuits in the development of low loss toroid coils that had characteristics suitable for inter-stage coupling. Also, the super-heterodyne is often bulky and inconvenient from the viewpoint of installation. To partially overcome certain of these features of the usual super-heterodyne, the Super-Torodyne was devised.

Weeks of careful selection of apparatus followed, particularly in the nature of the selection of the intermediate stage transformers and the oscillator and antenna coupler units. It was recognized that while it might be possible to easily design a coil for the set, it would mean more to the builder to have a unit that was already on the market. The All-American Toroid transformer type, T-2, proved the most suitable of all tried.

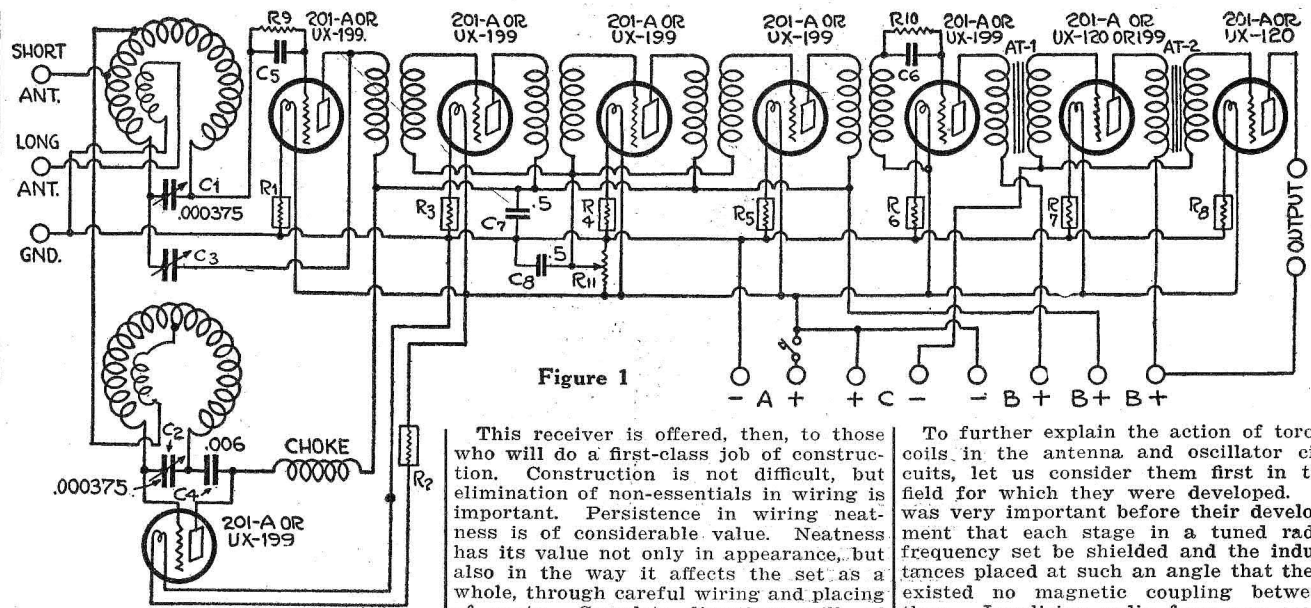


Figure 1

super-heterodyne utilizing the unusual toroid advantages in a generally satisfactory manner; the scheme being to produce a set of real quality. Nothing cheap has been substituted that might in any way interfere with quality of reproduction, nor sensitivity and selectivity. It

This receiver is offered, then, to those who will do a first-class job of construction. Construction is not difficult, but elimination of non-essentials in wiring is important. Persistence in wiring neatness is of considerable value. Neatness has its value not only in appearance, but also in the way it affects the set as a whole, through careful wiring and placing of parts. Complete directions will, of course, be given.

The wiring diagram of the Super-Torodyne is that shown in figure 1. It will be noticed that the circuit is fairly standard, except that regeneration is used with an outside aerial. The term "outside aerial" is used in its general sense, and only to distinguish it from a loop. It may consist of a wire strung around the room. Regeneration is obtained in the antenna coupler in much the same way that it is obtained in a loop in many super-heterodyne circuits. The antenna and oscillator couplers are toroid in their construction, as was explained above. It is from these that the set gets its name. As is seen in the list of parts, air core intermediate stage coupling transformers are used, the high frequency response of the Victoreen units giving them a low noise level.

To further explain the action of toroid coils in the antenna and oscillator circuits, let us consider them first in the field for which they were developed. It was very important before their development that each stage in a tuned radio frequency set be shielded and the inductances placed at such an angle that there existed no magnetic coupling between them. Localizing radio frequency magnetic and electrostatic fields was no small job. Local broadcasting stations proved quite disastrous on the action of many receivers. In spite of the theoretical considerations and experiments which led to the set's rejection of signals fed directly into it and at a frequency differing to that for which the receiver was tuned, local stations kept on interfering and spoiling reception. Further consideration of the matter showed that linkages within the fields of each radio frequency transformer and the broadcasting sources resulted in each unit acting as sort of an antenna. The solution to this problem revealed by this discovery, was in toroid coils. These units have no external field—that is, the field at any point caused by a flow of current within the wire of a toroid units giving them a low noise level.

(Continued on next page)

SUPER-TORODYNE

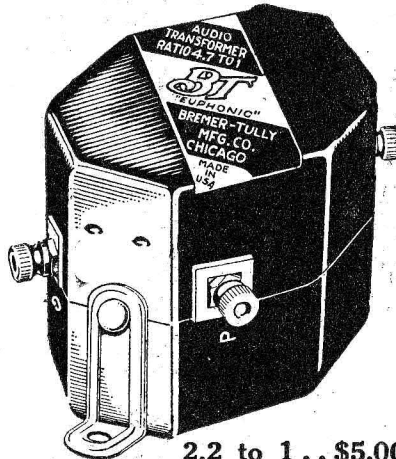
List of Parts

4 Victoreen R. F. Trans.	Geo. W. Walker, Cleveland, Ohio.....	\$28.00
2 Type AL-2 Shield Audio Transformers	Jefferson Elec. & Mfg. Co., Chicago	12.00
2 T-2 Toroid R. F. Trans.	All-American Radio Corp., Chicago..	7.00
2 .000375 Hammarlund Condensers	Hammarlund Mfg. Co., New York.....	9.50
1 .000032 Hammarlund Junior Cond.	Hammarlund Mfg. Co., New York.....	1.80
1 Victoreen 400-ohm Potentiometer	Geo. W. Walker, Cleveland, Ohio.....	1.50
1 Battery Switch	Benjamin Elec. Mfg. Co., Chicago....	.30
1 Pair Benjamin Brackets	Benjamin Elec. Mfg. Co., Chicago....	.70
7 Bremer-Tully Universal Sockets	Bremer-Tully Mfg. Co., Chicago.....	5.25
1 B-T Silent Universal Socket	Bremer-Tully Mfg. Co., Chicago.....	1.25
1 B-T Radio Frequency Choke Coil	Bremer-Tully Mfg. Co., Chicago.....	.90
2 Velvet Vernier Dials	National Co., Cambridge, Mass.....	5.00
2 1-mfd. Fixed Condensers	Tohe Deutschmann Co., Boston, Mass.	1.80
6 4v-199 Amperites	Radiall Company, New York city....	6.60
2 No. 120 Amperites	Radiall Company, New York city....	2.40
2 2-Megohm Grid Leaks	Allen-Bradley Co., Milwaukee, Wis.	1.50
1 .006 Fixed Condenser	Dubilier Cond. & Radio Corp. New York city75
13 Eby Binding Posts	H. H. Eby Mfg. Co., Philadelphia, Pa.	1.75
2 .00025 fixed Cond. with grid leak mtgs.	Dubilier Cond. & Radio Corp., New York city90
1 Formica Panel, 7x18	Formica Insulation Co., Cincinnati..	2.85
1 Formica Panel, 7x17	Formica Insulation Co., Cincinnati..	2.70
1 Formica Strip, 10½x1¼	Formica Insulation Co., Cincinnati..	.30
1 10x18 Cabinet		3.50
Cook's Bus Bar Wire	E. N. Cook Plate Co., Providence, R. I.	.50
Miscellaneous: Screws, Spaghetti, etc.,		2.00
Total		\$105.75

This set is not offered in a spirit of education for those in the kindergarten class in Radio. The super-heterodyne circuit is fundamentally the most complex circuit yet devised, aside from certain super-regenerative sets. No particular attempt has been made to produce a "most simple super-heterodyne," or anything of the sort, but rather to produce a

may be said in all fairness, however, that stability of operation was recognized as a necessary essential in the finished product, and an effort to overcome the usual disadvantages attendant to stability was seriously made. This effort was quite successful, and is apparent when one studies the circuit and the arrangement of its different units.

BEST AUDIO TRANSFORMER BUY ON THE MARKET



2.2 to 1 .. \$5.00
4.7 to 1 .. \$5.75

J. E. Owen, Bureau of Tests and Measurements, University of Oklahoma and Radio Digest Technical writer, says, "I find your apparatus very excellent indeed. To my mind there is no better audio transformer buy on the market at anything near the price than your 2.2 to 1 Euphonic Transformer."

From a New York Pianoforte Instructor

Brooklyn, N. Y., March 10, 1926.

First let me tell you that in the past year I have built seven B-T Nameless Receivers.

Up to the completion of the seventh I was prepared to swear that there was no instrument in the world that could even equal it for selectivity, power and last but not least, tone quality. I say this from a musician's viewpoint.

Then came the Counterphase Six—

I think that you must take a malicious pleasure in springing surprises on competing manufacturers!

I have just completed my third one of these instruments. There is only one instrument that can come near to it in any way—and that is the "Nameless." I am using my personal instrument with a Western Electric Cone and their 25 B Power supply. The resulting reproduction is perfect.

The Counterphase sweeps all before it.

A. E. F.

Other B-T Products—

- Lifetime Condensers
- Tuning Controls
- Tuners
- Type UL Sockets
- Silent Sockets
- Nameless Kits
- Counterphase Kits for Home Set Builders and Complete Factory-Built Counterphase Six Receivers

BREMER-TULLY MFG. CO.
532 South Canal Street CHICAGO, ILL.



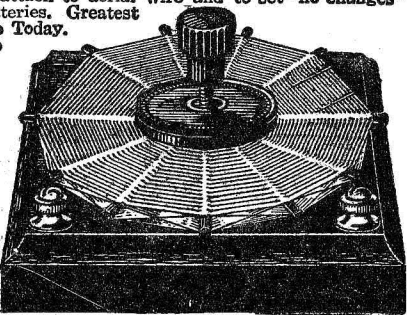
Steinite Low Loss Interference Eliminator

No Radio Set Complete Without It

Select stations at will. With music and voices crowding the air 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. Greatest Dollar Value in Radio Today.

OVER 300,000 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.**



Mrs. Famous 1,500 Mi. Steinite 1-Tube Set, \$6; Long Distance Crystal Set, \$6; Steinite Crystal 50¢—3 for \$1
STEINITE 5-Tube Set—\$29.75

FREE Descriptive Literature on request.

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. \$1.00 postpaid anywhere in U. S. when cash with order.

References: Exchange National Bank, Atchison Savings Bank. Order today—a dollar bill will do.

STEINITE LABORATORIES, 161 Radio Bldg., ATCHISON, KANSAS

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

NEW SUPER-TORODYNE

(Continued from page 19)

oid coil is zero, excluding flux leakage and choosing the point outside the unit. Therefore, the use of such coils in the radio frequency stages of a receiver proved quite satisfactory.

Two Antenna Taps

These coils carried over into the super-heterodyne circuit work quite well. Retaining the same characteristics that gave them success in the radio frequency circuits just described, they make in the super-heterodyne circuit for selectivity. Regeneration used with them makes the receiver also quite sensitive and selective. The unit selected used as an oscillator coupler has an output just sufficient to satisfactorily mix with the incoming signal of the first detector, while two antenna taps are provided for long or short aerials, which is an added advantage.

Buy Units Separately

Just a word might well be said about the intermediate stage and the audio units. The Victoreen intermediate coils are sold in kits, or separately, as desired, and are tuned individually to a frequency for which they were designed. One may feel safe in buying them separately, because they are built to a standard. There is considerable talk by some manufacturers of iron core units against air core units, their contention being that often mismatched transformers are sold and the resulting amplification is therefore quite low. Most certainly it is true that a mismatched set of units will give very poor results. The Victoreen units, however, may be used in full faith that they are well matched, and will stand considerable abuse without becoming detuned. The Victoreen kit should not be bought because the oscillator unit included in the kit is not used in the Super-Torodyne.

HOW SUPER-TORODYNE WILL LOOK

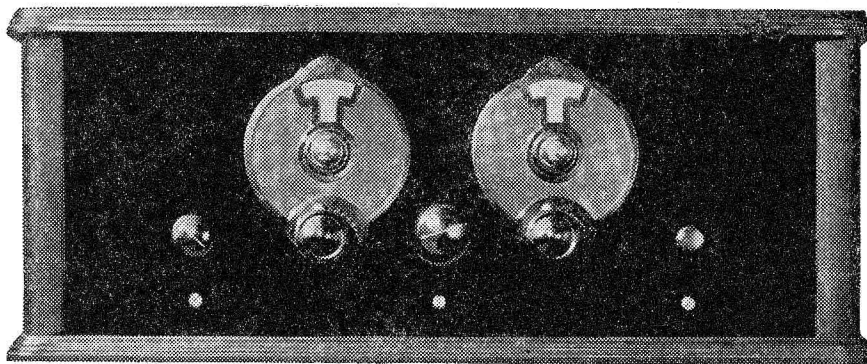


Figure 2

The writer on the Four-Filter Super in his first article recently gave a most excellent defense for the air core transformer and scored heavily against arguments that air core transformers of this type give distortion through elimination of side bands.

Use Quality Parts

Although the expression "elimination of side bands" has no meaning in the audio stages, the major portion of distortion in most Radio receivers occurs in such stages, such irregularity being generally chargeable to the design of the transformer being such that they favor either the low or high register and thus lack any semblance of uniform amplification over the total broadcast frequency band. There are, however, available a few makes of audio transformers which clearly indicate the result of intensive

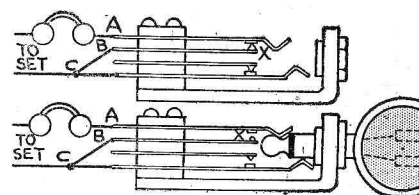
research, and which produce straight line amplification characteristics which are most desirable.

Prominent among such transformers is the new Jefferson AL2 shield type, its amplification curve at broadcast frequencies from 40 cycles up being such that it is bound to find much favor among those insistent upon quality apparatus. It is to be remembered that any circuit is entirely dependent upon the quality of the parts used, while the arrangement and skill of the constructor follows in their order. Give this Super-Torodyne the benefit of good apparatus and it will prove a most excellent receiver.

(Next issue Professor Owen will start the actual construction of the Super-Torodyne by describing the panel layout, drilling and assembly instructions. Buy the specified parts and be prepared—Editor's Note.)

Connecting Phones in Series

The modern Radio experimenter often finds it desirable to connect another pair of phones in series with those that he is already using, but does not wish to take the time and trouble to disconnect the first set of phones in order to connect the



second set into the circuit. There is a very easy and simple way that this can be accomplished and the only material that is needed is an ordinary double circuit jack and plug.

In the great salt mine at Kalicz, Czechoslovakia, a receiving set and loud speaker have been installed in the deepest gallery of the workings, and the men are thus able to listen in to Vienna, Prague and other stations while working nearly a mile under the earth surface.

dering what's it all about, this Radio business, that can take a singer and make her popular in such a short time. Although she has refused good offers to go on the stage, yet she is glad she has been the means of adding to the enjoyment of others. Of the future, she says little; but some day when deams come true, she hopes to sing personally to the many inmates of Uncle Sam's hospitals, who have been so generous in their letters.

With the risk of telling a secret, will whisper that recent negotiations have been made whereby the little singer whose career has been so spectacular, is to journey to New York to sing for records.

We only wish that the folks who write in and ask to be told "something about the Sunflower Girl" could have seen her as we saw her; there in the delightful drawing-room of her temporary home, eager and unaffected and sincere; singing and playing for the sheer love of it and enthusiastic in the happiness it was bringing to others.

WDAE ON BUILT ISLAND

(Continued from page 5)

to do it regularly on a mere 250 watts! If you want to know who is the king of Davis Islands you'll find a monogram of a "D." and a "T." on a coronet of coils, tubes and crossed wires.



R. H. Megargle

The programs broadcast nightly from the Davis Islands Country club will rank with the finest on the air. Isham Jones and his famous Chicago orchestra playing their regular dance program at the Country club are broadcast each night. All dance lovers and most phonograph and Radio fans of America have heard this great orchestra, declared by musical authorities to be the greatest dance orchestra in the world.

Isham Jones was brought to WDAE from the Kit Kat club, London, England, where he played a long engagement and his was acknowledged the favorite dance orchestra of the Prince of Wales.

Besides broadcasting orchestra and studio programs of exceptional merit, WDAE is teaching its listeners how to swim, how to play golf and how to dance by Radio. Miss Helen Wainright, champion woman swimmer of the world, is

teaching a regular course in swimming every Wednesday night from 8:30 to 9 o'clock to students who hear her from the air.

On Thursday evenings, at the same hour, Miss Dorothy Mason, former dancing partner of Vernon Castle and instructor of dancing at Cornell university, takes the microphone to broadcast a weekly lesson in dancing.

On Friday night all the golf enthusiasts "tune in" on WDAE to hear Johnny Farrell, golf professional, at the Davis Islands Country club and runner-up in the national open golf tournament last year, broadcast his weekly golf instruction. Farrell, who recently beat Bobby Cruickshank for the Florida open golf championship, is making a big hit with the northern golfers who often are snow-bound and unable to play their favorite game.

Ralph H. Megargle, director of Radio for the Tampa Times and Robert H. Nolan, one of the best known announcers in Florida, are handling the administration work and doing the announcing. Nolan, formerly with WGBU, Fulford-by-the-Sea, is also an entertainer of ability and features many programs with song and

instrumental numbers. He announces as "B. N."

Megargle, who announces as "Tod," is well known and popular throughout the North as well as South because of his "sunshine state" announcements and stories. He is a former newspaper writer and has written many articles on Radio subjects.

Isham Jones and his orchestra will broadcast each night from WDAE until May 15. The programs start at 9 o'clock and continue until 2 a. m. On Sundays a special two hour concert, starting at 7:30 and continuing until 9:30, is broadcast.

WDAE operates on a wave length of 273 meters.

WBAP SUNFLOWER GIRL

(Continued from page 4)

life the night she sang to thousands in the Coliseum at Fort Worth, the occasion being the opening of the Fat Stock Show and Rodeo; this program was also broadcast. Mingled with the thunderous applause was the characteristic whoops and calls of the cowboys and cowgirls—many of them world champions.

The little Sunflower Girl is still won-

Professor J. E. Owen
Specifies the
HAMMARLUND
Straight-Line Frequency
and
"HAMMARLUND, JR."
CONDENSERS
In His New
SUPER TORODYNE
The best is none too good for those who know.
Write for Folder
HAMMARLUND MFG. CO.
424-438 W. 33rd St., New York
For Better Radio
Hammarlund
PRECISION PRODUCTS

Cadiz, O. **Verified Reception from Paris by Cadiz, Ohio, Radio Fan**

Coast to Coast On a Loop
is easy with a
Victoreen "Super"

The Heart of the Circuit
4—No. 170 R. F. TRANSFORMERS at \$7.00 each and
1—No. 150 Coupling Unit at \$5.50
No oscillations, howls or squeals—no matching of tubes.
Complete parts to build the "Victoreen" can be purchased of your dealers at moderate cost.
Ask your dealer for free "Victoreen" folder which contains hook-up and complete information or write us direct. This folder answers all questions regarding the "Victoreen" circuit.

Victoreen No. 170 R. F. Transformer—Neat and Compact 3" in diameter, 1" thick.

THE GEORGE W. WALKER CO.
6509 GARNEGIE AVENUE CLEVELAND, OHIO
Branch Offices in Principal Cities

Year after Year leading builders of fine sets use more Thordarsons than all competitive makes of transformers combined—proof they are best!

ZENITH
KENNEDY
Radiodyne
Planstiehl
Howard
Thermodyne
OZARKA
Deresnadyne
ADLER-ROYAL
MURDOCK
MU-RAD
Valley
LEICH
Silver Marshall
GLOBE
Mohawk
Newport
BUCKINGHAM
NUNN-LONDON
KUSTOMBILT and many others

ALSO—Choice of MacMillan Arctic Expedition

Do as they do—use THORDARSON Super TRANSFORMERS STANDARD ON THE FINEST

THORDARSON ELECTRIC MFG. CO., CHICAGO

How to Stop Blooping and Man-Made Static

Part IX—Trouble Shooting Apparatus

By The Technical Staff

IN MAKING tests to locate sources of interference, as was shown in last week's article, one must approach the subject with an unprejudiced mind as to the source of the interference, and before concluding that the interference is caused by any given source, it is well to consider all possible conditions in which the interference may have originated from some other unknown cause. Investigating interference is a very fascinating detective game and one would sometimes suppose that the source of the interference had

vide a path to ground in the form of a condenser. In order to make these filters effective, it is advisable to introduce between the line and the source of the disturbance a trap which will make the passage of the surge more difficult. This trap preferably takes the form of a choke coil consisting of a number of turns of wire of sufficient size to carry the required current without overheating.

Choke Coil Construction

A type of choke recommended for cases where the current is less than three am-

peres is constructed according to figure 16. It consists of 100 turns of number 18 double cotton covered copper wire comprising a single layer, wound on a fiber tube 3 inches in diameter, 1/8 inch thick. Leads are soldered to each end and made from number 14 flexible rubber insulated braid covered copper wire, making one turn around the tube then through a hole in the tube and extending through the inside of the tube a length of one foot.

All burrs should be carefully removed from the hole in the fiber tube so as not to cut the insulation. End rings or fillers are mounted at the end of the winding to build the coil form up to the same diameter as the outside diameter of the winding. These may be made of tape or a suitable size of fiber tube. The whole coil is then covered with five layers of Empire cloth

and taped with friction tape and painted with an insulating varnish. Mounting lugs made of fiber can then be attached to each end of the coil. The finished coil should be mounted on a board covered with asbestos 1/8 inch thick and the leads soldered and thoroughly taped according to standard wiring practice.

Mounting Condensers

Condensers which will stand a test voltage of 1,000 volts direct current may be connected across an alternating current or direct current circuit of 250 volts or less.

Where condensers are to be used on 550-volt circuits, two condensers of the approved type must be connected in series

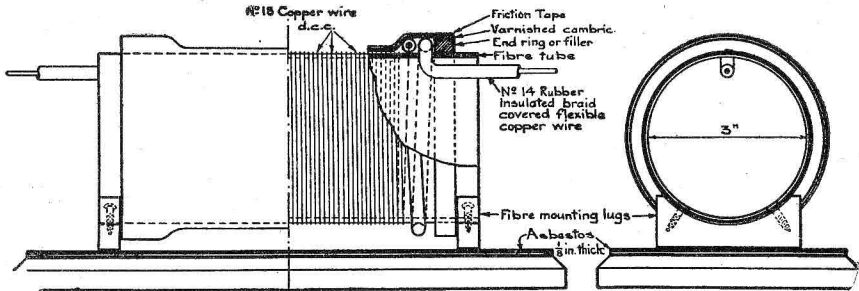


Figure 16

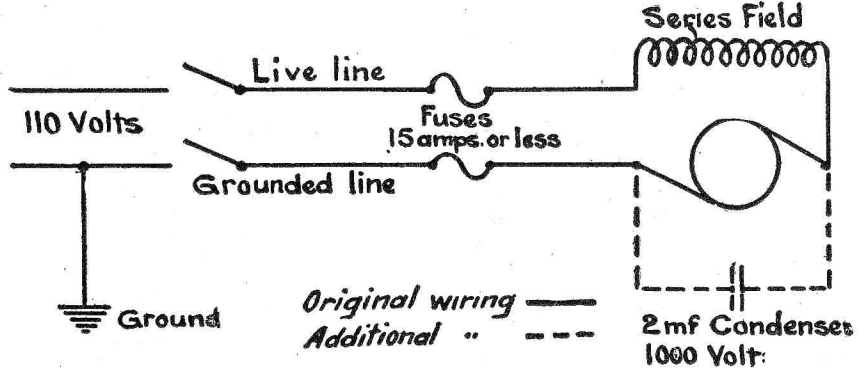


Figure 17

On circuits which are protected by fuses of not more than 15 amperes capacity, no additional fuse is required for the condenser. On circuits protected by fuses of greater than 15 amperes capacity, a

between the lines, and the common point not more than 15 amperes capacity, no additional fuse is required for the condenser. On circuits protected by fuses of not greater than 10 amperes (Continued on next page)

a sense of humor and was trying to evade detection in a manner similar to that of the most clever criminal.

As a major portion of interference is caused from leakages incident to transmission lines and their associated apparatus, there also exists disrupting surges from apparatus which are not defective.

In such cases where the electrical apparatus appears to be in good electrical condition it is often possible to supply some means of preventing electrical surges from getting out to the power line where they would radiate and cause interference.

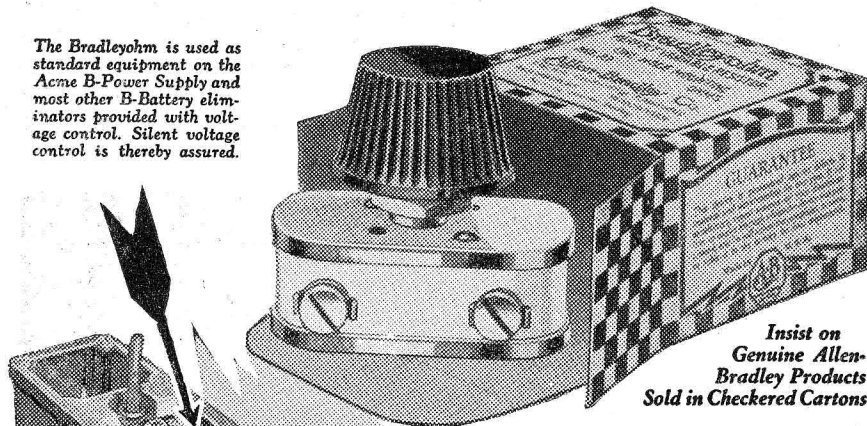
Condenser Prevents Surges Traveling

Such electrical surges have the property of passing through condensers more readily than through inductances. The methods employed in preventing electrical surges which cause Radio interference, is to pro-

peres is constructed according to figure 16. It consists of 100 turns of number 18 double cotton covered copper wire comprising a single layer, wound on a fiber tube 3 inches in diameter, 1/8 inch thick. Leads are soldered to each end and made from number 14 flexible rubber insulated braid covered copper wire, making one turn around the tube then through a hole in the tube and extending through the inside of the tube a length of one foot.

All burrs should be carefully removed from the hole in the fiber tube so as not to cut the insulation. End rings or fillers are mounted at the end of the winding to build the coil form up to the same diameter as the outside diameter of the winding. These may be made of tape or a suitable size of fiber tube. The whole coil is then covered with five layers of Empire cloth

The Bradleyohm is used as standard equipment on the Acme B-Power Supply and most other B-Battery eliminators provided with voltage control. Silent voltage control is thereby assured.



How to Get Extra Voltage Taps from Your B-Eliminator

MANY radio receivers are provided with several B-Battery terminals for detector, amplifier and radio frequency tubes. To provide the extra voltage taps from B-battery eliminators, such as the Acme B-Power Supply unit, is a simple matter. The diagram below shows the method of connecting the necessary Bradleyohms and condensers.

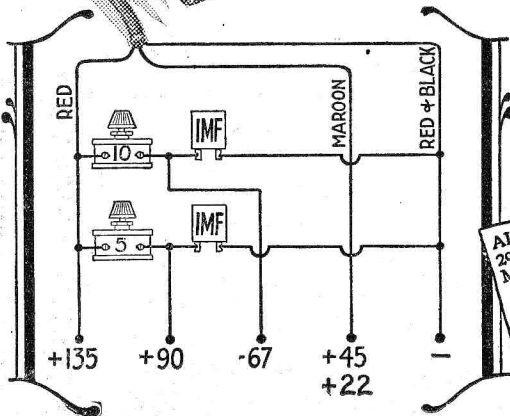
A Bradleyohm No. 10 for the 67-volt connection and a Bradleyohm No. 5 for the 90-volt connection provide marvelously smooth control over a wide range for these terminals. The condensers may be larger if desired, especially when used with audio-frequency taps. The standard Bradleyohm in the eliminator gives sufficient range for the detector plate voltage. Your dealer can supply you with Bradleyohms and condensers. Try these connections tonight and improve your receiving set.

Mail the Coupon for Literature

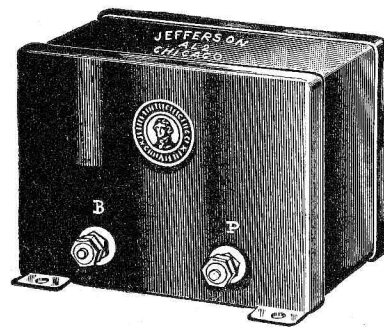
ALLEN-BRADLEY COMPANY
290 Greenfield Avenue
Milwaukee, Wisconsin

Please send me literature on Allen-Bradley radio products including the Bradleyohm.

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



Prof. Owen Specifies JEFFERSON A L Sealed Transformers



Prof. J. E. Owen of the Oklahoma University, after exhaustive research has selected Jefferson A L Sealed Audio Frequency Transformer for his new Super-Heterodyne circuit as described in this issue of Radio Digest. The A L Transformer was developed by Jefferson Radio Engineers after months of exhaustive experiments, the outcome of which allows us to offer to the radio public a transformer of a nicety of balance which comes from sufficient winding and large enough core and which gives an even amplification at low frequency and prevents resonant peaks at the higher frequencies. This transformer shows practically a straight line curve from 30 cycles for the low notes up to 10,000 cycles for the high notes.

A L Sealed Transformers Can Be Used with New Power Tubes

The A L Sealed transformer is one of the few which can be used with power tubes because it is heavily insulated throughout. This heavy insulation also causes less resistance between the primary and the core eliminating the danger of electrolytic action which is the cause of most open circuits.

A L Transformer Sealed

The Jefferson A L Sealed transformer is built into a metal case which makes it impervious to outside influences such as moisture which is liable to collect on the cord and windings if the transformer is used in damp places or humid climates so often found in summer homes and cottages. The extra large core permits the current to flow readily from tube to transformer preventing distortion. The A L Sealed transformer has not only been approved and tested by Prof. Owen but by most radio laboratories of this country. It is the last word in radio transformers manufactured. Ratio 2 to 1. Price \$6.00.

For sale by all dealers. If your dealer does not carry the A L Transformer do not be satisfied with a substitute but write direct to manufacturer.

Jefferson Electric Manufacturing Co.

506 So. Green St., Chicago, Ill.

Specialists in Electrical Precision Equipment



HELP STOP BLOPING

(Continued from page 21)

capacity in each live line. If the condensers are to be connected to two-phase or three-phase circuits of not greater than 600 volts, one condenser may be connected from each live line to ground and installed with fuses as stated above.

As these condensers contain wax, they should not be placed where they may be subjected to excessive heat. Condensers when connected to a circuit as stated above have no objectionable effect on the

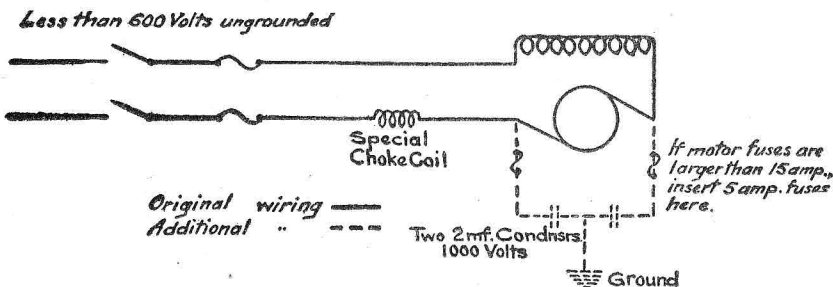


Figure 18

circuit, or the operation of any electrical associated apparatus.

Condensers of the Tobe Deutschmann or similar type of 1 mfd., 1,000 volts direct current, are suitable for installing in metal boxes as described above.

In many cases it is possible to make slight changes in the connections of the electrical apparatus causing the surge, in order to use some existing apparatus such as a choke coil and thus prevent the necessity of adding additional chokes to the system.

A series commutator motor, causing a surge of sparking at the brushes, may have its leads reversed to reduce the Radio interference. Where one wire is grounded, Radio interference from such a motor is often reduced by reversing the leads supplying the motor, so that the brushes are connected to the ground side of the line and the field coil is connected to the live side of the line. In this case, the field coil is used as a choke. It may also be necessary to place a condenser of one or two microfarads capacity across the brushes. See figure 17.

In cases where neither side of the line is grounded, a choke may be inserted on the line connected directly to one of the brushes, while the field coil may act as a choke in the other line. In such a case it is recommended to use two 2-microfarad condensers in series with the ground at the middle point according to the diagram, figure 18.

Where it is not convenient to make connections with the brushes of a motor, the condenser may be placed across the line as near the motor as possible, and a choke coil inserted in the live line, when necessary. Instructions for the installation of these units were given above. The live side of a low voltage lighting circuit may be determined by means of a test lamp connected from ground, first to one wire and then to the other. The lamp will light when connected from the live line to ground.

Battery Chargers and Sign Flashers

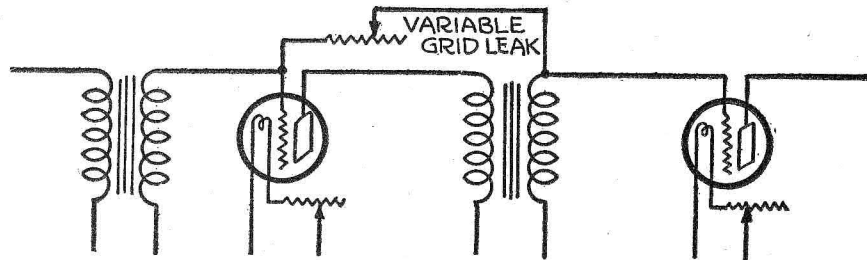
A battery charger of the vibrator type may be prevented from causing interference by connecting a condenser of 1/2 microfarad capacity across the vibrating contacts. It is useless to put condensers across the mains serving battery chargers, but it is essential to make use of the choke consisting of the wire and coil within the battery charger, to prevent the surge from getting out on the line.

Flashing electric signs may usually be prevented from causing interference by connecting condensers from 1/2 to 2 microfarads capacity across the contacts of the circuit breaker. As the Radio interference from such sources depends upon the conditions of the installation, it is necessary to make a few experiments, as suggested in our previous issue, in each case, in order to reduce the interference most effectively.

Sometimes the interference from such a sign is caused by sparking at the commutator of the motor which drives the flasher. This may readily be determined by the nature of the sound in the Radio receiver and can be remedied with the method described for dealing with interference from commutator motors.

Internal combustion engine ignition systems may cause Radio interference, but this is usually of a very local nature. Such, however, may be considerably reduced by making the leads from the magneto or spark coil to the engine as short

KINK TO LESSEN SPEAKER NOISES



If you are troubled with various unwanted noises, try out this simple little experiment. In the accompanying sketch I show where an ordinary variable grid leak is connected between the grids of the last and preceding audio frequency tubes in order to control various kinds of distortion. I have found this arrangement most satisfactory. The resistance should be set at its lowest value and then

increased very slightly. If howling should occur, the secondary leads of one or both transformers should be changed over.—Joseph H. Stevenson, Oak Station, Pa.

A "RADEX" Tuning Chart

Shows by dial numbers, wave length to which set is tuned. Tells where to place dials for any station. Identifies programs received without announcement.

Adapted to any set
Send 25c Coin or Stamps
RADEX, Box 143-S, CLEVELAND, O.

NATIONAL DIALS
HAMMARLUND CONDENSERS
GENERAL RADIO PARTS
CARDWELL CONDENSERS
TRANSMITTING APPARATUS
MADISON-MOORE UNITS
Chicago Radio Apparatus Company, Inc.
415 South Dearborn Street, Chicago, Ill.
Harrison 2276-7.

Yale GROUND HOG
The Perfect Ground
DOUBLES POWER AND DISTANCE
Marvelous newly-invented ground gives 100% improved reception. Doubles power and distance. Stops leakage. Reduces static. Stops jangling even in mid-summer. Results never before equalled, users say. Satisfaction Guaranteed.
Preven absolutely essential to clear, powerful distance reception. Draws and holds moisture indefinitely. Highly sensitive to radio energy.
SEND NO MONEY—To introduce, we offer to those who act at once, regular \$5.00 size for only \$2.00. Send name today and pay \$2.00 plus 17c postage on delivery. Or send only \$2.00 with order and save postage. **FREE**—Full description of Ground Hog and big money making agent's offer on request—write today.
Yale Specialty Supply Co.
1805 Grand Ave., Kansas City, Mo.

AN ESTABLISHED MANUFACTURER WISHES TO INCREASE HIS SALES FORCE
and will consider applications for district Managers in New York State, Long Island, Connecticut, New Jersey, Pennsylvania. Intends to open branches in 20 towns. Under our plan of operation, we furnish the Radio Receiving sets and equipment, and make it possible for the applicant to start in business right away and make at least \$2,500 per year income.
MR. FRANCK, 117 E. 24th St., New York, 11th floor

BUS BAR WIRE
Use COOK'S
We make a superior wire of pure copper
Every piece of Cook Bus Bar Wire is now plainly stamped "COOK'S"—your protection against substitutes.
It is finished square or round, properly tinned and correctly tempered for radio use.
Furnished in standard lengths of 2 feet.
EDWARD N. COOK PLATE CO.
72 Ship Street Providence, R. I.
REPRESENTATIVES
A. ALLEN SMITH
304 E. Fourth St., Los Angeles, Cal.
WOOD & LANE CO.
915 Olive Street, St. Louis, Mo.
MR. W. I. OTIS
Rialto Building, San Francisco, Cal.
HARRY J. CAFFREY
51 East 42nd St., New York, N. Y.

A & B Battery \$2
Charger ONLY
SATISFACTION GUARANTEED
Charges any type of storage A or B battery, using a few cents worth of ordinary house current. Works perfectly on either alternating or direct current. Cannot injure battery and lasts for years. May be used as a trickle charger. Complete directions enclosed—any one can operate. No expensive "extras" to buy.
Why pay \$10.00 to \$18.00 for a charger when you can get this splendid **GUARANTEED** A. B. Charger by mailing us two dollars (bills, money order, check or stamps) plus 10c in stamps or coin to pay mailing costs. Charger will be sent postpaid. If you are not satisfied, return within five days and we will refund your money. Order at once—**TODAY**.
R. B. Specialty Company
308 East Third, Dept. 342, Cincinnati, Ohio

It SEPARATES the STATIONS
One Dial (1 condenser)
GOES THRU STATIC
SUPERFLEX—\$30.00 list
Dealers—ask us WHY? Test a sample.
RADIO PRODUCTS CORPORATION, (Inc.)
3816 N. 28th St. Birmingham, Alabama

Televocal
QUALITY TUBES

TELEVOCAL TUBE
A Technical Triumph Fully Guaranteed
Televocal Corp
614 Fifth Ave. — New York

Bethe Jazz King Of Your Town!
Be popular. In demand everywhere. Have fun. Earn your welcome. Charm your friends with your **BUESCHER True Tone**
SAXOPHONE
Teach yourself, 3 free lessons give you quick easy start. Try any instrument in your own home 6 days free. See what you can do. Easy terms if you decide to buy. Send now for beautiful free literature. A postal brings details.
Buescher Band Instrument Co.
1524 Buescher Block Elkhart, Indiana

Gets Everything But Noise!
Read this convincing letter from a man who has "listened and marveled":
"Redlands, Cal., March 9.
Kane Antennae Co. Gentlemen: My location is very bad, as I am entirely surrounded by high powered lines, but on putting up a Kane I found that my troubles were over. Before, I had two stations I could depend upon, namely: KFI and KGO. The first night after installing a Kane, I received 14 long distance stations from 10:30 P. M. until about 11:15.
I can't say too much for your Antennae as it surely does its stuff. **RUSSELL DEAN.**"
Improves Reception 60%
Entirely eliminates all power noises such as leaky transformers, generators, motor hums, Delco Plants, etc. Cuts static and regeneration howls and squeals in two. Dr. Gehrig of Oakland, Cal., says it improves his reception fully 60 percent. Do away forever with disagreeable noises.
\$1.00 Brings BLUE PRINT Complete Working Drawings and full instructions for erecting this wonderful Antennae. Just send \$1.00 (a check will do. Stamps not accepted). A limited number available. Send **TODAY**.
KANE ANTENNAE CO.
Dept. 823E, 3034 W. Van Buren St., Chicago, Ill.
Dealers—Send at Once for Attractive Proposition.
KANE ANTENNAE

FOR CLEAR, QUIET "B" POWER
RADIO Storage "B" Battery
12 Cells 24 Volts Lasts Indefinitely—Pays for Itself
Economy and performance unheard of before. Recharged at a negligible cost. Delivers unfailing power that is clear, pure and quiet. Approved and listed as Standard by leading Radio Authorities, including Pop. Radio Laboratories, Pop. Sci. Inst. Standards, Radio News Lab., Lefax, Inc., and other important institutions. Equipped with **Solid Rubber Case**, an insurance against acid and leakage. Extra heavy glass jars. Heavy rugged plates. Order yours today!
SEND NO MONEY wanted and we will ship day order in received. Extra offer: 4 batteries in series (96 volts), \$10.50. Pay expressman after examining batteries. 5 per cent. discount for cash with order. Mail your order 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. \$11.95; 150 Amp. \$13.95; 240 Amp. \$24.00.
All equipped with **Solid Rubber Case**.
World STORAGE BATTERIES
Set your Radio Dials at 210 meters for the new 1000 watt World Storage Battery Station, WSBC, Chicago. Watch for announcements.
KDKA—WEAF—WGN—WJS—KJZ—KGO—KFAF—WJW—KGF

CLASSIFIED ADVERTISEMENTS
AGENTS WANTED
Sell **Marvelous New Radio Invention** That Improves summer reception 100%. Effarsee marvel inside antennae gives better tone, greater selectivity, less static. Sells to every radio owner for only \$4.00. Write today. Fishwick Radio Co., 136 W. Central Parkway, Cincinnati, Ohio.
BLUE PRINTS
Super-Net, Ryan's Simplest Possible 7-Tube Set. Complete instructions, actual size template. How to make a loop. All for 50 cents. Book Dept., Radio Digest, 510 North Dearborn Street, Chicago.
SALESMEN WANTED
A PAYING POSITION OPEN to representative of character. Take orders shoe-hospitality direct to wearer. Good income. Permanent. Write now. Tanners Shoe Mfg. Co., 3-717 C St., Boston, Mass.

Simplifies!
No guessing, less wiring and—no grief—with **AMPERITE**. Eliminates hand rheostats. Specified in the Radio Digest Super-Torodyne. Price \$1.10
Radiall Company
Dept. R.D.-1, 50 Franklin Street, New York City
Write for **FREE Hook-ups**
AMPERITE
The "SELF-ADJUSTING" Rheostat

Radiophone Broadcasting Stations

Corrected Every Week—Part IV

FIND MISTAKES AND YOU'LL GET DOLLAR

ONE DOLLAR will be paid to the Radio fan reader of Radio Digest submitting the most errors in any one station's listing in the Directory of Radiophone Stations, which appears in six parts, serially continuously on the next to last page. Letters must reach Radio Digest's office not later than one week from date of issue corrected. Readers are not limited to correcting one station, but such corrections must be verified by the stations themselves, and NOT by comparison to other so-called accurate Radio directories or lists. Verifications must accompany corrections. Turn in corrections for as many stations as you can find—if you can find errors! Use separate sheet of paper for each station submitted and place name and address on each sheet. In case of tie, duplicate awards will be made.

United States (Cont'd)

NOTE.—The fourth part of the schedule list appears below. Part five appears next week.

- WLIT, Philadelphia, Pa. 394.5m-760kc. 500 watts. Lit Bros. Announcer, Harry E. Ehrhart. Club, "Morning Glory." Daily ex Sun, 12:02 pm, music; 2, music. Mon, 4:30 pm, 7:30, 8, 10. Tues, 11 am. Wed, Thurs, 4:30 pm. Wed, 7:30 pm, 8, 10, 11. Fri, 7:30 pm, 8:45, 10. Eastern.

- Fri, Sat, Sun, 6-6:30 pm, 8:30-12 midnight, dance music. Eastern.
- WNOC, Knoxville, Tenn. 267.7m-1120kc. 500 watts. Peoples Telephone & Telegraph Co. Announcer.
- WNVC, New York, N. Y. 520m-570kc. 1000 watts. New York Municipal Radio Station. Announcer Tom Cowan. Slogan, "Municipal Broadcasting Station of the City of New York." Tues, Thurs, 7 pm, markets; 7:30 pm, 10:30, police; 7:55, entertainment; 10:30, weather. Mon, Wed, Fri, 6:10 pm, markets. Eastern.

- gan, "The Voice of the Maple City." Mon, Thurs, Sun, 10:45 am. service; 8:30 pm. Central.
- WRAC, Escanaba, Mich. 256.3m-1170kc. 100 watts. Economy Light Company. Announcer, H. E. Flath. Slogan, "The Gateway to Cleveland." Mon, Fri, 8:30 pm. Eastern.
- WRAM, Galesburg, Ill. 243.8m-1230kc. 100 watts. Lombard College. Mon, 7-11 pm. Central.

- 9-9:30 am; 7:30 pm. Alternate Mon, 4 pm. Sat, 7:30 pm. Sun, 9:30 pm. Central.
- WSVS, Buffalo, N. Y. 218.8m-1370kc. 50 watts. Seneca Vocational School.
- WSWS, Chicago, Ill. 275.1m-1090kc. 1,000 watts. S. W. Straus & Co. Daily ex Sun, 11-1 pm. Daily ex Sun, 6-7 pm, 8-9, 10-11. Tues, Thurs, Sat, 12-1 am. Sun, 11-12:30 pm, 3:30-5, 7-9:30. Central.

Canada

- CFAC, Calgary, Alta. Can. 434.5m-690kc. 500 watts. Calgary Herald. Announcer, Fred Carleton. Daily ex Sun, 1 pm, news, markets, music. Mon, 9-10 pm. Tues, Wed, 8-9 pm. Thurs, 9-11 pm (CNRC), Fri, 7-8 pm. Mountain.
- CFCA, Toronto, Ont., Can. 356.9m-840kc. 500 watts. Toronto Star. Announcer, E. J. Bowers. Daily ex Sun, 12:30-1:30 pm. Tues, Wed, 8-9 pm. News, 9:30-9:45; household hints; 10:25-10:30. weather 11:55-12; 12:05-12:45 pm, music; 3-3:55, music; 3:55, markets. Daily ex Sat, Sun, 6-7, dinner concert; 8, music. Mon, Wed, Fri, 9 pm, orchestra. Wed, 10 pm, orchestra. Sun, 11 am, church service; 2-3 pm, concert; 7:20, Capitol theater; 9:15, operatic stars. Eastern.

Photogravures of Your Favorite Artists

GALLERY OF RADIO STARS

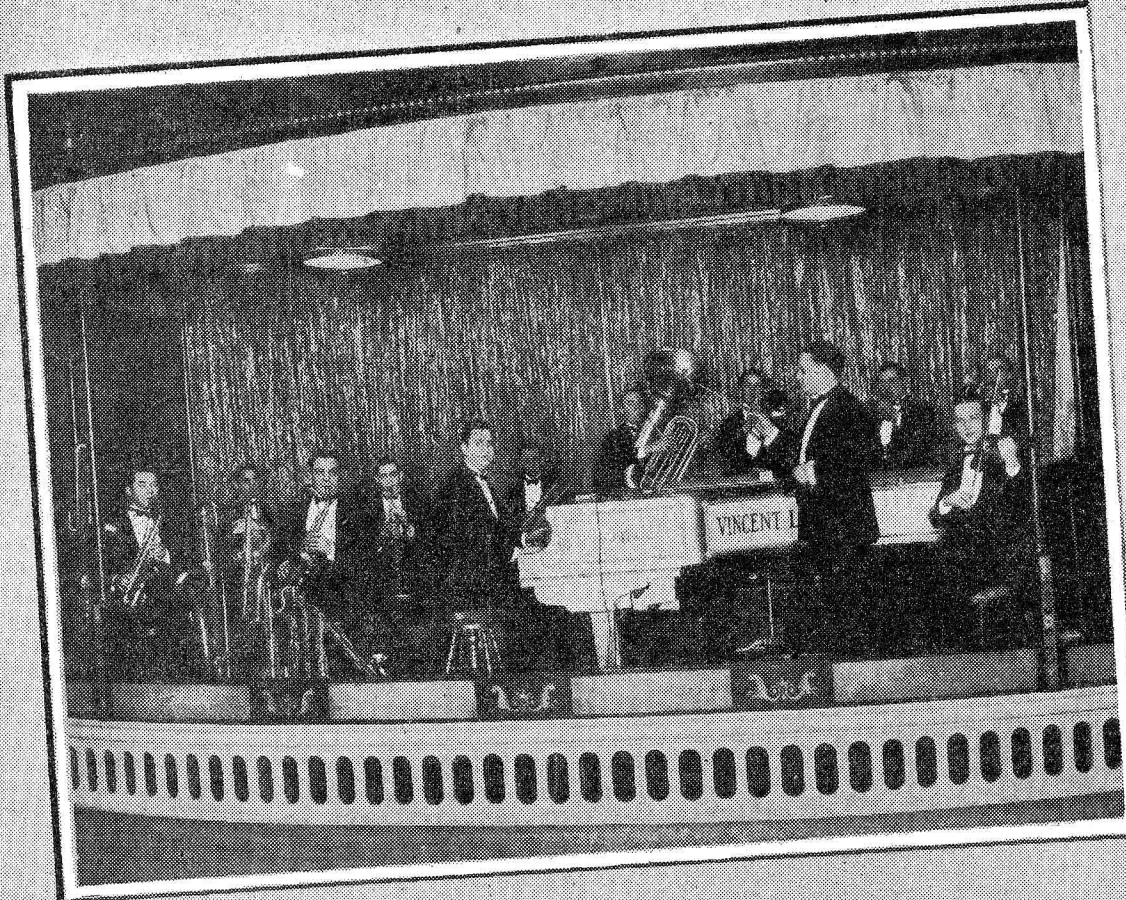
SUITABLE FOR FRAMING OR PLACING IN YOUR ALBUM

BY special arrangement, Radio Digest is able to offer our readers an opportunity to secure fine photogravures of their favorite Radio stars at practically no cost. Radio fans will be able now, by this very special offer, to have pictures of their favorite artists and announcers before them when they listen in. All that is necessary to secure photogravures from the Gallery of Radio Stars is to send the coupon published each issue in Radio Digest, accompanied by ten cents to cover the cost of mailing and postage. Where a series of three photogravures is desired, it will only be necessary to send twenty-five cents and three consecutive numbered coupons clipped from Radio Digest. Remittance must accompany the coupon. Cash at your risk. Add 5 cents to personal checks for exchange.

WITH COUPONS
ONLY

10c Each
3 for 25c

To cover cost
of mailing
and postage.



20. Vincent Lopez, No. 1 Pennsylvania Orchestra

SIZE 11x14 INCHES

Select Your Favorites from the Gallery of Radio Stars

- | | | |
|--|--|--|
| 1 Wendell Hall, king of ukulele ditties | 18 Al Carney, organ favorite at WHT | 40 Ray-O-Vac Twins, known country-wide |
| 2 Graham McNamee, 1925 Gold Cup announcer | 20 Vincent Lopez, No. 1 Pennsylvania orchestra | 41 Art Linick, KYW's Mrs. Schlagenhauer |
| 3 Jack Little, popular wandering balladist | 21 E. L. Tyson, pleasing voice at WWJ | 42 Fred Hamm of WTAS, now WLIB, fame |
| 4 Billy B. Van, the sunshine man | 23 Art Gillham, "The Whispering Pianist" | 43 Meyer Davis' Le Paradis orchestra of WRC |
| 5 Coon-Sanders' "Nighthawks" at KYW | 24 Paul Greene, announcer at WSAI, "bridge voice" | 46 D. R. P. Coats, 1925 Silver Cup announcer |
| 6 George Hay, 1924 Gold Cup announcer | 25 Harry Ehrhart, "Dream Daddy" at WLIT | 47 Gene Rouse, WOAW's popular announcer |
| 7 Harmony Girls, Edith Carpenter, Grace Ingram | 26 Correll and Gosden of "Kinky Kids Parade" fame, at WEBH and other stations. | 49 Iris Ruth Pavey, KOA's invisible stage beauty |
| 8 Ford and Glenn, Lullaby Boys of WLS | 27 Norman Brokenshire, popular at WRC, WJZ | 51 Ipana Troubadours, on the WEAF Chain. |
| 9 "Roxy" Rothafel of WEAF chain fame | 29 Jane Novak, Blues Singer of Twin Cities, WCCO | |
| 10 The Hired Hand, famous "Substitute Announcer" of WBAP | 30 Jean Sargent, the original, now at WHT | |
| 12 Bob Emery, Big Brother of WEEI | 31 Ralph Emerson, popular organist at WLS | |
| 13 "Bill" W. G. Hay, ex-KFKX, now of WLIB | 32 Edna Adams, of KPRC | |
| 14 Happiness Boys, jovial singers of WEAF | 33 Pat Barnes, vaudeville announcer at WHT | |
| 15 Lambdin Kay, "Little Colonel" of WSB | 38 Walter Wilson, "Uncle Bob" of KYW | |
| 16 Leo Fitzpatrick, "Merry Old Chief," WJR | | |
| 17 Henry Field, 1925 Gold Cup runner-up | | |

COUPON NO. 16

This coupon entitles the holder to one photogravure selected from the Radio Digest Gallery of Radio Stars when accompanied by ten cents to pay the cost of mailing and postage. Three consecutively numbered coupons entitle the holder to three photogravures when accompanied by 25 cents. Remittance must accompany the coupon. Cash at your risk. Add 5 cents to personal checks for exchange.

Order by Number.....

RADIO DIGEST PUBLISHING CO.
510 North Dearborn Street, Chicago