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RADIO  
MAGAZINE

# The Daily News

EVERY  
MONDAY

SAN FRANCISCO, MONDAY, APRIL 7, 1924

## S. F. AGAIN LEADS THE WORLD

### RADIO STARTS MOVE FOR ONE WORLD TONGUE

BY ISRAEL KLEIN  
NEA Service Radio Editor

LONG distance radio broadcasting in Europe is as popular with the fans there as it is in this country, for one significant reason:

The variety of languages.

All of Europe can be placed neatly inside the boundaries of the United States and the Province of Ontario, Canada. Yet the people on that continent speak 60 distinct languages, to the one spread over the entire North American continent!

The difficulty of understanding a long distance broadcast program, except music, is apparent. Even were all restrictions and limitations on radio broadcasting and receiving now existent in Europe removed; with everyone as wild about radio as we are in this country, European fans would still be faced by the uselessness of listening in on a lecture or other talk they could not understand.

#### Local Areas

Every nationality, except the Russian, is confined with an area which we may safely term local, so far as broadcasting is concerned. One station for each country would be almost enough to satisfy all the fans.

In England, where there are more, they interlock regionally, as do many neighboring stations in this country.

Two 50-watt yet that human desire to reach out beyond one's limits has seized European radio amateurs to the extent that they have given greater impetus to the movement for an international language.

Numerous international language radio societies are being formed by the European amateurs, who are convinced some new and simple means of communication should be adopted for their DX, or long distance, work. It is not so much a campaign for a universal language, like the effort to adopt Esperanto or Ido throughout the world, as it is a movement to perfect an auxiliary international language.

#### Start Made

The national languages may remain. But the European amateurs and other radio fans are seeking a language for long distance communication.

European radio amateur societies are already proceeding along this line. They have begun to formulate a language which they call "Ido," although it is not a universal language. Its original name was "Ilo," from the initials of "International Language" with an "o," signifying it is a singular noun.

This "Ido" is based principally on 11,000 roots taken from six most popular and varying languages, with some from other languages.

Perhaps, when international and trans-oceanic broadcasting becomes popular, American fans also will have to adopt this language.

### NEW YORK WILL GET POLICE SET

Police Commissioner Enright of New York is trying to get an appropriation of \$30,000 to equip the city's police force with a radio station. The present plant at police headquarters is the property of the Western Electric Company.

#### Radio Phonograph

A radio phonograph in popular style is promised by the combination of the Radio Corp'n of America and the makers of the Brunswick phonograph.

### WELL, HE SHOULD SNICKER!!



Ha, ha! The Air Reporter thinks it's funny! Imagine a newspaper PAYING him to listen to the fine programs broadcast from the Pacific coast stations. Tee, hee! That's what he'd be doing anyway if he didn't have to work for a living. Ho, ho, hum—

### WORLD'S FIRST AIR REPORTER ON JOB HERE

BY THE AIR REPORTER

Well, folks, who ever thought that some one would be PAID to listen to radio programs?

That's one feature of radio that interests me personally—when The Daily News broadcasts the weekly pay envelope which is picked up by Station ME and rebroadcasted on a shorter wave length to pay my bills.

Yet, why shouldn't a newspaper have an air reporter?

They have been "covering" the police stations; why not the radio stations? They have critics attending plays, movies and concerts; why doesn't radio music deserve the same attention? Certainly there are nearly as many Californians listening in every night as there are in the theaters.

I'm afraid the real reason for neglect of the radio news field in the past is that radio stations don't spend money for advertising, while the theaters do. Or perhaps it's because the radio stations are so new that newspapers have not awakened generally to the fact that some very readable stories may be written from the air waves.

#### Germans Tried It

The time will come, however, when every big newspaper will have a regular radio reporter. That time will be when news is sent through the air instead of over the wires.

During the war the German military machine, cut off from wire communication with the world, spread its propaganda and the word of its victories over wireless. This was probably the first attempt to broadcast big news before it has been published. But it will not be the last.

The time will probably arrive, for instance, when the proceedings of Congress will be broadcast while they are happening, and when a senate senator asks for "the floor" he also wants to be cut in on a microphone which will carry his speech over the entire continent.

#### News From Radio

Let us presume that our own Senator Johnson is making a speech on the floor of the senate relative to the Alameda naval base. San Francisco newspapers can tune in on his talk and beat the news wires to the story by an hour.

There is no doubt that the value of radio news—not news about radio, news from radio—will eventually be recognized at its proper value by the whole world.

San Francisco, having put the first air reporter in the field, will have proved again that it "knows how."

### INTERCOLLEGE CLUB PLANNED

An intercollegiate radio club is being formed, by which colleges having radio calls will be represented. College games away from home will be reported through it, various matches held, interesting collegiate news exchanged and college interests represented at important legislative hearings in Washington.

#### Radio for Charity

Poor children of Detroit recently were converted to radio without cost. A Detroit radio manufacturer furnished each with a small set, good enough to receive local concerts. They were already so tuned that they needed no adjustment.

### Dog-Howling Test England's Latest

LONDON, Apr. 7.—There was an awful howl in London this week.

It could be heard over half the world—if you happened to be listening in.

One of the big British broadcasting outfits conceived the idea of having a radio dog-howling contest.

Noted bow-wowists all over the British Isles were entered. This was one time when the mongrel out in the back alley who keeps the neighborhood awake all night with his wails was in demand.

The "grand howl" lasted half an hour. The winner was named

### MOVIE CHIEF FEARS RADIO

PHILADELPHIA, Pa., Apr. 7.—The radio is a real menace to the motion picture industry, D. W. Griffith, producer, said here. Thousands who formerly went to the movies several times a week, now stay at home evenings and are entertained by "listening in" on broadcasting programs, he said.

"George," and his voice was officially catalogued as "Mezzo-alto-robusto." They're figuring on a cat-yowling contest next.

### Parent-Teachers Ask Censorship

DENVER, Colo., Apr. 7.—Many radio programs being broadcast in this part of the country are "harmful for youthful ears to hear," in the opinion of certain members of the Colorado Parent-Teachers' Ass'n, who demand that the organization investigate and recommend suitable censorship, either by the broadcasting stations themselves or by others. Special committees have been appointed by Mrs. Harry Zimmerhackel, state president, to take appropriate action.

There are 2723 American ships equipped with radio.

## WEEP, MATES, FOR THIS GINK

BY LEWIS CONNECTION

Brother "dial twisters" tune in. Amplify this sad tale of woe into your receivers.

Being an amateur, and desiring to be otherwise, mayhap, thinks I, 'twould be fit and proper to radio a bit along with 99 and ten-tenths per cent of my friends and acquaintances.

Forthwith, I hie me shopping to gather the little jiggers essential for this popular indoor sport.

"Would thou a super-tuter-ripity-splitty-squawkudyne or the more simple clackitty-rackety-upliftudyne purrs the czar who dispenses the insomnia inducers. "Yes," I faltered, "about \$25 worth."

Shaking off the withering scorn cast by this individual I found myself possessed of the necessary utensils to radio.

"You twist this, and you turn that, then jigger those, and you get Chicago or something," the dispenser of torture instructed. I got something, all right. I got a headache.

I twisted, and turned, and twisted. A scream like the wailing of a lost banshee, nearly tore my numb ears apart.

Regaining consciousness I found the radio minus even a little, tiny bit of "ray."

I sought advice among my friends and I got it.

"It's your condenser," quoth one. "Let me see it."

He did and I bought a new one.

"It's your A battery," said another. "Nah! It's his hook up. Or the grid."

When they warmed up, the Fan Friends were no pikers. "The regeneration is on the blink. The B battery is weak.

The wiring is crowded. The socket is loose."

"Air, air," I shouted, "stand back, don't crowd. There'll be pieces enough to go around."

"THAT'S IT," they triumphed. "It's his aerial!"

Zowie. When they finished picking the thing to pieces, I gathered up the bones and packed them home to mourn in silence.

They rest content among other souvenirs of my adventures off the beaten path.

Note: Serves this gink right! He ought to have known that all that his set needed was another turn around his variometer, a loading coil on his aerial, a grid that didn't leak so much, a bit more vacuum in his tubes and stepup of audio-frequency. Not every man who knows the way home can become a master mechanic.



## THIS WEEK'S AIR PROGRAMS

## MONDAY, APRIL 7

KFO—Hale Bros., San Francisco  
423 Meters  
NOON—Time signals, Scripture.

1 TO 2 P M—Rudy Seiger's Fairmont Hotel Orchestra, by wire telephony.  
2:30 TO 3:30 P M—Piano solos: Sonate Pathétique (first movement), Valse in C flat major (Op. 70); Elvira Valdes.

Soprano solos—California, Land of Beauty, When Twilight Falls, Treasure of Dreams, Just Fishin'; Marjorie Sayles. Mrs. Roma, accompanist.

Tenor solos—I Did Not Know, A Resolve; Raymond Nealon. Mrs. Roma, accompanist.

Piano solos—Valse in A flat major (Op. 34), Gollwag's Cake Walk; Elvira Valdes.

Soprano solos—Win, a-Blowin' Gentle, Estrellita; Marjorie Sayles; Mrs. Roma, accompanist.

4 TO 5:30 P M—Rudy Seiger's Fairmont Hotel Orchestra.  
5:30 TO 6:30 P M—Children's hour. Stories for children by "Big Brother" of KFO, taken from the "Book of Knowledge." His selections: Alice in Wonderland, Insect Foes of Man.

Piano solos—The Faun, Waltz in C sharp minor, Dorothy Rustad, pupil of Mary M. Gardner.

7 TO 7:30 P M—Dinner concert by Rudy Seiger's Fairmont Hotel Orchestra.

8 TO 9 P M—Organ recital by Theodore J. Irwin, KFO official organist: March, Para de la Victoria; overture, Light Cavalry; selection of melodies from Chopin; Air de Ballet; selection from Blossom Time; Serenade (by request); fox trot, selected; old time popular song medley; waltz, Summer Nights; operatic selection from Carmen.

9 TO 10 P M—A discussion of "Dust Explosions and Fires" by David J. Price, engineer in charge of development work, bureau of chemistry, United States Department of Agriculture, Washington, D. C.

Tenor solos—All Through the Day, Trees, The Message, composed and sung by E. G. Morison.

Piano solos—Negro Legend, Noon Gardens, played by composer, Howard Jackson.

Tenor solos—The Love Kiss, June's Time for Roses, The Bitterness of Love, Songs My Mother Taught Me; Ernst Groskopf, Morison. Howard Jackson, accompanist.

Violin solos—Selected, Edward Harkens.

Baritone solos—Erl Tu Che Machlavi, My Dear; Walter Dupre.

Violin solos by Edward Harkens.

Baritone solos—Just an Old Love Song, Duna, Walter Dupre, accompanied by Carl Lamont.

10 TO 11 P M—E. Max Bradfield's Versatile Band, playing in the Palace Hotel Rose Room Bowl.

KGO—General Electric Co., Oakland  
312 Meters

1:30 P M—New York Stock Exchange and weather reports.

3 P M—Feature numbers on program furnished by Alameda Federation Parent-Teachers Ass'n.

4 TO 5:30 P M—Music by St. Francis hotel dance orchestra, Henry Halstead, leader.

5:30 TO 6:30 P M—Final reading, stock exchange and weather reports and news items.

KLX—Oakland Tribune  
509 Meters

7 TO 7:30 P M—News, weather forecast, market and financial news.

8 TO 10 P M—Program broadcast by Radio Club, University of California, from the campus, Berkeley, over private leased wires, through KLX. Program supervised and arranged by the Radio Club.

Series of short talks by prominent men attending the vocational conference, sponsored by the Alumni Association.

News of the campus.

Violin solos—Sonata, Melody in A major, Concerto in D minor, Viennese Popular Song; Clarence Nash. Marie M. Bevo, accompanist.

Reading from the play "Cyrano de Bergerac," which is to be produced by the English Club, on April 12. R. E. Onions, "24; Lois Julia Austin, "24.

Tenor solos—Vesti la Giubba, from the opera "Pagliacci," Sunrise and You, "Ben Mio," from the opera "Il Trovatore," A Dream, Hecanna (Easter Song), Joseph J. Young.

Soprano solos—Selected, Esther Mannering.

KRE—Berkeley Gazette, U. C. Battery & Electric Co., 275 Meters

8 TO 10 P M—Musical program.

## DISTANT STATIONS

KGW—Morning Oregonian, Portland, Ore.—492 Meters

11:30 A M—Weather forecast.

3:30 TO 4 P M—Literary program by Portland Library Association.

7:30 P M—Weather forecast and market reports.

8 P M—Joint recital by Christian Pool, cellist, and Warren A. Erwin, tenor.

9:30 P M—Program provided by Montgomery Ward & Co.

KFI—Earle C. Anthony, Inc., Los Angeles—469 Meters

4:45 TO 5:15 P M—Evening Herald news bulletins.

5:15 TO 5:45 P M—Examiner news bulletins.

8 TO 9 P M—Evening Herald Radiolians, playing popular dance music. Ethel May Hart, contralto; Ruth Rogers, accompanist. "Romance of Gas," by Charles A. Luckenbach.

9 TO 10 P M—Examiner concert.

10 TO 11 P M—Ambassador-Max Fisher's Coconut Grove Orchestra.

KHJ—Los Angeles Times  
395 Meters

12:30 TO 1:15 P M—Program presenting the Hollywood Harmony Hounds.

8:30 P M—Special program presented through the courtesy of Herman Kolodkin, Viola, and Mabel McDonald Hope, pianist.

WBAP—Star-Telegram, Fort Worth, Tex.—476 Meters

5:30 TO 6 P M—Monthly concert by Brooks Morris, violinist, and Guy Pittner, pianist; presenting a group of their artist pupils.

7:30 TO 8:45 P M—Concert by Walter Wylie and his High School Cadet Band of Fort Worth.

KFAE—Washington State College Pullman, Wash.—330 Meters

7:30 TO 8:30 P M—Modern Capitalization a Cause of War—Prof. F. R. Yoder, sociologist.

All high school program by Pullman high school radio club.

KFOA—Rhodes, Seattle, Wash.  
455 Meters

8:30 P M—The Carnation Milk Products Co. of Seattle presents Seattle's most popular piece orchestra, the Olympic Sirenaders, in a special two-hour dance program.

## Best Bets in Air Features

SAN FRANCISCO TIME  
Copyright, 1924, by U. P. WJZ, New York (465 meters), noon—Concert of the American Orchestral Society.  
KSD, St. Louis (546 meters), 6 p m—Studio program by St. Louis Grand Opera School.  
WOS, Jefferson City, Mo. (440.9 meters), 8 p m—Missouri state prison band.  
WOC, Davenport (484 meters), 6 p m—Concert by the Clinton, Ia., Citizens' band.

## TUESDAY, APRIL 8

KGO—General Electric Co., Oakland  
312 Meters

1:30 P M—New York stock exchange and weather reports.

4 TO 5:30 P M—Music by the St. Francis hotel dance orchestra; Henry Halstead, leader.

6:45 P M—Final stock exchange reports, weather and news.

8 TO 10 P M—Il Trovatore (The Troubadour) in four acts; music by Verdi; under direction of Carl Anderson.

Leonora (soprano)...Florence Ringo Arucena (contralto).....

Manrico (tenor).....A. Cicotti

Count de Luna (baritone).....

.....Emanuel Porcini

Chorus of soldiers and gypsies; incidental music by KGO orchestra.

10 P M TO 1 A M—Dance music from the orchestra in the St. Francis hotel ballroom, San Francisco, Henry Halstead, leader.

KLX—Oakland Tribune—509 Meters

2:45 TO 5 P M—Baseball scores.

7 TO 7:30 P M—News items, U. S. weather bureau forecast, market and financial news.

KFO—Hale Bros., S. F.—423 Meters

NOON—Time signals.

1 TO 2 P M—Rudy Seiger's Fairmont hotel orchestra, by wire telephony.

2:30 TO 3:30 P M—Concert U. S. 30th Infantry Army band, direction Warrant Officer Fred Butler.

4:30 TO 5:30 P M—Rudy Seiger's Fairmont hotel orchestra.

5:30 TO 6:30 P M—Children's hour; stories for children by "Big Brother" of KFO, taken from the "Book of Knowledge." His selections:

Alice in Wonderland; answers to questions.

6:30 TO 7 P M—Presented by Chandler-Cleveland Motor Car Co.—Cleveland Six orchestra, under direction of Wilt Gunzendorfer.

Dancing Dan; Forget Me Not; Valse Boston.

Saxophone solo—Valse Erica, by Allen Popes.

Sunshine, of Mine, Twelve o'Clock at Night, Memories Garden.

Saxophone solo—Boy of Mine, by Wilt Gunzendorfer.

The One I Love, San.

7 TO 7:30 P M—Dinner concert by Rudy Seiger's Fairmont hotel orchestra, by wire telephony.

8 TO 9 P M—Program under the management of Hazel Huff, soprano: Piano solo—Kamenoi Ostrow, by Elvira Dettner.

Soprano solo—One Fine Day (from Madam Butterfly), by Hazel Huff, Elvira Dettner, accompanist.

Tenor solo—Song of Songs, by Louis Elario; Elvira Dettner, accompanist.

Violin solo—Serenade, by Elvira Dettner; Hazel Huff, accompanist.

Soprano solo—The Jasmine Door, by Hazel Huff; Elvira Dettner, accompanist.

Tenor solo—The Trumpeter, by Louis Elario; Elvira Dettner, accompanist.

Violin solo—Mighty Lak' a Rose, by Elvira Dettner; Hazel Huff, accompanist.

Soprano and tenor duet—The World Is Waiting for the Sunrise, by Hazel Huff and Louis Elario; Elvira Dettner, accompanist.

Violin solo—Smilin' Through, by Elvira Dettner; Hazel Huff, accompanist.

Tenor solo—Roses of Picardy, by Louis Elario; Elvira Dettner, accompanist.

Soprano solo—Musetta's Waltz (from La Boheme), by Hazel Huff; Elvira Dettner, accompanist.

Tenor solo—Somewhere a Voice Is Calling, by Louis Elario; Elvira Dettner, accompanist.

Violin solo—Dear Old Pal of Mine, by Elvira Dettner, Hazel Huff, accompanist.

Soprano and tenor duet—Ten Thousand Years from Now, by Hazel Huff and Louis Elario; Elvira Dettner, accompanist.

9 TO 10 P M—Program under the management of Walter Wenzel, pianist:

Contralto and baritone duet—Calm as the Night, by Martha Tackabury, Norman Simon.

Piano solos—Valse Caprice; Prelude—E Minor, by Elsa Naess.

Violin solos—Adagio Religioso, Rigaudi, by Modesta Mortensen.

Contralto solos—Ganges Boat Song, Ise Gwine Back to Dixie—folk songs, by Martha Tackabury.

Piano solos—Gavotte, Etude Heroique, Humoresque, by Elsa Naess.

Baritone solos—Aria (Le Roi de Lahore), Trade Winds, Cargoes, by Norman Simon.

Violin solos—Adagio, Slavonic Fantasy, by Modesta Mortensen.

Contralto solos—Goin' Home, One Who Has Yearned, By the Waters of Minnetonka, by Martha Tackabury; Walter Frank Wenzel at the piano.

10 TO 11 P M—E. Max Bradfield's Versatile band playing in Rose Room Bowl of Palace hotel.

## DISTANT STATIONS

KGW—Morning Oregonian, Portland, Ore.—492 Meters

11:15 A M—Market basket.

11:30 A M—Weather forecast.

12:30 P M—Concert by Civic Club of Portland.

8:30 TO 9 P M—Talk by Jeannette P. Cramer, home economics editor of the Oregonian.

7:30 P M—Weather forecast and market reports.

7:45 TO 8 P M—Talk for farmers; Oregon Agricultural College extension service.

KFI—Earle C. Anthony, Inc., Los Angeles—469 Meters

4:45 TO 5:15 P M—Evening Herald news bulletins.

5:15 TO 5:45 P M—Examiner news bulletins.

6:45 TO 7:30 P M—Program.

8 TO 9 P M—Ambassador-Max Fisher's Coconut Grove orchestra.

9 TO 10 P M—Examiner concert.

10 TO 11 P M—Motion picture stars in program.

KHJ—Los Angeles Times—395 Meters

12:30 TO 1:15 P M—Program presenting Major and his orchestra.

2:30 TO 3:30 P M—Program presented through the courtesy of Barker Brothers.

6:45 TO 7:30 P M—Children's program presenting Alice Gieschen, 14-year-old pianist, and the weekly visit of the Sandman and Queen Titania.

8 TO 10 P M—Program of French-Canadian compositions, Dr. Thomas Lutmann, lecturer.

10 TO 11 P M—Art Hickman's orchestra from the Biltmore hotel.

WLJ—Star-Telegram, Fort Worth, Texas—476 Meters

5:30 TO 6:30 P M—Concert by the Panther City orchestra, J. N. Wimple, director.

7:30 TO 8:45 P M—Program by the orchestra, Ladies' Glee club and student quartette of the Southwestern Baptist Seminary at Fort Worth.

## WEDNESDAY, APRIL 9

KLX—Oakland Tribune—509 Meters

2:45 TO 5 P M—Baseball scores.

7 TO 7:30 P M—News items, weather forecast, market and financial news.

8 TO 10 P M—Studio program.

Baritone solos—The Star I Came With a Song, by Irvin Johnson.

Quartette—Beaute Enchantresse, La Traviata, by KLX Quartette—violin, cello, flute and piano.

Baritone solos—The Crying of Water, Slave Song, by Irvin Johnson.

Instrumental—Autumn and Winter, Berceuse, by KLX Trio—Flute, cello and piano.

Baritone solos—When I'm With You, Amoroso, by Irvin Johnson; Margaret Conklin, accompanist.

Instrumental—Souvenir du Bal, Serenade, by KLX Trio—Flute, violin and piano.

Vocal—I'll Tell the World, by Louis W. Pritzkow; Ashton G. Leech, accompanist.

Piano solos—Selected, by Estelle Drummond Swift.

Instrumental—In Vol d'Oiseau; The West, a Nest and You, by KLX Quartette—violin, cello, piano and flute.

Instrumental—Hawaiian selections, by the Mid-Pacific Quartette.

KFO—Hale Bros., S. F.—423 Meters

NOON—Time signals. Scripture.

12:45 P M—International Interpreter luncheon at the Palace. "World Affairs" address by prominent speakers.

1 TO 2 P M—Rudy Seiger's Fairmont hotel orchestra.

2:30 TO 3:30 P M—Matinee program by Jack Palt's Entella Cafe orchestra.

4:30 TO 5:30 P M—Rudy Seiger's Fairmont hotel orchestra, by wire telephony.

5:30 TO 6:30 P M—Children's hour; stories for children by "Big Brother" of KFO, taken from the "Book of Knowledge." His selections:

The Emperor's Nightingale, Princess Florida, Some Insects Friends of Man.

Piano solos—Allegro, Viennese Waltz, by Dale Graham Adams, seven-year-old pupil of Ruth Viola Davis.

7 TO 7:30 P M—Rudy Seiger's Fairmont hotel orchestra.

8 TO 11 P M—Talk on "Your Boy and Mine" by W. T. Elzinga; E. Max Bradfield's Versatile band playing in Rose Room Bowl of Palace hotel; during the intermissions the Hundred Per Cent club dinner music will be broadcast from the Palace.

Daisy Jean, Belgian cellist. During the intermissions the Pomona Glee club will be heard, under direction of D. M. Hodson.

KGO—General Electric Co., Oakland  
312 Meters

1:30 P M—New York stock exchange and weather reports.

3 P M—Short musical program.

Address by Mrs. Josephine Rand Rogers on the subject, "The Need for Child Research."

4 TO 5:30 P M—Music by the St. Francis hotel dance orchestra; Henry Halstead, leader.

6:45 P M—Final stock exchange reports; weather and news.

## DISTANT STATIONS

KFI—Earle C. Anthony, Inc., Los Angeles—469 Meters

4:45 TO 5:15 P M—Evening Herald news bulletins.

5:15 TO 5:45 P M—Examiner news bulletins.

6:45 TO 7:30 P M—Nick Harris detective stories and concert.

8 TO 9 P M—Evening Herald concert presented by the Ingewood Players under direction of Ruth Rogers.

9 TO 10 P M—Examiner concert.

10 TO 11 P M—Hollywood Community orchestra.

11 TO 12 P M—Ambassador-Max Fisher's Coconut Grove orchestra.

KHJ—Los Angeles Times—395 Meters

12:30 TO 1:15 P M—Program presenting Henrietta Weisman, contralto, accompanied by Elsie Apst.

2:30 TO 3:30 P M—Program presented through the courtesy of Barker Brothers.

6:45 TO 7:30 P M—Children's program presenting Berenice Van Loan Gaines compositions, with Richard Headrick, Billie Haynes and Rosalie Tasso.

Bedtime story by Uncle John.

8 TO 10 P M—Program presented through the courtesy of the San Jacinto Chamber of Commerce—"An Evening in Ramona-land." Dr. Mars Baumgardt will lecture on astronomy.

10 TO 11 P M—Art Hickman's orchestra from the Biltmore hotel.

KGW—Morning Oregonian, Portland, Ore.—492 Meters

11:15 A M—Window shopping.

11:30 A M—Weather forecast.

12:30 P M—Concert by Darby's orchestra of Cotillon Hall.

3:30 TO 4 P M—Children's program.

7:30 P M—Weather forecast and market reports.

## Radio Specials

Manhattan Head Sets, 3000 ohms. Regular \$7.00 value.

Sale price \$3.10

Scientific Head Sets, 3000 ohms. World's greatest phone value.

Radiola (R. S.), 2-tube Receiving Set, including phones, tubes, batteries and antennae. Regularly sells at \$85.00.

Sale price \$42.50

I. S. COHEN'S SONS

1015 Market St., near 6th

Phone Market 9558.

Mail Orders Promptly Filled

## KUO

KUO—S. F. Examiner (360 Meters).

Daily except Saturday and Sunday.

9:05 to 9:20 a m—Weather forecast and news bulletin.

11:00 to 11:30 a m—Market report.

2:30 to 2:45 p m—Sporting news.

3:00 to 3:05 p m—Financial bulletin.

6:45 to 6:50 p m—Sporting news and financial report.

6:40 p m—Weather forecast.

Friday, add to daily schedule:

5:30 to 5:45 p m—Health bulletin.

Saturday only:

9:05 to 9:20 a m—Weather forecast and news bulletin.

2:30 to 2:45 p m—Sporting news.

5:45 to 6:30 p m—Sporting news and financial report.

6:40 p m—Weather forecast.

Sunday only:

9:05 a m and 6:40 p m—Weather forecast.

8 TO 9 P M—Orchestra concert arranged by Harold Bayley.

9 TO 10 P M—Alexander Hamilton Institute business talk by James Albert.

10 TO 11 P M—Dance music by George Olsen's orchestra by direct telephone from the Portland hotel.

KFAE—Washington State College, Pullman, Wash.—330 Meters

7:30 TO 8:30 P M—Vocal numbers; instrumental selections. The Burden of Armaments, by Prof. Yoder; horticulture talk, by C. L. Vincent; Where Our Styles Come From, by Mrs. Nellie Jacobs; home economics department; Early Orchard Tillage, by F. L. Overly, horticulturist; Farm Water Supply, by A. B. Crane, extension specialist.

KFOA—Rhodes, Seattle, Wash.  
455 Meters

8:30 TO 10 P M—Wilbur Westerman, violin



## AMATEURS TRY TO TUNE IN ON NEW ZEALAND

HARTFORD, Conn., Apr. 7.—A boomerang imported from the wilds of Australia where this weapon was at one time used by the natives to kill game and annoying neighbors will be presented by the American Radio Relay League to the first radio amateur in this country or Canada who establishes two-way communication with an amateur in Australia or New Zealand. This announcement was made at the league headquarters today following the receipt of reports that a New Zealand station had been heard in the United States.

A number of foreign countries, regarded heretofore as backward in the development of radio communication, are now showing an increasing interest in amateur transmission. New Zealand fans have been for some time a highly appreciative and little known audience of American broadcast stations. While listening to transmissions from this country they have heard amateurs in the various districts talking with one another by radio telegraph and many have learned the code so that they are able to understand some of these communications.

### Install Code

They desire now to make themselves heard in the states and several have installed code transmitters for that purpose. Already amateurs in Eureka, Kansas, and Bridgewater, Mass., have reported hearing a New Zealand transmitting station. Rev. Chapman, a missionary at Anvik, Alaska, claims to have heard a New Zealand call.

As New Zealand and the Philippines are about equally distant from the center of the United States, it is expected that communication with the islands will be possible in the near future. However, the local receiving conditions are by no means as good as they are in New Zealand where atmospherics are at a minimum. Fred Elser, operator of the Philippine station 1XA, is making an effort to communicate with the United States with two 50-watt tubes.

## WOUFF-HONGS INCREASING IN NUMBER IN EAST

FLINT, Mich., Apr. 7.—The secret of the R. O. W. H. is out! Several thousand radio men who have been initiated into the Royal Order of Wouff-Hong, regarded as a highly dignified secret order, may be surprised to learn that in this city, where the R. O. W. H. came into being, the original ritual was used for a far less estimable organization, having as its title "The Ancient Order of Mop Handles."

The truth of this statement is vouched for by F. D. Fallain, the supreme secretary of the Royal Order of Wouff-Hong. Not content with stopping at this explanation of where the ritual was unearthed, the secretary goes on and tells of other matters which have heretofore been in the possession of a few of the original organizers.

The now popular secret order was started by a group of Flint radio men who had been selected to make arrangements for the second Michigan annual A. R. R. L. convention. On the night before the opening of the convention the sky was overcast and rain threatened. The committee realized that only a supreme effort would draw a crowd.

"Everyone present placed his right hand on his forehead and stared at the floor," declared Fallain, "likewise no one said a word."

### How It Happened

Finally an initiation was suggested and the committee thought it a good idea if someone would be bold enough to state what the spectators should be "initiated into and why."

"Boiled Owls" was suggested and immediately killed," continued the supreme secretary. "We wanted something new. I would like to remember the name of the gentleman who said if we did not quiet down he would get the 'Wouff-Hong' to us. Down came seven fists on a single head and seven voices shouted, 'Wouff-Hong! That's it!'

## STATION KFI IS BEAUTIFUL

Here is Paul Reese, the new announcer at Station KFI, Earle C. Anthony, Inc., Los Angeles, the owner of one of the most popular voices in the country. The magnificent studio which is finished in Spanish renaissance and the control room with its elaborate equipment are also shown.



## STATION KFI LOOKS LIKE A FINE MANSION

LOS ANGELES, Apr. 7.—Visitors who are curious about the workings of a radio studio when going to the top of the Packard building here are always amazed to find so little mechanical contrivances in the KFI studio, but rather a Spanish Renaissance furnished room, that might be the living room of a California home.

The room is of course heavily padded behind its neutral toned walls to concentrate the sound and keep out extraneous noise.

Perhaps of more interest than any bit of equipment in the entire KFI studio are the Deagan chimes, which are so closely associated with all program issuing from the main and remote control stations.

The first question most visitors ask refers to the chimes. They are electrically operated, either from the announcer's desk or the operator's room, and are formed of xylophone bars, hit with small rubber hammers. The chimes, signal box and two microphones are the only apparatus in the broadcasting studio. Spanish furniture, a concert grand piano, wrought iron, parchment-shaded lamps give the impress of an unusually attractive California home, and the soft neutral colors of walls, floor and ceiling lend an undeniably pleasing background where the varying personalities of radio artists do not conflict.

Paul Reese, youngest announcer on the Pacific coast, is the new voice from the KFI Radio Central station, owned by Earle C. Anthony, Inc. People who are regular listeners-in have become personal fans of his voice, the owner of which they have never seen.

Reese is a musician of high caliber and has had a large concert and vaudeville career, thus enabling him to arrange musical programs for Anthony station of concert standard. The balance of an hour's musical program must be studied with the same care and consideration that a full concert or recital is planned.

## UNSOLVED MYSTERIES

Radio presents more mysteries than any other science. Of these, H. Gernsback, noted science writer, points to four outstanding phenomena that are still unsolved.

1. Fading—the dying out of a concert for no apparent reason.
2. Dead spots—areas in which certain transmitted signals cannot be heard.
3. Crystal records—records of 500 to 1000 miles in reception made by crystal sets which ordinarily cannot receive more than 25 miles.
4. Body capacity—referring to the effect a person's body has on the reception of a radio set, when he is close to it.

## SCHOOL SENDS OUT LESSONS

Another university is listed as radio broadcaster of educational entertainment. It is the University of Pittsburgh, which has begun to broadcast through station KDKA. The latest report of the Bureau of Navigation shows 95 broadcasting stations connected with universities, colleges or other schools.

### Spanish Program

Station KDKA, Pittsburgh, in its efforts to reach out beyond the bounds of the United States, is preparing special programs for other countries. Thus, for instance, a special program for Spanish speaking people—in Mexico, Central and South America—has been arranged. It may become a regular institution.

### Amateur Record

Transatlantic amateur communication is an accomplished fact, reports the American Radio Relay League. Last January an amateur in West Hartford, Conn., and one in Nice, France, spoke to each other for two hours.

### Grid Trouble

If there is a steady knocking or ticking noise in your receiver, the grid leak hasn't the proper value. Put a finger on the grid binding post of the tube while listening in. If this makes the signals louder, there is too high a resistance in the leak.

### Canadians Pay

Radio listeners in Canada continue to pay \$1 license fee for each of their receiving sets. Fees for other sets have been raised. They are \$2.50 for amateur experimenters, \$10 for amateur broadcasters and \$10 for ship stations.

## Try These on Your Radio Set!

LONDON (By Mail to United Press).—These are the latest ones with which the London radio fans have been regaled:

An elder lady who has always scorned broadcasting, was finally induced to "listen in." Timidly she adjusted the receiver. "I am thy father's ghost!" came a voice. "Hamlet" was being broadcast. The old lady never knew that. She waited for no explanations:

After dinner headpieces were adjusted to the participants in a quiet little party, just as the wine was passed around. As a lady raised her glass the title for the next song admonished her to "Take those lips away!" They can see me!" she gasped, and fled from the table.

The doctor came to examine a little boy with the stomachache. "What did the doctor do?" the father asked that night. "Oh, nothing much, daddy. He just listened in."

### Shipping Aided

Weather bulletins issued by the United States Weather Bureau are transmitted to ships in the Caribbean Sea through broadcasting station WNU, New Orleans, which re-broadcasts them on 3331 meters to Swan Island for ship transmission from there.

United States has 12 transoceanic radio stations, 790 other land stations and 16,590 amateur transmitting stations.

## STATIONS OF REAL SERVICE

Some broadcasters are accommodating fellows. For instance, WDAP, Chicago, acceded to a request for the Lohengrin wedding march during a recent wedding ceremony. And WLW, Cincinnati, broadcast a solo for a funeral service at the request of an undertaker.

### Radio Questionnaire

The idea of broadcasting questions by radio, for the listener to answer to himself, has become a popular weekly even for WJZ, New York. Questions of varied popular interest are asked, a 30-second wait allows the listener to try answering it, and then the correct answer is broadcast.

Benjamin Franklin  
Radio Stores

Home Office 1129 Market Street  
San Francisco

The Long Distance Receiver

NEUTRODYNE  
5 TUBE

WIRED IN beautiful  
Walnut Cabinet

\$100.00

\$30.00 Below Regular  
Price

Benjamin  
Franklin  
Radio Stores  
1129 Market



We  
give time.

Why not use your  
Credit?

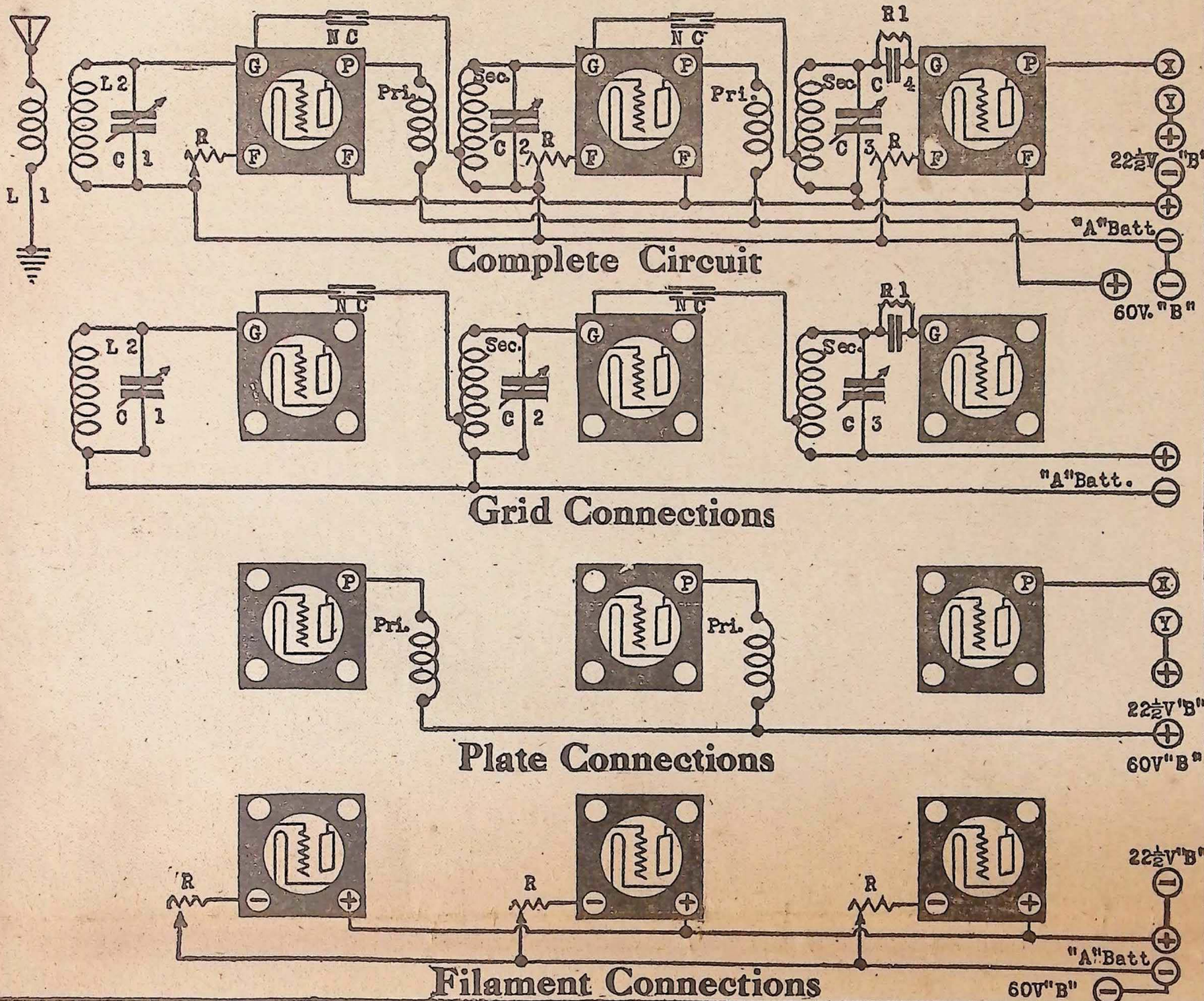
FREE DEMONSTRATIONS  
AFTERNOONS AND  
EVENINGS

UPSTAIRS



# HERE ARE FIVE MORE POPULAR PRO

## Neutrodyne Circuit



## Constants for Circuit on This Page

In matching the circuits on this page to amplifier circuits which appeared last week, the following exceptions to the rule of matching X's and Y's should be noted: In reflex circuits employing a vacuum tube as a detector, the Foot's Amplifyne, the "B" batteries should be connected as in this drawing and the plate from additional stages of audio frequency amplification should be connected to Y. When it is desired to add audio frequency amplification to frequency circuits, such as the neutrodyne transformer coupled circuits, the 60-volt "B" battery should be omitted and the 90-volt "B" at 60 volts.

**Transformer Coupled Radio Frequency Amplification**—L1 is 20 turns on a 1½-inch tube and L2 is 50 turns wound on the same tube and same direction. L3 is also 50-turn honeycomb coil. C1 is a .0005 variable condenser and C2 is a .00025 grid condenser and C3 is a .00025 grid condenser and C4 is a .00025 grid condenser. The R's are rheostats, R1 is a 1 to 2 megohm grid leak and R2 is a 400-ohm potentiometer.

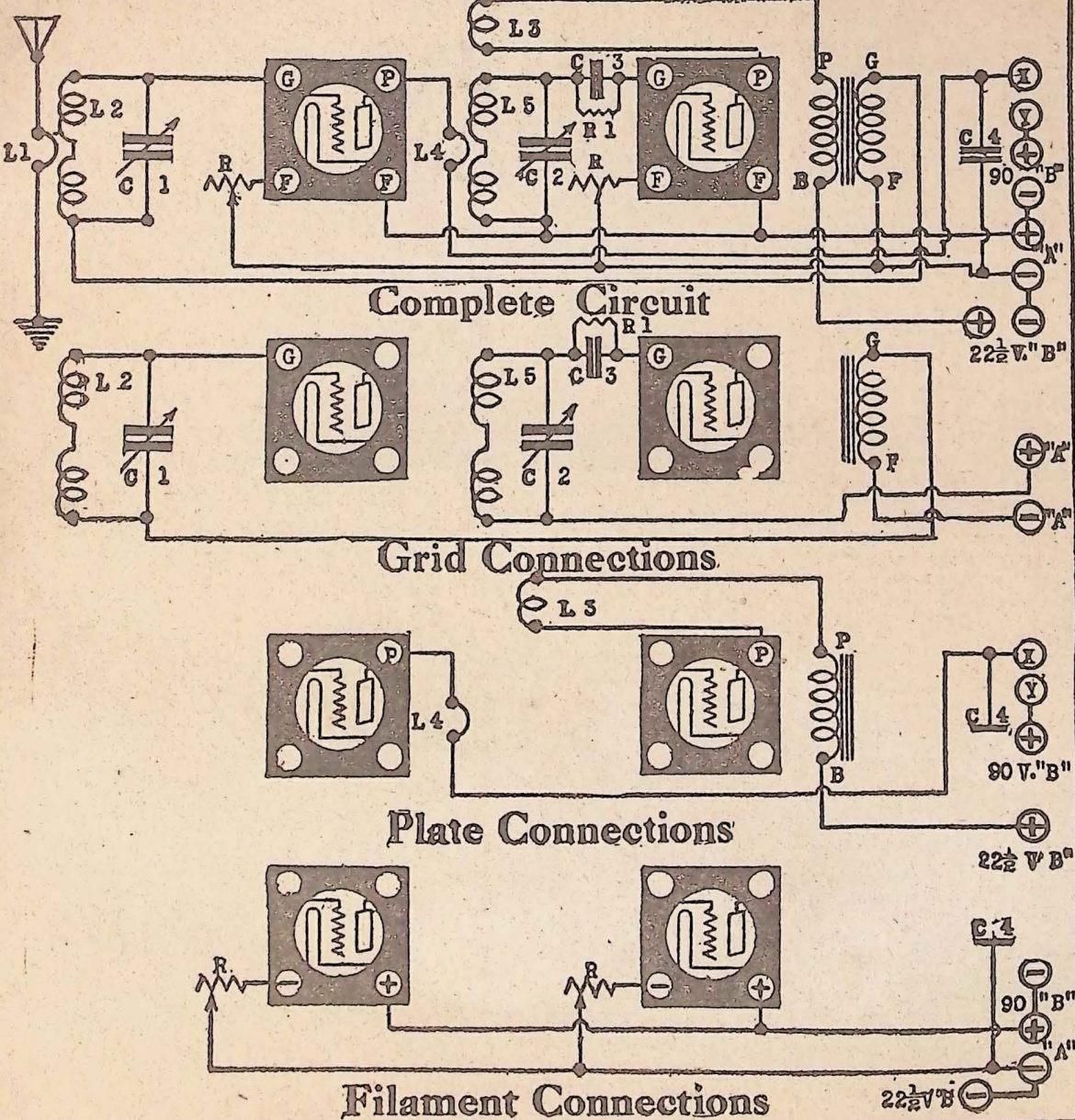
**Neutrodyne Circuit**—L1 and L2, as well as primaries and secondaries of the transformer, the conventional neutrodyne-formers, consisting of 15 turns on the primaries and 65 turns on the secondaries, the last two of which are tapped at the 18th turn. C1, 2 and 3 are .0005 variable condensers, C4 is a .00025 grid condenser and C5 is a .00025 grid condenser. The R's are the neutralizing capacitors. The R's are rheostats and R1 is a 1 to 2 megohm grid leak.

**Sherma-Flex**—L2 is a 50-turn honeycomb coil and L1 is 10 turns of wire wound on top of the same direction. L3 is also 50-turn honeycomb coil. C1 and C2 are each 26-plate K&S variable condensers and C3 and C4 are 40-plate K&S variable condensers. R is a rheostat and DCJ is a double crystal. The crystal detector should be pyratex. The two audio frequency transformers should be ratio Sherma-Trans.

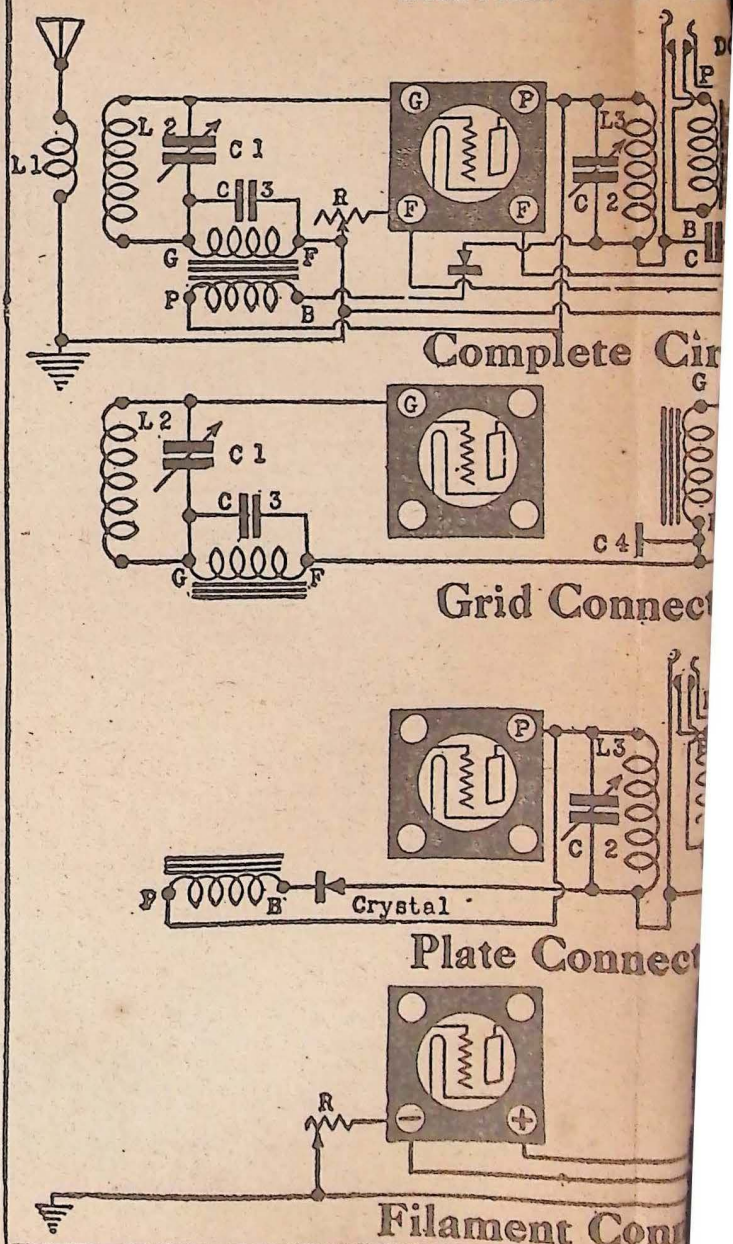
**Superdyne**—L2 is 42 turns of wire on tube and is tapped at the 20th turn. L1 is of bus bar and is wound over L2 and in same direction. L3, the tickler, consists of 35 turns on a 4-inch tube and is tapped at the 25th turn. C1 and C2 are .0005 condensers, while C3 is a .00025 grid condenser. The R's are the rheostats.

**Foot's Amplifyne**—L1 is 5 turns wound in the middle of a 4-inch tube and L2 is 70 turns of wire, 35 turns on each side of L1 and 35 turns on the other side. All windings must go in the same direction. L3 consists of 15 turns on a 4-inch tube and is tapped at the 10th turn. C1 and C2 are plate vernier condensers, C3 is a .00025 grid condenser and C4 is a .002 phono condenser. The R's are rheostats and R1 is a 1 to 2 megohm grid leak.

## Foot's Amplifyne



## Sherma-flex Circuit





# PROGRESSIVE CIRCUIT DIAGRAMS

## Circuits

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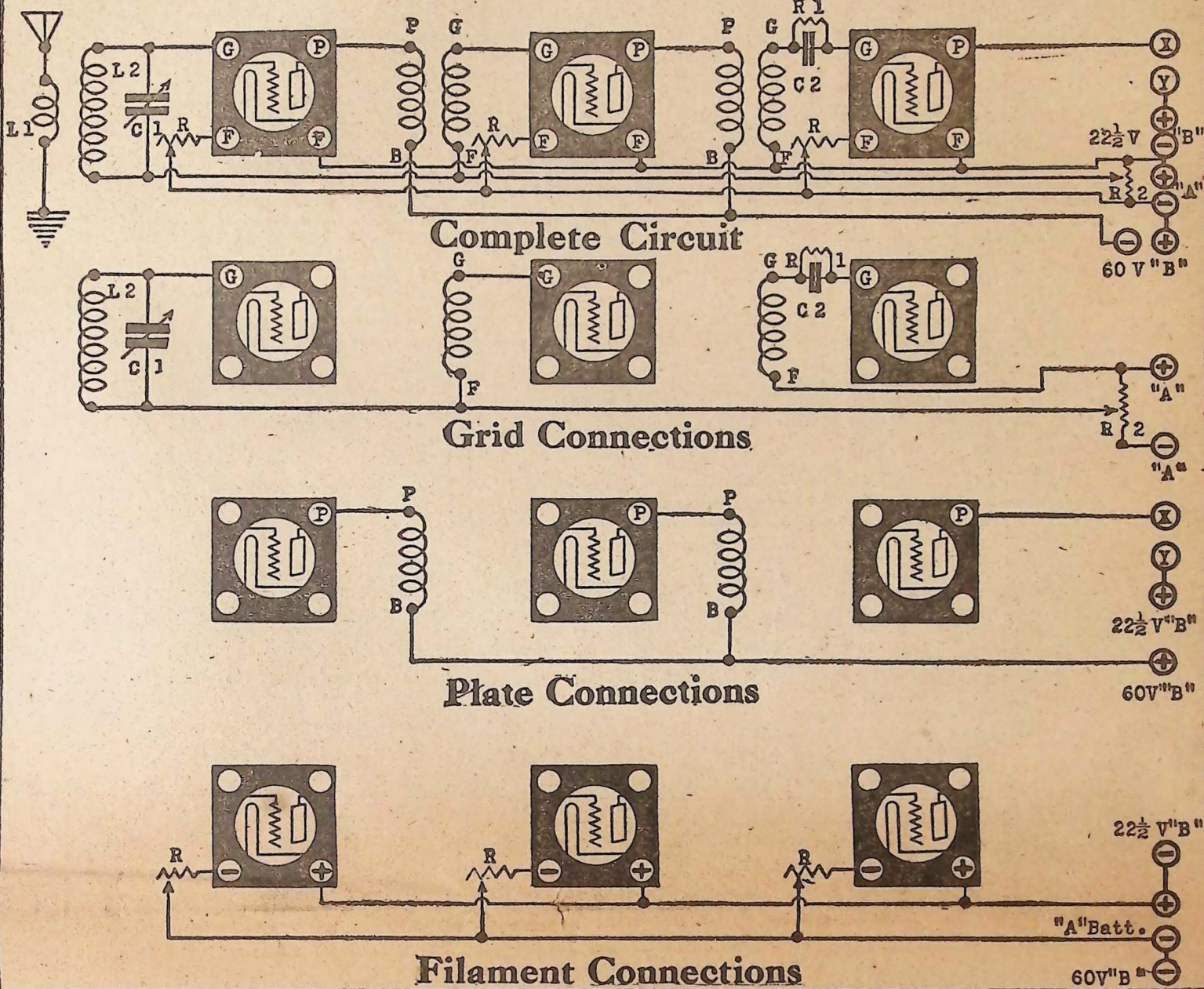
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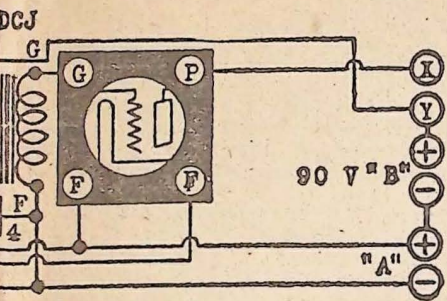
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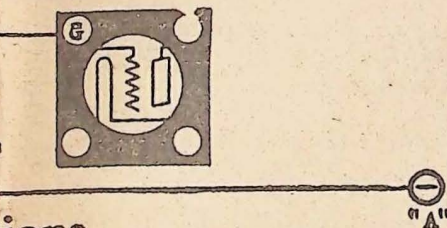
## Transformer Coupled Radio Frequency Amplification



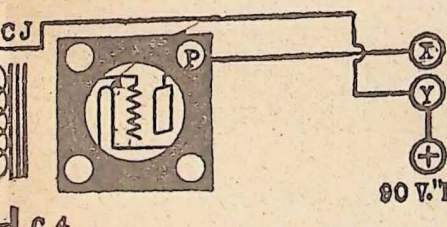
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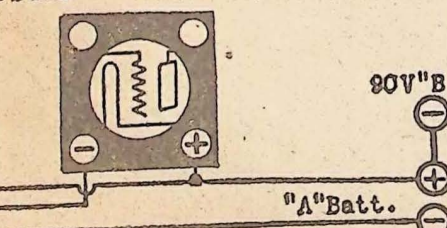
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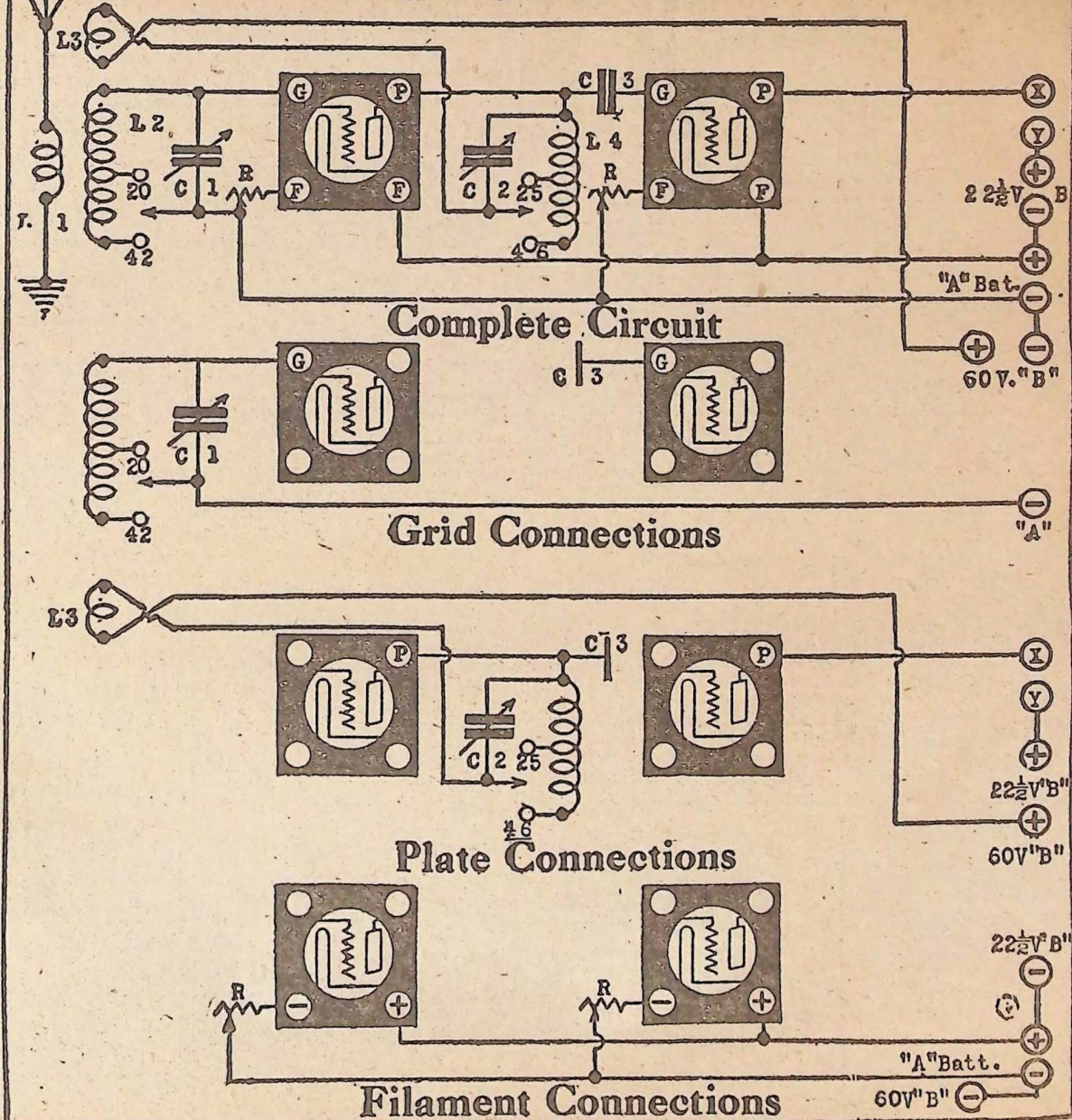


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## Superdyne Circuit





# HERE IS PEANUT TUBE SET

BY DAVID DIETZ

Science Editor of The Daily News

THE "peanut tube" radio receiving set is the cheapest vacuum tube set which the amateur can assemble.

It can be built at a cost ranging from \$20 to \$30.

The work is not complicated and any amateur can assemble the set with a few afternoons' work.

Use of the so-called "peanut tube" makes the purchase of a storage battery unnecessary since this tube operates on dry cells. This cuts out a large item of expense.

The "peanut tube" set will tune in local broadcasting stations and a fair proportion of the larger broadcasting stations in other cities.

Amateurs ought to be able to hear Sacramento, Stockton, San Jose, Los Angeles, possibly Portland, and other stations on the set.

The set will not operate a loud-speaker without the addition of an amplifying unit.

The set, as described in this article, can be used only with the usual head phones.

The following apparatus is required for the "peanut tube" set:

One cabinet with hinged cover, 12 inches long, 8 inches high and 8 inches wide. The amateur can make this himself out of hard wood.

One panel, 12 inches long and 8 inches wide. This should be of formica, bakelite, condensite, or any other insulating material. It must be drilled according to the instructions given below.

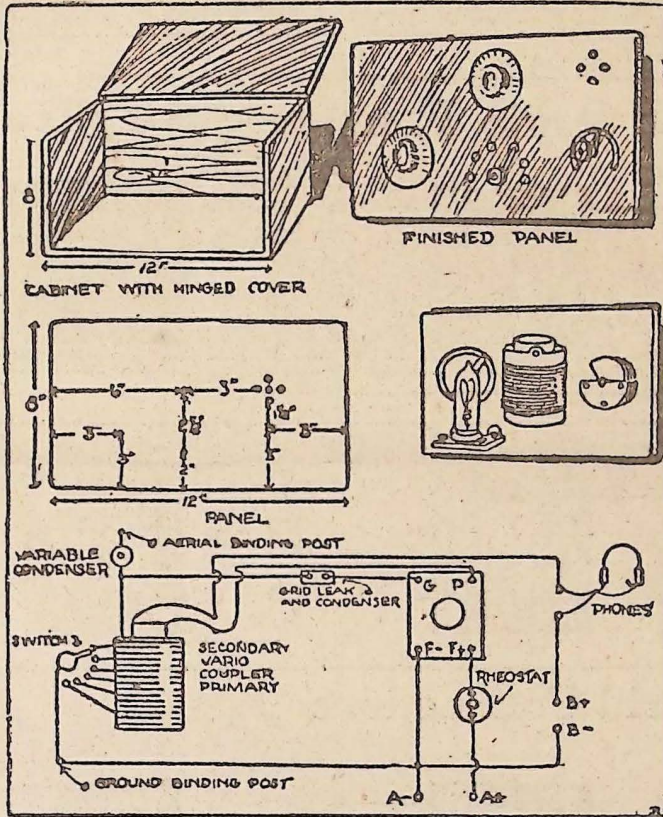
One vario-coupler.

One rotary switch-lever and six switch-points.

One 23-plate variable condenser.

One "peanut tube" and socket.

One grid leak and condenser.



One rheostat.

Eight binding posts. Rubber-capped ones make the neatest job, but any sort will do.

Bus wire for making the connections.

A dry cell of the "heavy duty" type for the "A" battery.

One 22½-volt "B" battery.

Set of head phones.

Drilling and Shielding

The panel is drilled as indicated in the accompanying diagram.

This diagram shows only the

holes for the shafts of the various instruments.

Other holes will have to be drilled as well for the screws which hold the various instruments to the back of the panel.

It is impossible, however, to show the location of these holes as they depend entirely upon the brand of instrument bought.

One type of variable condenser, for example, will require three screws to hold it to the panel.

Another will require only two.

Similar variations in the case

of other pieces of apparatus also exist.

After the panel is drilled it should be shielded with heavy tinfoil. This is done by fastening a sheet of tinfoil to the back of the panel with shellac or glue.

The shield should have large holes cut in it wherever the panel has been drilled. This is so that instruments will not be short-circuited as a result of shafts coming in contact with the shield.

An exception to this rule should be made in the case of the ground binding post. The screw holding this post should make good contact with the shield. This automatically grounds the shield.

Mounting Apparatus On As already stated, all apparatus is fastened to the back of the panel.

The variable condenser is mounted at the left. The vario-coupler is mounted in the center. The rheostat is at the right.

The tube socket is fastened to the back of the panel also.

One binding post is mounted to the upper left-hand corner of the panel. This is the aerial binding post.

The ground binding post is mounted in the lower left-hand corner.

Two binding posts for the phones are mounted along the right-hand edge.

Two binding posts for the A battery and two for the B battery are mounted along the lower edge of the panel well over toward the right.

The rotary switch lever for controlling the vario-coupler primary is mounted near the center of the panel below the knob which controls the vario-coupler secondary.

All this is shown clearly in

the accompanying diagram.

The diagram of connections is given in the accompanying diagram.

It is advisable to make the connections with bus wire such as is sold for this purpose.

Rubber tubing known as "spaghetti" tubing can be used to cover the connecting wires. This is not necessary, but many amateurs prefer it, as it lessens the chances of a short circuit occurring.

All connections should be soldered.

Neatness in making the connections is desirable for more reasons than the obvious one of appearances. Neat connections mean that the set will work better.

Where wires cross, have them cross at right angles. Also keep such wires several inches apart.

The diagram makes the connections clear. The only difficulty is in the case of the rotary switch. Remember that the rotary switch lever is connected to the ground binding post.

Before operating the set, always make sure that the batteries are connected correctly. If they are not, when you turn on the rheostat you may "blow out" the tube.

To operate the set, turn on the rheostat until a hissing noise is heard in the receivers. Then turn it back just far enough to cause the noise to disappear. The tube is now adjusted to the most sensitive operating point.

Then set the rotary switch lever on the last switch point.

Rotate the dials controlling the variable condenser and the vario-coupler secondary. Turn one dial faster than the other, so that all combinations of the two dials are obtained.

## RADIO FROM THE GROUND UP

In studying the magnetic effect of electricity, let us first think about ordinary magnetism as present in a horseshoe or bar magnet and the reasons for the attraction exerted by such a magnet upon other magnetic objects. The pulling effect of a magnet upon a piece of iron is just like the "pull" exerted by a rubber band upon a small weight, or upon your finger when you stretch it.

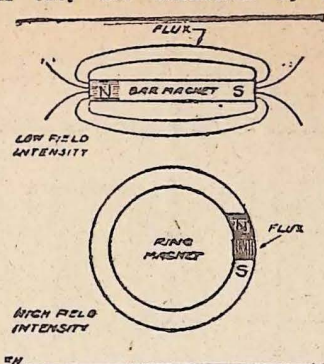
When a steel needle is "magnetized," we assume that the tiny "atoms" of steel in that needle are all arranged to be pointing in the same direction. If this needle is hung on a thread or balanced on a pivot, it will point north, showing that our earth, too, is a magnet and attracts the needle in such a way that it takes a position parallel to the earth magnet. The end which points north is called the north pole, while the south-seeking end is termed the south pole.

### Lines of Magnetism

The space near a magnet of any sort is under a certain strain, on account of "magnetic lines of force" proceeding from the north pole of the magnet and circling about to its south pole. These lines of magnetism try to take the shortest path they can in stretching from one pole of the magnet to the other, but they cannot be made to crowd too closely together. Hence the lines of magnetism from a powerful magnet are so numerous that they spread out quite far in their search for a clear path from pole to pole.

Suppose we have two horseshoe magnets, as shown in the illustration, with their unlike

poles near each other. The two magnets will pull together strongly, just as two little blocks of wood will fly together if they are connected by a



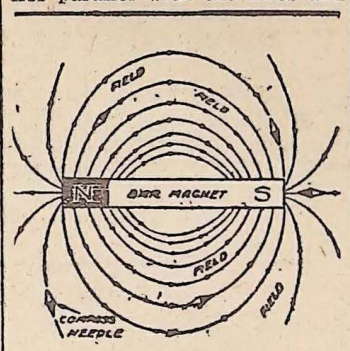
piece of rubber and pulled apart. The magnetic lines from the left-hand magnet, for instance, jump the small gap to the south pole of the other magnet, pass through that magnet, out of its north pole and back through the left-hand magnet again. Likewise, the lines from the right-hand magnet travel around in the same direction and reinforce the magnetic attraction exerted by the first magnet. In trying to travel through iron instead of through air the magnets pull toward each other.

### Magnetic Repulsion

When the unlike poles are presented to each other, the magnetic lines are traveling toward each other instead of in the same direction. They come into collision and bend away from each other. Since the lines are bent out of their normal path, they push hard in trying to straighten themselves out again, and the result is the same

as though we had two little blocks of wood pressed together with a piece of rubber between them. The rubber is compressed out of shape and pushes against the blocks in trying to get into normal form once more.

It is easy to trace the path of the magnetic lines if a small compass is moved about near a magnet. It will be found that the north pole of the compass lies parallel with the lines and



points toward the south pole. If a piece of iron is placed near the magnet it is easy to observe how the lines bend out of shape in passing through that iron.

Now we are in a position to realize why a horseshoe magnet is always more powerful than a plain bar magnet.

The magnets used in electricity are for this reason made in circular form or in some other convenient shape so that the lines of magnetism are confined to the iron for the most part.

This is sixth of a series of articles that will teach beginners what they ought to know about radio. The next article will be published in next Monday's Radio Magazine.

### Polish Ban Near End

Radio fans in Poland see a gleam of hope for the authorization of privately owned or amateur receiving stations in that country. They will be under government control, but at least they will be a big step from the previous prohibition against ownership of private radio sets.

There are more than 3000 manufacturers of radio supplies in the United States.

## CALCUTTA FAN GETS KDKA ON 5-VALVE SET

LONDON, Apr. 7.—Pittsburgh broadcasting has been heard in Calcutta, India, according to dispatches from that city.

A Calcutta amateur radio fan, understood to have been using a five-valve set, picked up Pittsburgh for half an hour. British listeners had failed to hear the broadcasting when it was relayed from London, due to atmospheric conditions here.

It is stated that an investigation conducted by the British Broadcasting Co. proved that the Calcutta fan actually heard the relayed concert.

It takes .054 of a second for a radio impulse to travel the 8500 miles from New Brunswick, N. J., to Warsaw, Poland.

## WAVELETS

Debating by radio from one continent to another may come sooner than expected.

Fifty million dollars will be spent for vacuum tubes alone in 1924, estimates Roger W. Babson, economist.

For every dollar spent on furniture in the United States, 33 cents is spent on radio.

Use low ratio transformers for good, clear reception with the least distortion.

Radio fans in Belgium are getting first-rate concerts from the Brussels broadcasting station, the only one in the country.

American Radio Ass'n will give \$500 for the best answer to the question, "Who is to pay for broadcasting?"

## THE SUPER 7

A 7 Tube Super-Heterodyne of Greater Possibilities

This week's reports from users of sets made from our parts include reception from New York City, Newark, Ottawa, Quebec, Montreal, Atlanta, Schenectady, Pittsburg, Troy, Chicago, Kansas City, Memphis and Fort Worth.

## ALL LOUD AND CLEAR

Calgary, Edmonton, Seattle, Portland, Los Angeles and other LOCAL stations almost as loud as San Francisco and Oakland.

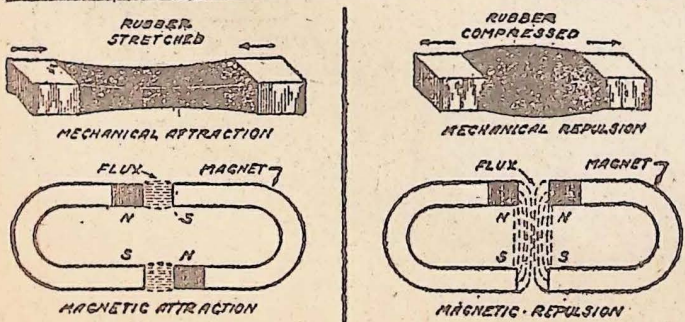
Parts for the Super 7 .....\$100-110 including engraved panel and cabinet.

## HOWARD'S

712 Market Street

Garfield 4548

San Francisco





## EXPERT SEES BENEFIT IN RADIO TRUST

CINCINNATI, Apr. 7.—Monopoly of radio apparatus has benefited the American public, S. M. Kintner, Westinghouse Electric & Manufacturing Co. engineer, says.

"Without the present monopoly there would be no radio receiving apparatus on the market," he claims.

"Control of the basic patents was split between the General Electric, Western Electric and the Westinghouse Co.

"Westinghouse controlled the Armstrong regenerative patents and the neodyne. General Electric and Western Electric controlled the detecting tube patents.

"We were unable to manufacture sets using tubes without infringing their patents and vice versa. So, the companies reached an agreement that permitted them to make sets available to the public."

Kintner justified the present high price charge for radio tubes. Radio receiving tubes, made of standard materials, under legitimate patents, cost about \$5.

### Spent Money

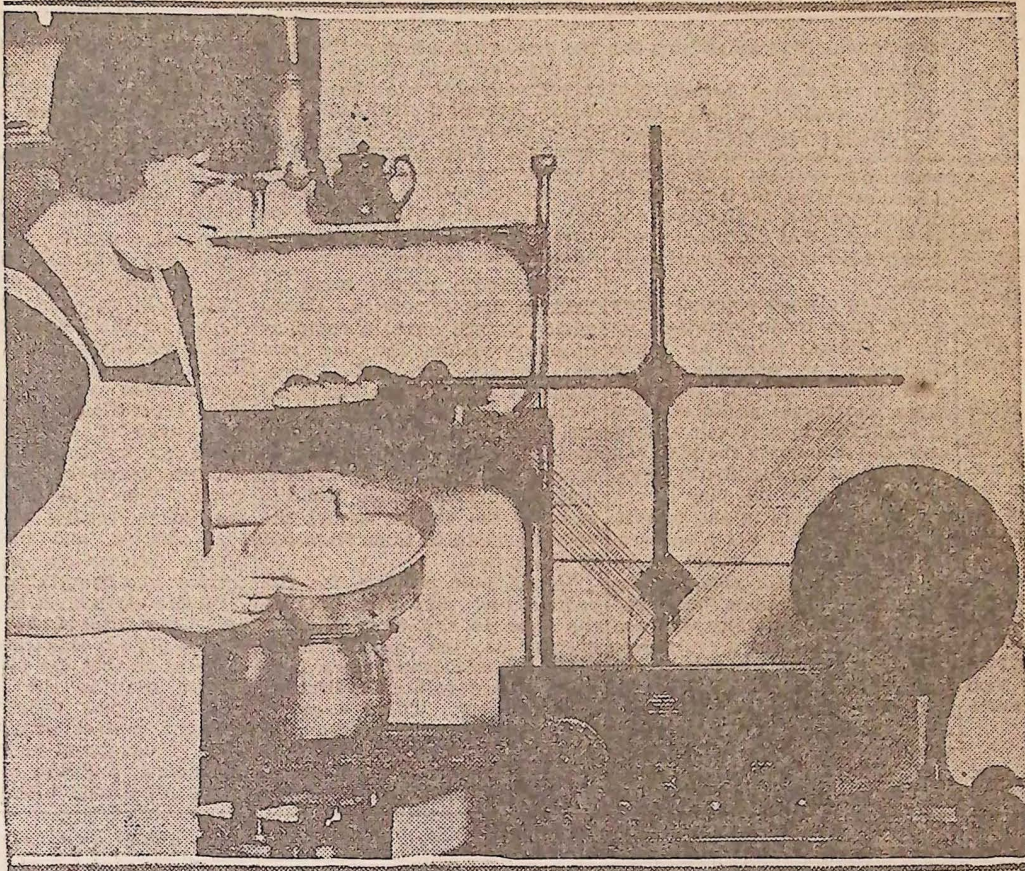
"The companies have spent hundreds of thousands of dollars perfecting these tubes," he said. "This last year we spent over \$100,000 in experiments on one tube alone.

"As long as our patents are in force, we have a monopoly on the production of the tubes; during those few years we have to get enough money above the cost of material and labor and legitimate profits to pay for the years of experiment."

### Politics Course

A course of 10 lectures on "Practical American Politics" has been arranged for broadcasting through station WEAJ, every Wednesday night at 8. The lecturer will be Schuyler C. Wallace of Columbia University.

## RADIO PLACED IN KITCHEN



Miss Katherine McKinley and her sleeper monotrol.

## RADIO SET ON TEA WAGONIS CULINARY AID

Miss Katherine McKinley of San Francisco has long enjoyed the reputation of being a fine cook. Her friends marveled at the delectable dishes turned out of her kitchen. But now the secret is out. Miss McKinley prepares the appetizing dishes from recipes broadcasted from radio stations.

When the hour comes for radio recipes Miss McKinley wheels her sleeper monotrol receiving set into the kitchen beside the stove and prepares the various dishes according to scientific recipes prepared by famous chefs and broadcasted for the benefit of housewives. Sometimes it is a tasty salad. Or, it might be a toothsome roast.

"When station KFAE, at Pullman, Wash., begins broadcasting their hints to housekeepers, I am right on the job. Not only am I able to prepare unusually good dishes by means of radio recipes, but I get excellent instruction as to other household duties.

"I think the radio will revolutionize housekeeping and do much to lessen the household drudgery. When I get tired of working I tune in to a musical concert and sit down in an easy chair and rest up. It is all so simple. I just turn the one dial to whatever station I wish and in comes the program loud and clear."

Miss McKinley has her receiving set mounted on a tea wagon so she can wheel it about the house.

### Popular on Farms

Illinois Agricultural Ass'n reports that more than 20,000 families on farms in 73 counties of the state have receiving sets. The survey seems to show that between 7 and 10 per cent of the state's rural population have receiving sets.

## RADIO GENIUS IS HONORED

E. F. W. Alexanderson, inventor of the famous Alexanderson high frequency alternator for trans-oceanic communication, has been awarded the Order of the Polonia Restituta by the Polish government in recognition of his services in connection with the construction of Poland's radio station near Warsaw.

## British Wave Lengths

LONDON, Apr. 7.—The wave lengths used by the British radio stations have been changed. The present schedule is as follows:

2LO, London, 350 meters; 5NO, Newcastle, 370 meters; 6BM, Bouremouth, 385 meters; 2ZY, Manchester, 400 meters; 5SC, Glasgow, 420 meters; 5WA, Cardiff, 435 meters; 5IT, Birmingham, 475 meters; 2BD, Aberdeen, 495 meters.

## NAVY EXPERTS HERE GET JAVA

Station NPG, United States naval station at San Francisco, reports having heard PKX, the Dutch government station at Malabar, on the Island of Java, 8200 miles to the west.

Railroad men around New York are appealing to the broadcasting stations to continue their programs through early morning for their benefit.

# THE WEEK'S AIR PROGRAMS CONTINUED

(Concluded From Page 1)

presented through the courtesy of Barker Brothers.  
6:45 TO 7:30 P M—Children's program presenting Billie Moore, 7-year-old reader; Bertha Lipson, 8-year-old pianist; bedtime story by Uncle John.  
8 TO 10 P M—Program presented through the courtesy of Mu Phi Epsilon, Dr. Chaim Weizman, president of World Zionist organization.  
10 TO 11 P M—Art Hickman's orchestra from the Biltmore hotel.

### FRIDAY, APRIL 11

KLX—Oakland Tribune—500 Meters  
2:45 TO 5 P M—Baseball scores.  
7 TO 7:30 P M—News items, weather forecast, market and financial news.

8 TO 10 P M—Studio program presented by the Jazz Studio of Oakland; Charles S. Offenberger, director. Instrumental—A Smile Will Go a Long, Long Way; You Wanted Some One to Play with; Maybe; Arizona Stars Waltz; Skip Along; Gardella's Dance Orchestra.  
Soprano solos—I'll Forget You; If Winter Comes; One Fleeting Hour; Angela Beale.  
Novelty: "Two-Man Band"—Popular Medley, Jazz Harmonics; Gamble Brothers.

Piano solos—Medley of popular numbers, Valse Dolores, Fussy Fingers; Charles S. Offenberger.  
Vocal—Close to My Heart, You'll Never Know; I Don't Care if You Never Come Back; Bob Maddern; Charles S. Offenberger, accompanist.  
Saxophone solos—Valse Vanite, Saxarella; Jack Gardella.

Piano duets—Oh, Baby; Mindin' Your Business; Eve Josephson and Emma Leichter.  
Instrumental—Sittin' Pretty in a Pretty City, Arabianna, Room Rent Blues, Irish Waltz Medley, Where the Lazy Daisies Grow; Gardella's Dance Orchestra.

KGO—General Electric Co., Oakland 312 Meters  
1:30 P M—New York Stock Exchange and Weather Reports.  
3 P M—Short musical program; address on Home Decoration.  
4 TO 5:30 P M—Music by the St. Francis Hotel Dance Orchestra; Henry Halstead, leader.

6:45 P M—Final stock exchange reports. Weather and news.  
KPO—Hale Bros., San Francisco 423 Meters  
12 M—Time signals. Scripture.  
12:40 P M—Talk by Edward M. Bassett of New York City, from Commonwealth Club luncheon at Palace Hotel.

1 TO 2 P M—Rudy Seiger's Fairmont Hotel Orchestra.  
2:30 TO 3:30 P M—Organ recital by Theodore J. Irwin, KPO official organist; March, Jersey Shore; comic operetta selection; Pinetop; Song Without Words; waltz, Vienna; waltz, fox trot, selected; Serenade; Amariyilis; Fox Trot, selected.  
4:30 TO 5:30 P M—Rudy Seiger's Fairmont Hotel Orchestra.

### DISTANT STATIONS

KGW—Morning Oregonian, Portland, Ore.—492 Meters  
11:15 A M—Market basket.  
11:30 A M—Weather forecast.  
12:30 P M—Program by Peck Hol-

ton's Orchestra of Christensen's Hall.  
3:30 TO 4 P M—Lecture by Esther B. Cooley, clothing expert of Extension Service, Oregon Agricultural College.  
7:30 P M—Weather forecast and market reports.  
8 TO 8:30 P M—Lecture provided by Extension Division.  
10:30—Hoot Owls.

KFAE—Washington State College Pullman, Wash.—330 Meters  
7:30 TO 8:20 P M—Instrumental solos; songs; agricultural talk; X-Ray and Crystal Analysis, Prof. Hugh Henton, School of Mines; Dehumanizing Effects of War, Dr. C. L. Erickson, psychologist; piano solos; Preparing Wool for Market, C. M. Hubbard, Extension specialist; The Trend of Farm Prices—R. M. Turner Extension Service; Book Chat, Alice Webb; Readings, Speech Department.

KFOA—Rhodes, Seattle, Wash. 455 Meters  
8:30 TO 10 P M—Ostrander's Plectral String Sextette: Carl T. Ostrander, first violin; John Nicholas, second mandolin; Mabel C. Whelan, tenor mandola; Arthur P. Melchert, mando cello; Mrs. Don Le Roy, guitar; Francis Hoffman, mando bass.  
This is one of three organizations of its kind in the United States, and is presented for the first time by radio.

WBAP—Star-Telegram, Fort Worth, Texas—476 Meters  
5:30 TO 6:30 P M—Classical recital arranged by B. U. Taylor Jr., baritone, and a group of his pupils.  
7:30 TO 8:45 P M—Monthly program by organizations of the College of Industrial Arts, Denton, Tex.  
KHJ—Los Angeles Times—395 Meters  
12:30 TO 1:15 P M—News items.

Weather report. Music.  
2:30 TO 3:30 P M—Program presented through the courtesy of Barker Brothers.  
6:45 TO 7 P M—Children's program presenting the Hollywood School for Girls Glee club. Weekly visit of Richard Headrick, screen juvenile. Bedtime story by Uncle John.

7 TO 7:30 P M—Organ recital from First Methodist Episcopal church; Arthur Blakeley, organist.  
8 TO 10 P M—Program presenting the Studebaker Radio Orchestra. Walter F. McEntire, lecturer.  
10 TO 11:30 P M—Art Hickman's Orchestra from the Biltmore Hotel.

KFI—Earle C. Anthony Inc., Los Angeles—469 Meters  
4:45 TO 5:15 P M—Evening Herald news bulletins.  
5:15 TO 5:45 P M—Examiner news bulletins.  
6:45 TO 7:30 P M—Vocal and instrumental concert.  
8 TO 9 P M—Evening Herald concert. Concert presented by the Newberry Electric Co. John T. Brown and his harmonica.  
9 TO 10 P M—Examiner concert.  
10 TO 11 P M—Lillian Hassler's Novelty Orchestra.  
11 P M TO 12 Midnight—Ambassador: Max Fisher's Coconut Grove Orchestra.

### SATURDAY, APRIL 12

NOON—Time signals. Scripture.  
1 TO 2 P M—Rudy Seiger's Fairmont Hotel Orchestra.  
2:30 TO 3:30 P M—Musical matinee

Banjo solos—The World Is Waiting for the Sunrise; Will You Always Love Me, Halsted and Traveller; Rudolph Peterson.  
Piano solo, Premiere Valse; Johan Colet.  
Bass solos—Invictus; Drink to Me Only with Thine Eyes; Syl Burkenroad.  
Piano solo—Second Mazurka, Benjamin Godard; Johan Colet.  
Bass solos—Friend o' Mine; Jean; Syl Burkenroad.  
Banjo solos—Remembering; Linger Awhile; Rudolph Peterson.  
2:30 TO 5:30 P M—E. Max Bradfield's Versatile Band playing in the Palace Rose Room Bowl.

8 TO 12 P M—Dance music by Art Weidner and his popular dance orchestra. This orchestra plays at the Fairmont Hotel.  
Baritone solos—Calm as the Night; When I'm Away from You; George Mox Ward, Evelyn A. Roach, accompanist.  
Address—Women in the Business and Professional World; Violet Richardson.

Cantillations—The Mouth Organ; The Sandpiper; Evelyn A. Roach.  
Baritone solos—Selected; George Mox Ward.  
Vocal selections—Selected; Oakland Realtors' Glee club.  
10 P M TO 1 A M—Music by the St. Francis Hotel Dance Orchestra; Henry Halstead, leader.

KGO—General Electric Co., Oakland 312 Meters  
12:30 P M—New York Stock Exchange and weather reports.  
4 TO 5:30 P M—Music by the St. Francis Hotel Dance Orchestra; Henry Halstead, leader.  
8 TO 10 P M—Program furnished by Soroptimist Club, Oakland.  
Vocal selections—Stars Brightly Shining; Amariyilis; Soroptimist quartet; Gussie Meyer, Dr. Lucella Swager, Isabelle Jenkins, Irma Randolph, Gertrude B. Rost, accompanist.  
Accordion solos—Quartet from Rigolotto; John L. Zunino.  
Baritone solos—Selected; William Edward Johnson. Gertrude B. Rost, accompanist.

Piano solos—Romance in D flat; Prelude, Op. 28, No. 7; Prelude, Op. 28, No. 20; Mrs. Evelyn Comstock.  
Reading—Dressing for the Play, Fluke; Rose Bell.  
Baritone solo—Selected; William Edward Johnson.  
Hawaiian guitar duets—Hawaiian Twilight, Vandersloot - Sherwood; Beautiful Hawaii, Mary Earl; W. F. Drury and Virgil M. Holden.  
Soprano solos—Selected; Irma Randolph, Mrs. Evelyn Comstock, accompanist.

Address—Mrs. Sue L. Ballard.  
Vocal—Selected; Oakland Realtors' Glee club; Zura E. Bells, director.  
Saxophone solos—Laverne; Saxophobia; Pearl Bateman.  
Vocal—When Twilight Weaves; Soroptimist Quartet.  
Hawaiian guitar duet—Medley of Hawaiian Airs; W. F. Drury and Virgil M. Holden.  
Reading—Blue Roses; Rose Bell.  
Contralto solos—Flower Rain; From the Land of the Sky Blue Waters; Mrs. Howard L. Bacon. Gertrude B. Rost, accompanist.  
Accordion solo—Trieste Overture; John L. Zunino.  
KLX—Oakland Tribune 500 Meters

2:45 TO 5 P M—Baseball scores.  
7 TO 7:30 P M—News items. Weather report.

### DISTANT STATIONS

WBAP—Star-Telegram, Fort Worth, Texas—476 Meters  
5:30 TO 6:30 P M—Review of the interdenominational Sunday school lesson and radio Bible class by Mrs. W. F. Barnum. Those writing in will be enrolled and sent a certificate of membership.  
KGW—Morning Oregonian, Portland, Ore.—492 Meters  
11:30 A M—Weather forecast.  
2:30 TO 4 P M—Children's program. Bedtime story by Aunt Nell.  
10 TO 12 P M—Weather forecast. Dance music by George Olsen's Orchestra by direct telephone from the Portland Hotel.

KHJ—Los Angeles Times, Los Angeles 395 Meters  
12:30 TO 1:15 P M—News items, weather report and music.  
2:30 TO 3:30 P M—Program presented through the courtesy of Barker Brothers.  
6:45 TO 7 P M—Children's program presenting Helene Pirie, screen juvenile. Mrs. Norman Hassler, soprano. Bedtime story by Uncle John.  
8 TO 10 P M—Program presenting Mrs. Norman Hassler, soprano; Norman Hassler, baritone; Eleanor Sleeth, violin; Clarence Kellogg, pianist.

10 TO 11 P M—Art Hickman's Orchestra from the Biltmore Hotel.  
KFI—Earle C. Anthony Inc., Los Angeles—469 Meters  
4:45 TO 5:15 P M—Evening Herald news bulletins.  
5:15 TO 5:45 P M—Examiner news bulletins.  
6:45 TO 7:30 P M—Instrumental program.  
8 TO 9 P M—Vocal and instrumental concert.  
9 TO 10 P M—Examiner concert.  
10 TO 11 P M—Vocal and instru-

mental concert.  
11 TO 12 P M—Ambassador-Max Fisher's Coconut Grove Orchestra.

### SUNDAY, APRIL 13

KPO—Hale Bros., San Francisco 423 Meters  
11 A M TO 12 NOON—Organ prelude, Theo. J. Irwin. Palm Sunday services. Dr. Marion L. Lawrence, consulting general secretary International Council of Religious Education, of Chicago; Sermon, Sunday School, Church and Nation.  
Vocal solos—Mr. and Mrs. A. M. Mellor; harpist, Martha Fisher; violinist, U. Tagnini.  
10:30 A M—Talk, Archbishop E. J. Hanna, direct wire from Palace Hotel.  
8:30 TO 10 P M—Rudy Seiger's Orchestra from Fairmont Hotel.  
KGO—General Electric Co., Oakland 312 Meters  
2:30 TO 4:30 P M—KGO Little Symphony Orchestra.

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# RADIO PLAY NEW FORM OF DRAMATIC ART

BY F. A. CLARVOE

The radio may develop an entirely new form of dramatic art, according to Prof. Samuel J. Hume, director of the Greek Theater, University of California.

"Reading of plays over the radio has become a species of entertainment offered in many parts of the country," Prof. Hume said, "and it causes one to wonder if there isn't a possibility that the dramatic triumph will be rounded out."

"We have the legitimate stage, with all its shades of art, the direct appeal to the audience by word and gesture, bits of personal 'business' that make the beholder feel the drama and be carried along with it, almost as a principal."

"Then there is the movie, with its wealth of visualization, the almost limitless appeal to the eye. Here the producer must be sufficiently skillful to capture the eye of the beholder and through his sense of sight reach his heart."

New School of Acting

"The movies make up for what they lose in the sense of sound

by extending and amplifying the sense of sight.

"The radio must develop that sense of sound to a high degree for it to be a successful dramatic medium. New technique will be necessary, perhaps even a new school of acting, for it will be by the composition of the play and by the voice that the 'reader' will satisfy his widely scattered audience."

"I have always opposed plays which have made successes on the legitimate stage, as 'Anna Christie,' for example, being used in the movies. For one thing, the movie producer tries to capitalize to a certain extent upon the popularity the play has achieved on the legitimate stage, and for another the play is not always adaptable to the screen. 'Anna Christie' is not a successful screen play. It would not be a successful radio play. It depends too much upon 'business,' upon personal subtlety, the unspoken business of a truly dramatic and highly successful legitimate stage play. But this is only one. Shakespeare was never meant to be suitable for radio broadcasting."

"I believe that there is a chance for people with a love of

the drama and a love of the radio to combine such aptitudes with a willingness to work hard upon a new form of dramatic art, really to do something original and valuable. Only let us hope that they do not make the mistake the motion picture people did—take plays that belong in an entirely different field and try to adapt them to the screen."

"The radio drama must go back to first principles. Here's what you will have: a company of actors reading the play from the broadcasting studio, thousands of people listening in by means of ear-sets or loud speakers, with nothing but their imaginations to draw upon as a background for the play, no scenery, nothing to make them feel the sway of the drama, except the voices coming to them from out of the ether."

"A difficult problem for the radio actor! But hark back to the time of the early English drama, to the period when Shakespeare's plays were first being staged during the lifetime of the author. There were no stage sets then, no makeup, no way for the audience to feel that a living drama was being enacted before their eyes except

through the skill of the playwright, the timber and feeling put into the voice of the actor, and such gestures as were known."

Putting Over Radio Play

"There is no reason why the radio actor cannot go back farther than that, if necessary. Expression can be put into the voice and skill can be used in the building of the dialogue which will put the play over. 'Cohen on the Telephone,' a famous phonograph record, the best seller ever recorded, depends upon mere words and mere expression to delight. Perhaps some of the preliminary education for the radio drama has been cared for by the phonograph. Who is unable to visualize Cohen raising Cain about that shutter, and picture the whole proceeding, shutterless window and everything?"

"Radio plays must be originated. They cannot be adapted. Motion picture scenarios are constructed so that the picture will tell its story to the eye; the legitimate play depends upon personal contact with the audience by emotional feeling, sight and sound, and the playwright builds his drama with these ad-

vantages. The radiowright, on might call him, has a more difficult task."

"There is no reason why he should not develop a following. A man or woman with a sufficient command of emotional language, of language in all its shades and phases, with the ability to make of his dialogue a picture in words, should do something valuable. Then acting; it must be a rehearsal ear, with the producer and he aids repeatedly 'listening in' the piece is rehearsed until they can 'see' the drama through their ears, before it ever can be put on the air. Merely reading the drama will not put it over."

"It all depends upon those responsible for the play's getting on the air whether such a form of drama will be a success. The chief word of warning that I can voice is that the writer, the producer and the actor must all be sufficiently plastic to 'think' radio in preparing and reciting their play. No thought or consideration of the legitimate stage or of the movies, or of their repertoire, can be entertained, or the whole thing will be a 'bust.'"

## THURSDAY TO BE 'SHRINER' NIGHT HERE

Next Thursday will be "Shriner" night in Pacific Coast radio-land.

Under arrangements made with broadcasting stations KPO, San Francisco; KGW, Portland, and KFI, Los Angeles, special Shriner programs will be broadcast.

In announcing this today Noble H. M. McKinley, in charge of the local committee, stated the program broadcast by KPO would include talks by Col. J. F. Dillon, supervisor of radio for the Sixth District; Dr. Jas. L. Gordon, pastor Congregational Church, and Wm. H. Worden, potentate of Islam Temple.

In addition to the local broadcast program the Shriners will hold a radio entertainment at Islam Temple clubrooms, 650 Geary-st., Thursday night. A feature of the entertainment will be an elaborate display of radio receiving sets by local radio dealers.

Another feature will be songs by the KPO, Hale Brothers station, trio in person.

The special program to be broadcast by KGW, Portland, will include an address by the potentate of El Kader Temple and a concert by the El Kader band and chanters. The KFI, Los Angeles, program will be featured by a talk by the potentate of Al Malaikah Temple and music by the Al Malaikah chanters and band.

The committee working out the details of the local show and broadcast program includes Dr. H. M. McKinley, Hugh McBirney, Ralph Wiley, James Raymond, Dr. W. M. Tryon, Alfred Rhine, Edward Kemp, Raymond Wilson and Louis Levy.

In order to receive the radio programs at the Shrine Temple two powerful radio receiving sets will be installed under the direction of Nobles Hugh McBirney and Ralph Wiley.

### Short Aerials

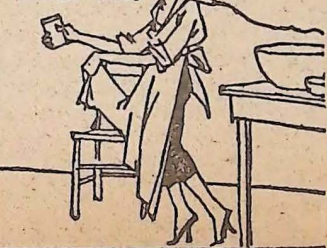
Great Britain prohibits the use of long antennas for reception. Most aerials in England are 40 feet or less. As a result radio frequency receivers are popular for reception of short wave signals.

## RADIO BISCUITS —By Roy Grove

YOUNG BRIDE STARTS IN TO MAKE BISCUITS BY RADIO



"-AND ONE CUP OF BUZZ-BUZZ SOMEBODY INTERFERES"



MARKET REPORTS CUT IN—CONTINUES—'GUN COTTON' GLYCERINE BUZZ-BEEK—



BUZZ-BUZZ BACK TO RECEIPTS PUT IN OVEN FOR 2 HOURS—STATION C.O.O."



### Oldest Broadcaster

There may be many men and women claiming honors as "oldest radio fans," but there is no doubt over the record held by Sarah Alexander, America's oldest actress, now appearing in "Rust" in New York. She is also America's oldest broadcaster, having been called to the microphone at WOR, Newark, N. J., to give a talk about herself.

### Antenna Lead

An effective antenna lead-in comes down all the way to the binding post on the set. It should not be brought down and then up to the set. The shorter it is, the better.

### Loop Aerial, Too

Besides its large antenna, the S. S. Leviathan has a large loop atop the radio shack for use in case of emergency and for direction finding.

## COAST TO GET ANOTHER BIG RADIO SHOW

Rivaling in popular interest the automobile show, the third national radio exposition will be held on the Pacific coast in 1925 following expositions in New York and Chicago. The name of the Pacific coast city and exact dates will be made known within a few days.

The sponsors of the radio exposition, the Radio Manufacturers' Ass'n, have secured ten-year leases on the Madison Square Garden in New York and the Coliseum in Chicago, for annual radio expositions, and another ten-year lease is being negotiated on a western exposition building.

An interesting feature of the radio show will be an amateur builders' contest, which will be open to children. There will be three classes—the first for high school boys, the second for graded-school boys (public or private), and the third for girls of all ages. Attractive prizes will be offered to each division, and enough space will be allotted to accommodate several hundred entries.

There will also be a series of important public experiments and demonstrations held during the show, under the supervision of a special jury of celebrated radio authorities, for the purpose of bringing to light and testing out new radio inventions and theories. Radio fans will have an opportunity of viewing and hearing the latest in radio equipment.

The decorative equipment of the coming exposition will be the most elaborate ever built for an American trade show of any sort. A noted architect, several famous artists and a score of scenic designers and builders have been engaged to assist in its production. At the close of the New York show the exhibits, booths and decorations will be transplanted, intact, by special trains, to Chicago, and from there to the Pacific coast.

### Mark Binding Posts

Before disconnecting the batteries from the set, it would be good practice to have the binding posts marked, so that the right connections will be made when the set is put into use again.

### Less Interference

Radio listeners are being promised less interference from the spark transmitters of ships operating within the broadcasting wave length limits. They are getting higher wave lengths outside the broadcast area.

### "Hears" With Fingers

Helen Keller, deaf and blind since the age of 19 months, enjoys radio by unscrewing the cap of the phones and lightly touching the diaphragm.

## ANSWERS

Questions addressed to this department will be answered by L. B. Day of the Day Radio Laboratory, 692 Mission-st. No hookups will be printed.

Martin Ohlmeier, 2154 Pacific-av, Alameda, asks:

Can I put a loud speaker on a crystal set?

Yes, by addition of a standard two-stage amplifier. You can get very good results on local stations.

Herbert Nelson, 440 Guerrero st, asks:

(1) Can I use a loop aerial on a two-tube set?

(2) How would a loud speaker operate?

(3) How far could I hear?

(4) My aerial is one strand 2 feet long. How far can I get?

(1) No.

(2) Loud speaker would work unless you can hear three feet from the headphones.

(3) All local stations, if above condition exists.

(4) Your aerial should be between 75 and 85 feet long.

Albert Muhlebach, 225A Dolores-st, asks:

Can I use a C-299 tube with a 40 volt B battery on the single tube flex with good results?

Yes. The C-299 tube works best as a detector with a plate voltage of about 40 volts. The normal A battery voltage should be about three volts. This is obtained with three ordinary dry cells and a 10-ohm rheostat in series with tube. As an amplifier from 80 to 100 volts are used. The addition of a C battery of 3.0-4.5 volts is advantageous.

## Radiation Prevented

Two St. Louis radio engineers have invented an inexpensive device which is said to prevent re-radiation in receiving sets. It can be attached in less than a minute, between the antenna, ground, and the receiver.

## LET'S SWAP

What have you that you don't want? What do you want that you don't happen to have?

The radio habit is like the automobile habit—you start with a flivver set and windup tuning in on a Rolls-Royce affair. In making the transition there are many parts left over that somebody else may need. Somebody else may have something that you want badly. Why not swap?

The Daily News Radio Magazine will publish "swap" ads free, but the article to be traded must be radio equipment.

## RADIO WIRE

For Any and All Radio Purposes. All sizes, any quantity, any wiring. Largest and most complete stock on Pacific Coast. ALSO RADIO SUPPLIES. 150 4th Street, S. F.

## GET YOUR RADIO NEWS DAILY

The Daily News publishes a radio news department EVERY DAY—the largest and most complete in San Francisco. The Daily News is the ONLY newspaper that prints COMPLETE and ACCURATE programs of ALL the broadcasting stations, corrected every day up to press time. If you are not already a regular subscriber, fill out this coupon, send it in and have The Daily News delivered every afternoon at your home or office. The price is only 50 CENTS A MONTH.

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