

Thrilling \$500 Prize Story Begins

Radio Digest

EVERY
WEEK

PROGRAMS
Illustrated

TEN
CENTS

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*"Mounties" Greet Return of Arctic Sun; Dizzy Izzy's "Blah" Club; Women's Programs
When and Where Prize Story Radario Will Be Broadcast; How to Care for Batter'*

LOPEZ GIVES MEDAL TO PROMOTE PEACE

ANNUAL AWARD FOR BEST GOOD-WILL BROADCAST

Famous Musical Artist Believes Radio Greatest Medium to Break International Hatreds

The employment of the Radio as an effective channel for the advancement and maintenance of world peace was given fresh impetus recently when Vincent Lopez announced the establishment of the "Vincent Lopez Medal."

The well-known Radio artist stated that he would give annually an award to the individual who, in the opinion of a chosen committee, contributed the broadcast designed to bring about the greatest measure of international good will.

Shortly after Mr. Lopez returned with his musical artists from a recent European trip, he expressed the belief that the most effective means of breaking down international prejudices was through the medium of the Radio.

By International Committee

Mr. Lopez intends to award the medal with the assistance of a committee including representatives of each country in which Radio is extensively employed. In addition to these representatives he will ask prominent editors in the large American, European and South American cities to serve. This body will be known as the committee of recommendations, and the actual award will be decided upon by a further body composed of prominent American citizens and members of the various diplomatic corps in Washington.

The "Vincent Lopez Medal" will be designed by a prominent artist and will be cast of precious metal in combination with metal obtained from scrapped military and naval armament.

Pioneer Station to Return to Air Soon

WARC, Formerly WGI, Is Ready to Resume Broadcasting Under Powel Crosley's Direction

BOSTON, Mass.—When WARC here goes on the air shortly with their former wave length of 261 meters, fans will find that the interference that characterized the old station has been eliminated. The steel masts of the old "Amrad"—WGI station which radiated and caused considerable trouble, will not be used by the new station. All the equipment is new and just as soon as a suitable location for a Boston studio has been found, WARC again will be on the air.

WGI was formerly the station of the American Radio and Research corporation, the pioneer broadcaster of the country, although KDKA was the first to obtain a broadcast license and, thus, according to governmental records, the first broadcaster.

But WGI began sending June 5, 1915, and was on the air for six months before people in and around Boston could be convinced that with a crystal set they would be able to pick music out of the air.

The station is now controlled by a new corporation headed by Powel Crosley, Jr., who owns controlling stock, and Harold Powel, founder of the old Amrad concern and president of the new company.

Chez Pierre Studio Offers WJAZ Variety in Programs

CHICAGO.—The recent opening of the new Chez Pierre studio of WJAZ, Zenith station here affords a diversified program, partly dance music and partly semi-classical and popular music, which will be broadcast each Tuesday and Friday evening from 9:00 p. m. to 1:00 a. m., Central time.

At the Chez Pierre, Mr. Pierre Nuytens has his beautiful studio work shop, and it is this studio which is being used for a broadcasting room by WJAZ on these nights. Artists are surrounded here by thousands of dollars worth of original paintings and etchings. The atmosphere is conducive to inspire the artists' very best musical efforts.

KJBS Broadcasts Program as Fire Threatens Building

SAN FRANCISCO.—Despite a fire raging beneath its studio and operating room, and only eight minutes after the fire department had been called, KJBS, this city's "baby broadcaster," was on the air with a musical program. During the re, which for a time threatened the building housing the station, the studio as so filled with smoke artists could hardly sing for choking. Edward Ludes, of announcer, was hero of the day.

SOVIET WORKERS ARE INSTRUCTED BY RADIO

Red Government Uses Air to Spread Propaganda of Union

WASHINGTON, D. C.—Over a million Radio fans in the Soviet Union listen in on the programs of the government stations every day, according to a report of the Soviet Radio industry received by the Russian information bureau here. The number is increasing by scores of thousands each week.

Village libraries in 400 villages in Moscow and Leningrad provinces have been equipped with powerful receiving sets and loud speakers, and 300 workers' clubs in the two cities have been similarly fitted out.

The big transmitting stations at Moscow and Leningrad are wired to all the principal theaters, concert halls, public meetings places and lecture halls.

Beg Pardon!

KTAB, Tenth Avenue Baptist church, Oakland, Calif., was reported erroneously in Radio Digest as one of the broadcasting stations which disregarded one or more of the International Radio week silence periods.

This mistake, which occurred in the February 13 issue, is sincerely regretted inasmuch as KTAB has shown that it did not violate any of the silence periods. Although many listeners heard the call letters KTAB, some amateur is believed to have perpetrated the trick.

RUTH ALLANSON, HIT AT KYW, IS ON COVER

WITH the increasing popularity of the semi-classical program, grows the admiration for the girl whose face adorns the cover this week. She is Miss Ruth Allanson, staff artist at the Congress hotel of KYW, Chicago. She signed a contract the first of the year to sing exclusively from this station. She has a modulated soprano voice which she has cultivated especially for Radio broadcasting under the direction of Brunetti Walter. Miss Allanson was born in Anita, Iowa, and finished her high school education there. Later she finished at Iowa State and Kansas state universities. Her father, Edward G. Allanson, is a well-known pianist and composer of Des Moines, Iowa. Miss Allanson is on the Thursday evening program at KYW.

Station Changes

Three stations—WEEW, St. Louis; WHK, Cleveland, and KMMJ, Clay Center, Nebr.—are now operating on 1,000 watts. Another St. Louis station, KMOX, has been authorized to increase to 1,500 watts.

WCEE, the old Elgin station, has been leased by the S. W. Straus company and will be heard under the call WSW.

The Long Beach, Calif., broadcaster, KFON, is now owned by the Nichols and Warriner company.

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Looking Ahead

Next Week's Installment of Robert J. Casey's Thrilling Radio Mystery, "A Step On the Stairs," will carry readers into new complications. You will have to read the story, which appears exclusively in Radio Digest, to follow understandingly the dramatization as it is being broadcast from leading studios from coast to coast.

Those Fascinating Hill Billies Heard from WRC, Washington, D. C., will be seen face to face in the next issue of this periodical. They're the real thing and that accounts for the convincing way they do their stuff over the air. They are doing their share to bring the world to the remote hamlets in the mountains of Virginia, Tennessee and the Carolinas.

There is a Lingerin Romance and Glamor in the Island of Cuba with its old Spanish plantations, its quaint and picturesque social customs. These thoughts, perhaps, are in mind when we tune in PWX of Havana. The next issue of Radio Digest will print pictures and story of this interesting station.

Part IV on the Short Wave Receiver will next week describe trouble shooting and methods of adjusting this set. Connections of the batteries, etc. will be included for those building this outfit who are not sufficiently expert to understand how to do this themselves.

The Anti-Bloping Campaign should naturally include the construction of devices for prevention of radiation, (it is not re-radiation) so in the next issue the technical staff will describe how to build the Penetrola, a single stage of non-oscillating radio frequency amplification.

Milo Gurney Gets into Circuits with his next A B C article and, as his collection of hook-ups is most complete and varied, this chapter unfolding some of the mysteries of Radio should be unusually interesting.

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.....

NEWS BRIEFS FROM THE BROADCASTERS

WELL-KNOWN CARTOONIST INSTRUCTS OVER WTIC

Concert Master at WGN—WBAL Features Continuity Programs—John Drew on WEA Chain

Become a cartoonist this spring by tuning in for the series of lectures by Bud Kingston at WTIC, Hartford. A Radio course in art is a novel thing but Mr. Kingston does not stop there. He asks all his listeners to follow him by sketching as he talks and to send in their sketches for his approval. He will make corrections and suggestions and return the sketches. These talks are scheduled for March 5 and 19, April 2, 9, 16 and 23, and May 7 and 14.

Jacques Gordon, internationally famous violinist and concert master of the Chicago symphony orchestra, is offering a series of four concerts from WGN, Chicago. Mr. Gordon may be heard this week during the Tuesday program of this station. He will play his famous Stradivarius called the "Clara Schumann Strad" because it once belonged to the wife of the famous musician.

Musical continuity programs especially written for WBAL by Broughton Tall, one of Baltimore's musical writers and dramatists, will be the new feature of this station. "The Evolution of American Popular Songs" was the title of the first presentation of this type. The narrator, Harry Welker, took the audience from the vivid colorful colonial period to Irving Berlin's "Alexander's Ragtime Band."

John Drew, one of the most popular actors of the American stage appeared recently at WEA during the Eveready hour. He dramatized some of the scenes of "Rose Mary."

Comedy will rule the air from KGO, Tuesday evening, March 2, when James (Jim) Madison, famous maker of the Madison Budget of jokes, familiar to stage people, will appear before a KGO microphone reading some of his latest. He will also present a comic musical skit, "Musical Memories," assisted by the Sierra male quartet, which will show the evolution of the American popular song.

WJZ is now featuring operatic stars during the Sunday evening concerts. The second concert of the series was given by Madame Julia Claussens, mezzo-soprano and Paul Althouse, tenor, artist members of the Metropolitan Opera company.

"What the Army Does Besides Fight," will be the subject of the address given by Lieut. Col. H. Edmund Bullis of the war department general staff at KGW, Portland, February 27. He will give an interesting treatise on the peacetime purpose of the United States standing army.

One of the most popular features of the San Antonio station, WOAI, is the Mexican music given every Tuesday evening by the Gebhardt Mexican players. Jose Conrade Tovar, distinguished Mexican composer-pianist is the director.

Station WJZ will broadcast, as in past years the noonday Lenten services of the old historic Trinity church, every weekday except Friday and Saturday during the forty days of Lent.

Henry Field's station, KFNF, of Shenandoah, Iowa, gave a twenty-six hour birthday program recently. This not only celebrated the second anniversary of this station but also introduced its new Western Electric 1,000-watt equipment.

The rural comedy, "Interurban," written for the stage by W. T. Marrs, will be presented by the KGO players Thursday night, March 4.

A George Washington university program will be featured by WRC, Washington, D. C., February 27th, when prominent members of the faculty of the institution, together with the musical clubs and the debating society of the school will be presented to the Radio audience. The principal talk of the evening will be given by Dr. Wm. Mather Lewis, head of George Washington university.

Louis John Johnen, program director of WLW, Cincinnati, will sing five songs by John Masefield, set to music by Easthope Martin, on Sunday evening, February 28. Thomie Prewitt Williams will be the accompanist.

The United States Coast Guard band from the Coast Guard academy returns to WTIC, Hartford, for a series of five concerts. The first program will be given Friday, March 5.

CAN YOU SOLVE RADIO MYSTERY?

I WON'T BLOOP CLUB GROWING BY BOUNDS

IDEA GROWS OVERNIGHT TO NATION-WIDE CAMPAIGN

Move to Lessen Interference Makes Popular Appeal to Fans, Clubs Stations and Newspapers

Almost overnight, the I WON'T BLOOP CLUB has grown from an idea to a national organization. A plea for individual cooperation by broadcast listeners in an attempt to limit needless interference has suddenly developed into a mobilization of a vast army of Radio fans, a long string of broadcasting stations, many listeners organizations and numerous newspapers, whose avowed purpose is to improve Radio reception. With the fulfillment of the pledges received by the Radio Digest, a large percentage of blooming will be prevented and all sections of the United States and Canada will benefit by the movement.

The purpose of the campaign and the simplicity of the requirements has struck a popular appeal. The applicants for membership need only to pledge that they will operate their sets to reduce radiation or blooming, to equip them with anti-blooming devices in cases where it is thought needed, and lastly, if all other methods fail, to renew them with sets designed to limit howling and squealing.

Pledges Pouring In

It is quite impossible for the staff assigned to this work to keep abreast of the exhilarated movement, so popular has been the I WON'T BLOOP CLUB, and a count of the pledges being received daily cannot be given. Thousands of membership cards have been sent to the different organizations that have been granted charters in the club and are securing memberships. Upon receipt of pledges, the Radio Digest issues membership cards. A membership card in the I WON'T BLOOP CLUB signifies that you are doing what you can to help Radio.

Clubs Join Movement

A number of listeners clubs throughout the country have joined the Radio Digest in the campaign to eliminate interference and have joined the I WON'T BLOOP CLUB as organizations, being granted separate chapters. In several instances the membership pledge of the Radio Digest has been adopted by the organizations as a purpose. Among the Radio clubs who have applied for chapters are the Butte (Mont) Radio club, Broadcaster Listeners' association of Terre Haute, Indiana; Newton (Kansas) Radio club and the Columbus (Ohio) Radio league.

In line with the campaign being fostered by the Radio Digest, Chicago listeners have organized the Anti-Blooming association, with the signified purpose of educating the public to courtesy in the use of the air.

Another great force that is aiding to clear the air of preventable interference is the Prowler's club of the Chicago Evening Post Radio magazine. This was one of the first organizations formed with the expressed purpose of combining the efforts of Radio fans to improve reception.

The value of listeners' organizations cannot be over-estimated. In Great Britain, blooming has become so bad that the English are calling it a "plague of oscillation which is marring reception." Each week brings a record-breaking number of complaints to the British Broadcasting company.

New Station Chapters

Added to the list of more than a score of stations printed last week who have secured chapters in the I WON'T BLOOP CLUB, and are cooperating with the Radio Digest in clearing the air are KFAB, Nebraska Buick Auto company, Lincoln, Nebr.; WEAR, Goodyear Rubber company, Cleveland, Ohio; WHBP, Johnstown, Automobile Co., Johnstown, Pa., and CKY, Manitoba Telephone system, Winnipeg, Manitoba.

Station KNX, Los Angeles Evening Express, and WDAF, The Kansas City Star, besides offering the influence of their broadcasting stations have also lent their columns to advancing the I WON'T BLOOP CLUB. The Wilmington (Del.) Evening Journal, The New Orleans (La.) Item-Tribune and The Hartford (Conn.) Times have also offered to support the Radio Digest in the campaign.

The Radio Digest is at the present time printing a series of articles for the instruction of fans on how to prevent blooming and other forms of man-made static. Different types of receivers will be reviewed and the proper method of operation will be given. As yet, a set that will not regenerate has not been devised, but with care and knowledge, blooming

HUNDREDS WAITING FOR AIR LICENSES

WASHINGTON, D. C.—The Radio section of the department of commerce now has on hand between 250 and 300 applications for new Radio broadcasting licenses, with no wave lengths available and this in spite of the fact that officials of the department have repeatedly stated that there is no chance for the issuance of any more licenses at this time. All applicants are simply being notified that no licenses will be issued.

\$500.00 TO GO TO WRITERS WHO BEST UNTANGLE STORY

"A Step On the Stairs," New Phase in Literature, Will Be Put in Radario Form and Broadcast from Group of Leading Stations

"ALONE IN A CLASS"—DIELECTRIC



The golden voice of Mary Garden, "Our Own Mary," has added the invisible audience to its list of conquests. The famous opera star, who recently returned from Europe, is probably the most fervent Radio enthusiast among opera singers. Her program over WJZ, where she is here shown, is reviewed this week by Dielectric in "Condensed."

Readers of Radio Digest are afforded an opportunity in this issue to step off on a new and important phase of Radio entertainment.

Those who have been watching the rapid strides of Radio growth day by day, month by month and year by year, will behold in the presentation in this magazine, this issue, the first installment of Robert J. Casey's "A Step on the Stairs," the fruition of a new and significant phase of Radio literature.

It is a story written by a recognized author, technically familiar with Radio broadcasting, to bring out the latent effects concealed in the mystery of the average receiving set. He is opening a box of tricks new to readers and the listening world. He knows the art of weaving adroit situations that make the reader shiver with ghostly apprehensions, cry with tragic climaxes and laugh at comical incidents.

Author Well Fitted to Task

It would be hard to find anywhere in America a writer better able to do this particular piece of literature, for Mr. Casey has not only established his position as a fiction writer but he has written many technical articles on Radio. He knows the possibilities from the transmission end through his staff connection with the Chicago Daily News broadcasting station, WMAQ. In his own home he has a specially equipped laboratory for building and experimenting in Radio reception.

To the average listener there is a magic about the cabinet and the speaker that brings voices out of the silent air from all parts of the world. It is enveloped in a mystery that seems almost supernatural. It is capable of emitting sounds and noises created by the ephemeral atmosphere itself. What are these voices of the unseen world? We read about radiation and static and let it go at that. But Mr. Casey has written a story that will bring out sounds from the Radio horn hitherto unheard and in all probability will mystify even the most skilled of Radio engineers as to their cause. Will they be called forth from the world of the departed dead?

Can the Dead Return?

What is the basic force that makes the human mind function? What is telepathy? Is it not fundamentally Radio activity, a form of Radio transmission. Can the energy that starts a mass of brain cells into motion, that formulates thought and speech be propelled as the voice is propelled from the vibration of the fragile filament in a vacuum tube? Does this energy ever die? Can it be attuned, converted into controlled ether wave movement, refined to audible sensitiveness?

These are questions to be considered in the strange case of Peleg Turner in the first two chapters of "A Step On the Stairs," appearing in this issue of Radio Digest. Was it the voice of the dead Peleg that manifested itself, as he had predicted, through the Radio horn for the benefit of his heirs?

Gold Prizes for Best Solutions

Begin reading this marvelous story today and figure out your own solution to the mystery that haunted the old Turner manse. Was it natural or supernatural? Did both have a part and who was the living personality that shaped the tragic twists of fate?

Analyze it and prove your powers as a detective. Your ability will be rewarded not only by the satisfaction of knowing your own skill at unravelling a tangled skein of contradictory threads but by real money—real gold. The Radio Digest offers \$500 in Gold for the correct solutions to the enigma.

And here is the big surprise that was promised last week!

Leading Stations Broadcast as Play

Fred Smith, one of the most experience Radio dramatists in the country, has taken Mr. Casey's story and converted it living and spiritual personalities who come to you through the air. Radio 1 has offered this dramatization to a number of the strongest Radio stations.

(Continued on page 30)

can be abolished and interference limited. Do your share. Sign the pledge card of the I WON'T BLOOP CLUB today and mail it to Radio Digest and you will receive a membership card in the club. It will be your credentials that you are earnestly endeavoring to help Radio reception.

PLEDGE CARD Radio Digest I WON'T BLOOP CLUB

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

I pledge myself to operate my Radio set to reduce radiation or blooming. If I am unable to make my present set operate properly, I further pledge myself to replace it with a receiver that will create less interference.

Make of my set:	Signature
Number of tubes is:	Address
	City and State.....

I am cooperating in this campaign with Station.....
Upon mailing this pledge to Radio Digest, "I Won't Bloop Club" membership card suitable for wallet or framing will be issued.

Sun Greetings for "Mounties"

OLD VET of Royal Mounted Tells of Hardships Where the Night is 135 Days Long. Friends Send Radio Messages.



loves his God and fellow man up there is joining with the Eskimos in the Sun Dance. 'Tis a great occasion. Sure, he's only there long enough to promise he'll come back tomorrow, but seein' as it's the first time he's been nigh the top o' the world for 135 days it's worth the trouble."

* * *

"AREN'T you glad you're not up there any more, Uncle Jim?" asked the little lady who could not understand the heart of a soldier of the woods.

"In His Majesty's service, Margaret, a man is glad to be where his duty calls. If you are meanin' that duty does not call me there today, and tells me to be here, then here it is I'm glad to be. Though I think I could still do the Sun Dance with the best of 'em. Birthdays? Say, girl, when the sun forgets to shine for about five months, who's goin' to remember the birthdays in the dark—except that they're registered in the little black book of the command. And when they begin to accumulate past a certain number—

"But they're a merry crew above the

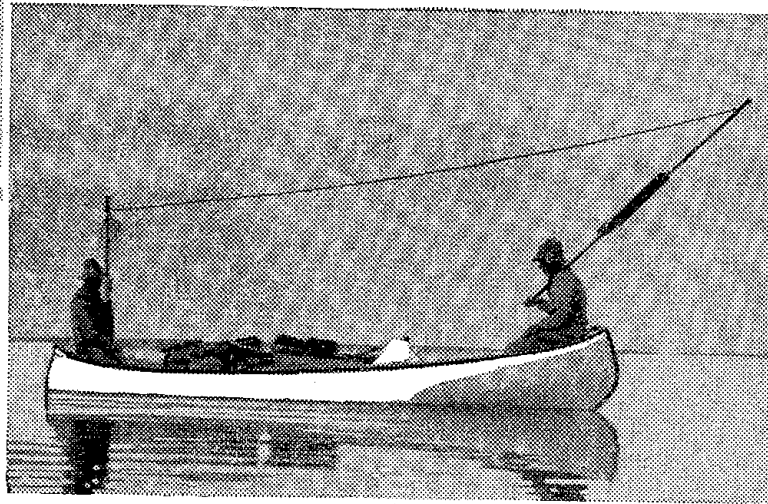
Arctic today. Old Sol hoists a bloody eye over the hills of snow and ice, gives one wink and is gone again to warm himself for returnin' tomorrow when maybe he'll be givin' two winks. Each day he'll come back for a little longer and soon he'll be squintin' long and warm through the black trees bringin' the sap from the ground. That'll start the leaves comin' and the country will become more beautiful which will please Old Sol inducin' him to stay longer and longer until midsummer he'll be payin' visits in the middle of the night and forget to go down at all.

"Sure and don't I know the truth of it myself and don't I know the pleasure of seein' the sun on the Twentieth of February, which is no less than the comin' of the mail that mushes all the way from Edmonton by the dog teams? It's hard enough to be shut off in darkness 3,240 hours and each hour a little longer than the last—no word between you and your kin and never knowin' whether your own are dead or alive. Oh, and don't I know, the feel of the deadly white fingers of the bristling ice that freezes and squeezes the very marrow out of your bones? But never was there a man whose hand was the law that would complain of that."

The old man turned again to his paper.

"Don't they have the telegraph up there?" asked Margaret.

"Now, I was just a-comin' to that," he ran a long, leathery finger (Continued on page 24)



Below are two little Eskimo pupils sent by Mrs. W. R. E. Moore, who, with her husband, teaches a school at Pilot Point, Alaska, 45 miles from the nearest white person. Mrs. Moore wrote to KMA, Shenandoah, Ia., telling of the Radio program they had received there and which was enjoyed by their Eskimo charges. Pilot Point, she described as "just a little jaunt" from Siberia, Russia.

JAMES CAMPBELL, retired sergeant of the Canadian Royal Mounted Police, found much to interest him in the pages of the Winnipeg newspaper as he sat by the kitchen range at the home of his nephew who lives in one of those boxed-up, steam heated apartments in Minneapolis.

Presently the old veteran of the Arctic frontier peered over the rims of his steel bowed spectacles as the cheery lady of the house busied herself in turning flapjacks and stirring the ham that was sizzling in the pan.

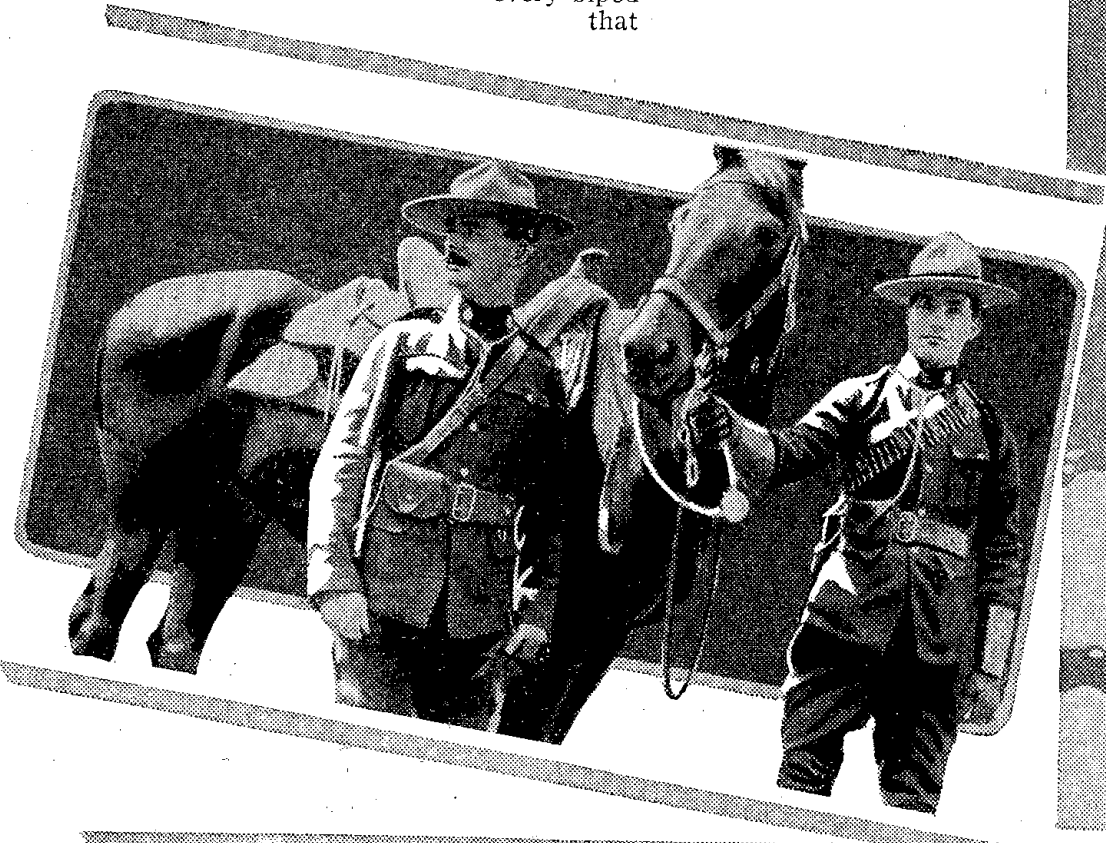
"Do ye mind that this is the Twentieth of February?" he observed.

"And what does that mean?" asked the lady, "Somebody's birthday?"

For a moment he seemed oblivious to his surroundings as he slowly folded his paper and dropped it on the edge of the table. He crooned a curious chant, low and guttural. Then he hopped to his feet and began a weird Indian dance about the kitchen floor.

"I'm pretty spry yet, what?" he paused in front of his chair and sat down again. "Today the sun is showing himself north of Fifty-Five and every biped that

At the top is Sergt. White of the Royal Mounted located at Pangnirtung on the Arctic circle, who received the special greetings sent February 20. In the canoe are shown two trappers on Sluice lake, who picked up a concert from Annapolis in their boat. Below, Sergt. Treadgold, left, and Constable Larry Higgins of Pond's Inlet, who received messages from friends with the appearance of the sun.



Girl Solves Izzy's Problem

EVERYBODY Who Wants to Join Blah Club at WOAW, Omaha, Must Ride the Brindle Cow with the Tinkling Lavalliere. Membership now 35,000 and 25,000 on Waiting List

DIZZY IZZY was serious. He had a Problem. Even to try to be a Radio clown and be compelled to worry along with a Problem on your neck is enough to make anyone serious.

Things were always coming up and Dizzy Izzy had to put them down—or he would forget them. It made no difference that he had Mike at WOAW, Omaha, in front of him and all the Woodmen of the World back of him.

There are lots of things in this world that stump even woodmen. And the Problem stumped Dizzy Izzy. Once he turned the "mikrophobia" upside down and stuck his finger against a hot wire when the Problem seemed to Present itself there. Four hundred sets went dead. Dizzy explained to a twisting audience that a crystal crab in Lincoln had snapped at the end of his finger and made the blood come.

Still the Problem haunted him. It crept out of his subconscious mind at all sorts of inopportune times and shinned up the microphone stand like a diabolical imp to taunt and prod him.

What was it? What did it all mean?

* * *

WHAT was income tax, philosophy, ethics, poetry, breakfast, matrimony, world court, zero, music, the Einstein theory, higher mathematics, theology, static, 100 per cent, Eighteenth Amendment?

These questions all seemed to be a part of his Problem. They streamed through his mind as he

nestled into a one-armed chair in Thompson's restaurant and drained the dregs of a loco weed sandwich.

His meditations were interrupted. A freakish looking girl with long hair done up in the old-fashioned way and skirts that came an inch below her knees approached with a glass of milk and a Bismark. Without even noticing Dizzy, she settled down cozily in the harbor across the arm of his chair. She tilted her glass of milk and Dizzy noticed that her throat was as white as the fluid she drank—even whiter. Her long lashes caressed her cheeks lovingly. Her slim, wax-like fingers had the daintiest tint of rosebud pink.

Dizzy admired the classic elevation of her alabaster brow. Suddenly he felt a surging desire to speak to her—to confide in her, to ask her advice as to his Problem. Here was one who surely would understand. He licked the last drop of the loco weed sandwich from the bowl and turned tremblingly toward the young woman.

"Kiss the cow and give her my regards," wrote one "Eoob" to Dizzy Izzy (right), chief potentate of the Blah club, WOAW, Omaha.



PARDON me, Miss," he stammered, taking his turtle shell specs from his eyes and wiping a green fog from the lenses with his paper napkin. "I hope you will pardon my, my-my, idiocy—idiocy—idiosyncrasy in speaking to you, but I have a very, very serious Problem, a very difficult Problem—"

"I'm not a school teacher, but I guess you are harmless, what is it?" She camly broke her Bismark.

"Well, I've been thinking of the meaning of things—everything, you know—"

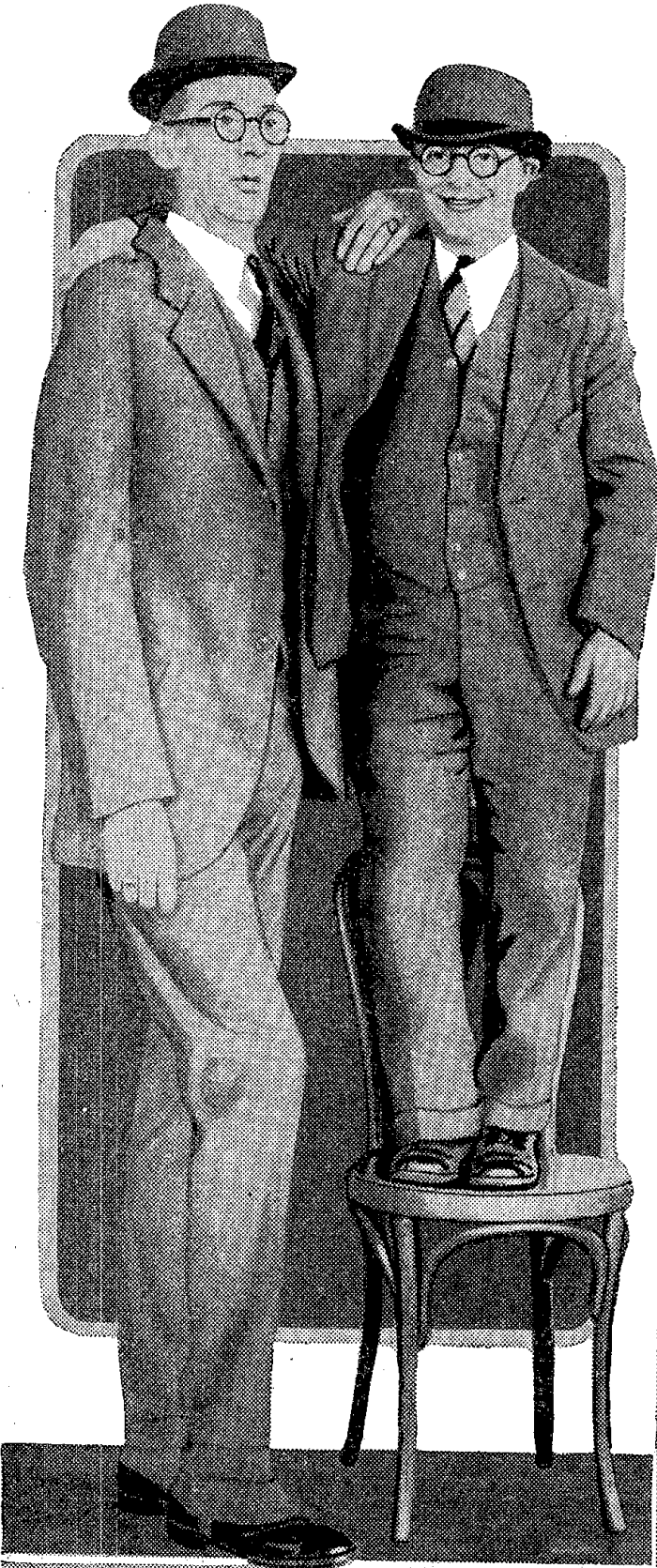
"For instance, what?" wiping a bit of red jelly from her dainty chin.

"Oh, just for example, we'll say love, matrimony, divorce, domestic—"

"Easy, old fellow; it's easy. The whole thing is just BLAH!"

(Continued on page 24)

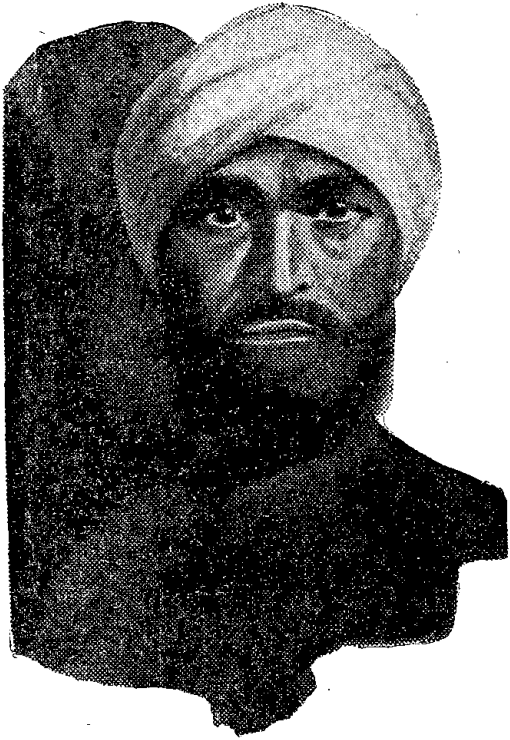
Sometimes Dizzy Izzy assumes human form and stalks forth as on the right. While again, is Izzy dizzy? He is at left aloft of a chair by "Eiffel Tower" Lew Farris. The Blah Therskites (below): standing, B. J. Sisk, composer; Fred Jessen, Sid Jolson (Cy Perkins), and "Gus." Seated: Ole, announcer; Louise Race and Izzie.



a STEP ON

Read—

THIS Thrilling Story and Hear It Broadcast in Radario Form from Your Favorite Station



The door swung open with the noiselessness of oiled hinges and a tall dark man in the garments of the East stood facing her... Indian, perhaps, or Malaysian.

CHAPTER ONE

The Disappearing Visitor

UNDER the whispering cedars a one-armed man stood motionless, shielding his eyes with his hand and peering through the blizzard—a almost impenetrable now that twilight was falling—toward the little boat landing at the foot of the driveway. There was a footfall on the brittle ice along the shore and then, presently, a ringing step on the packed snow near the park. The one-armed man stepped suddenly out of his shelter to confront a youthful figure in a heavy ulster. Recognition in such a light would have been impossible, even had the newcomer's face not been shielded by the long bill of a cap and the folds of a plaid muffler that crept up over his chin. Still, the one-armed man peered at him for a long time, silently and appraisingly.

"What do you want?" he demanded.

A youthful laugh answered him.

"Who are you?" countered the stranger.

"I'm Henry Millis," replied the one-armed man slowly. "I'm caretaker here. I was put here by Peleg Turner. I stayed here when his brother Jeremiah came here to live an' I know everybody they knew. . . . An' I don't know you."

"I dare say that's possible. What of it?"

Henry Millis paused unmindful of the blizzard driving into his face and seemed to be thinking carefully about his answer. . . .

"There's this about it," he said at length. "Nobody ever has come to this house from off the sea there an' brought any good with them. There was a boat tied up to the landing there the night Jeremiah was shot an' Johnny Carton disappeared. There was somebody walked down that landing the night Peleg Turner died. I seen him come. I didn't see him go. In the mornin' there was a boat floatin' out there on the bay bottom side up an' old Peleg was lyin' dead up there in the house. . . . An' now you come. You're the third."

"Yes, if your count is correct, I should be the third. . . . But I am no undertaker. I came across Pelican Bay in a launch because I had to be here by six o'clock. It wasn't such bad going until the snow began. I suppose I was lucky to get here but there's no mystery about it."

"Nobody's lucky to get here," growled Henry Millis. "Mind you, I'm givin' you

fair warnin' young feller. If you be long up there at the house them as is there already will know it. If you don't belong there God help you."

"I'll take my chances." And the gray ulster moved off to be lost in the grayer shadows under the storm swept cedars while Henry Millis resumed his post under the trees with his eyes turned toward the boat landing—watching, waiting. . . .

SAVE for the snow, driven in plummy masses across the bare front of the building and softening the harsh outline of red brick wall and red tile gable, the house was much as it had been when they carried old Peleg Turner's coffin out through the seldom used front door on what should have been his last voyage. The critical populace of Pelican Bay, admitted the changelessness of the Turner manse with considerable reluctance. It did not seem right that the taking off of so important a citizen should have produced so little physical effect upon the scenes with which he had been associated.

True, there was an air of permanence about the old place that had survived even its evil reputation. Nothing, so far as anybody knew had happened to it when Washington's men had impaled its first owner, a Tory spy, to that same front door with his own sword. Nor had there been any obvious results when another doubtfully identified gentleman of the Turner family had seen a ghost in the great, empty gunroom and had died

with his face in his glass of port although that was explained by some skeptics, it must be admitted, with the suggestion that he might not have seen a ghost at all—that apoplexy, abetted by alcohol, might have caused his passing quite as well as a supernatural visitation.

For generation after generation the house had stood there, firm as a fortress with its buttressed walls of Lincolnshire brick and its timbers of teak precisely as it had been when the first of the sea-going Turners had come home from the back-lots of the world and had built it for his Spanish bride.

Recently an ominous gloom had seemed to haunt the ancient abode. A depressed foreboding like a deepening shadow had seemed to spring from the darkened windows since the day that Jeremiah Turner had been found dead on the gunroom hearth, a bullet in his head.

The superstition grew from that very night when the lights that always had burned brightly in the gunroom had flickered out to be followed by the lifted latch that opened only to permit the passing of another Turner—through the door of death reserved by tradition for the final exit of the lord of the manor.

AN AUTOMOBILE crunched through the drifts under the porte-cochere and a girl alighted—a tiny figure against the massive outline of the hand-hewn ballustrades and door frames, even in the enveloping bulk of her fur coat. She raised the knocker at the side door

and dropped it gently to be startled by the resultant clang that echoed through the unseen corridors beyond.

The door swung open with the noiselessness of oiled hinges and a tall dark man in the garments of the East stood facing her. . . . Indian, perhaps, or Malaysian. Old Peleg had picked his servants in odd corners of the world.

"I am Mary Williams," she said. "I received a message to be here at six o'clock."

"You are expected," the man at the door told her. "There are others here. . . . They are in the the Big Room"—he seemed to be quoting a title rather than a description. "If the Sitt will give me her wraps, I shall be glad to escort the Sitt to the place of meeting. . . . One moment, please, here comes the caretaker. I think he wishes to speak with me."

The girl turned to see Henry Millis—now only one of many shadows under the porte-cochere—leaping up the three stairs from the driveway. She could see little of him even in the dim light from the hallway as he stopped at the threshold to address the Indian.

"There was somebody here, Hari Singh?" he asked. "A man with a gray overcoat and a plaid muffler? A young feller. . . . You ain't seen him?"

"There has been nobody here since you went down toward the boat landing," replied Hari Singh. "Nobody in the last hour except the lady here."

And Mary Williams marveled at the sudden panic in the eyes that were all she could make out of the haggard face of Henry Millis.

"Where did he go?" he demanded.

Hari Singh dismissed the matter with a shrug.

"Who knows where anybody goes?" he replied. "He may have been wise enough to change his mind about coming here."

"There ain't any good comes to the Turners from out of the sea," muttered Henry Millis. "That's what my grandmother said. That's what I say. No luck to the Turners out of the sea."

"So few of the Turners are left that it doesn't make much difference," deprecated Hari Singh. And he closed the door as Henry Millis stalked away into the deepening gloom.

CHAPTER TWO

The Voice of Peleg Turner

DINNER had been served in the high beamed hunt-room—a ghastly affair for the dozen strangers who had eyed one another suspiciously across the vast whiteness of the table. Now Hari Singh, soft-footed and uncannily efficient, had removed the napery and silver and polished crystal and the light from the wilting tapers in a ten-branched candlestick made little ineffectual pools of twilight in the black oak board.

The great beams of teak were lost in the shadows that gave the height of a cathedral to the ceiling. The paneled corners were in movement with weird reflections from the fire that was dying on the board hearth. About the room in the deep cushioned leather chairs that the first Turner had brought with his bride from Spain a hundred years ago, the strangers sat in isolated groups and talked in whispers as they appraised one another without pretext or shame.

Mary Williams was more fortunate than most of the guests at this strange banquet. She found herself seated next to a man whom she had met before. The extent of this good fortune was curtailed somewhat by the fact that she would rather have met almost any other man in the world. Still, she could talk to him and there was much about this affair that she could wish explained.

\$500 in Gold

FOR THE SOLUTION OF

a Step On the Stairs

WITH the beginning of this exclusive and pioneering effort in coupling a master serial novellette with its production as a Radio play at a selected few of the country's best broadcasting stations, Radio Digest wishes to announce that \$500.00 in Gold prizes will be awarded to the persons who can best solve the mystery.

The story, "A Step On the Stairs," is written by Robert J. Casey, an author whose works in the literary world need no introduction. Furthermore he is well versed in the needs of such fiction for Radio presentation. His work, in turn, is being Radio dramatized by Fred Smith, Managing Director of the United States Radio Society, who can be counted among the first few men to write and present Radio plays.

Read the story and hear it played weekly from the selected stations. Don't miss this thriller, whether or not you intend to submit a solution!

The chosen stations, which will broadcast "A Step On the Stairs" in Radio play form, are given on page thirteen. 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 appearing 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 unravelling the mystery accurately, will win. In the event that two or more solutions are absolutely correct, the method of preparing the solution—its neatness, legibility, etc.—shall be considered.

RULES OF CONTEST

1. The contest opens with the February 27 issue. All solutions must be received by Radio Digest 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 of Radio Digest, together with the announcement of the winners' names.

2. The contest is open to everyone except employees 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 but one side of paper, and names and addresses should be written or printed plainly.

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

The STAIRS

By ROBERT J. CASEY

Radio Dramatization by
FRED SMITH, *Managing Director, U. S. Radio Society*

Illustrations by HILMER C. OLSON

"That's Ardwyn, the lawyer," he whispered to her as they pushed back their chairs to a point at the end of the room where they could survey the entire company. "He's the sallow looking man with the wallet. The one there at the end of the table. He seems to be running the show."

"Just what are we all here for?" inquired Mary.

"Search me. It's a weird crew they've cast us with. I don't think I ever saw any of them before, although I suppose they're all related to Old Peleg one way or another."

"I was introduced to that man with the beard at dinner—the one next to the lawyer. He gives me the shivers to look at him. He reminds me of a pirate."

"Maybe he is. A little thing like piracy wouldn't bother a grand jury that ever started to look into the history of this family. I'd trust a good pirate farther than that self-elected saint over there beyond the hearth. She has a murderous eye and a tongue that's all honey and arsenic . . . Our Aunt Helen, they tell me. That's our Cousin William she's talking to—the scared rabbit in the undertaker's costume . . . Listen to her talk . . ."

THERE was a vibrant quality in the voice of Helen Holmes that lifted it above the low hum of conversation throughout the room. She did not seem to be aware of its carrying powers. She was talking earnestly with Cousin William on a topic that seemed to be of the greatest importance—herself.

"I have tried to live down the reputation of the Turners," she was telling him. "My poor dear husband—dead and gone these twenty years—he always used to say to me, 'Nellie, you're an angel on earth. Nobody'd ever suspect the tribe of hellions you came from.' That's what he used to say to me—an' Heaven knows I tried to be worthy of him."

"Oh, but I guess you were," came the

Ardwyn, the lawyer, took command of the situation by rising in his place at the end of the table.

"Don't allow yourselves to become overwrought, ladies and gentlemen," he suggested. "The hour is still earlier than I had counted upon when I set the time of the dinner at nine o'clock. I wished to give you all a chance to become acquainted with one another. That's what Mr. Turner wished when he asked me to call you all together here."

"Turner," gasped Henry Graves. "Why he's dead."

"HE WAS not always dead," replied the lawyer unemotionally. "But unlike so many of us born to a few brief days in this ephemeral world he foresaw that one day he must die . . . He foresaw it quite definitely after the tragic death of his brother and so he wrote out for me the documents which directed me to summon you here. I need not read to you the instructions he gave me as his lawyer. I have already summarized them. But this other paper is a message to you—to all of you—a word from Peleg Turner whom some of you helped to carry out through the front door on his last journey . . ."

Clearing his throat, Ardwyn adjusted his glasses, and held a sheet of foolcap toward the candle light.

The great beams of teak were lost in the shadows that gave the height of a cathedral to the ceiling. . . . About the room the strangers sat in isolated groups and talked in whispers as they appraised one another without pretext or shame.

and I ask that you pay close attention.

"I have felt the malign influence of this old house since I inherited it from my father, the elder Peleg Turner, twenty-

five years ago. It is because I have felt that influence that I have lived in it so little. I knew when my brother Jeremiah was killed in this room and John Carton, my dead sister's boy whom I had brought up as a son, disappeared so mysteriously, that I, too, must look forward to satisfying the fates of this house. That Frederick Ardwyn is reading this message to you is proof enough that my intuitions were well founded. I have passed on—and some of you must follow me before many days are out.

"It is my one consolation in leaving those I have loved that in death I shall know the solution of the mysteries that have brought such sorrows to my house.

"AT MIDNIGHT tonight, therefore, I shall attempt to communicate with you by the only instrument that gives a voice to the great unfathomable ether—the Radio. I shall speak to those assembled here and I shall tell them what I have learned of the secrets of this cursed house. The lights must be turned out and the guests whom I have caused to be gathered here will sit quietly before the Radio receiver, the dials of which have been set to the markings hereinafter designated."



softer voice of Cousin William in dutiful echo. "I guess you must have been. Yes, yes."

"Well I'd like to see the man as says I wasn't. Here were these Turners marryin' heathen wimmin in foreign parts an' piling up gold—the curse of the world if I do say it. And I knew somethin' would happen to them. Which it certainly has . . . Just like I said it would."

"Quite right. It certainly has . . . Right there where your foot is they found Jeremiah Turner with his face in the ashes. He was shot right between the eyes. And they say the look in his face was that of a man peerin' plumb into Hell. That's what they say—yes!"

Cousin William's voice had carried farther than he was aware and a sudden silence fell over the guests. White faces stared wide eyed into the candlelight.

"For God's sake keep quiet," commanded Henry Graves with unmistakable evidence of rasped nerves. And then

"When you, my relatives, the last of our clan, hear this message I shall be dead," continued the lawyer. "Frederick Ardwyn, my old friend and adviser, will be speaking for me. But more than that I shall be speaking through his lips

The lawyer stopped. There was a moment of silence, then a babel of hysterical comment.

"This is poppycock!" declared Henry Graves with a tone of conviction that his nervousness belied.

"Don't say that," advised Mary Williams. "You don't know . . . Perhaps Uncle Peleg knew. Perhaps he . . ."

(Continued on page 26)

New and better Uses No tube

Ends "B" battery
troubles

Andrew White "B" Radio Power Supply

for Alternating Current only
110 Volts 60 Cycle

After 15 years in radio I offer this power supply device as the best that can be produced. It has had the most rigorous laboratory tests and months of hard usage under difficult working conditions. I look upon it as a complete solution of the nuisance of replacing "B" batteries in your radio set.

J. Andrew White

Major J. Andrew White, America's famous sports broadcaster, pioneer radio editor, the country's first broadcast director and veteran radio dealer and manufacturer.

Shipped on a satisfaction or money-back basis on receipt of price in money order or currency.

Ready for use at all times, 135 volts of "B" battery current, all you need, now or in the future. It delivers steady supply, operating perfectly at all times all sets using up to 9 tubes. The new tubes and modern sets require 135 volts—don't buy less!

No Hum There is no hum. No noise at all. The current is delivered from EIGHT electrolytic cells. NO TUBES TO FLUCTUATE OR TO REPLACE.

Economical Takes so little current you will notice no difference on your electric light bill.

Durable Will deliver the full voltages you require for detector, radio frequency and amplifier tubes, strong and steady year after year, just as if you had brand new batteries all the time.

Convenient Plugs into electric light socket—nothing to get out of order at any time.

Improves Broadcast Reception

Large size condensers and steady current supply improve the performance of your radio set. You will have better quality of speech and music and greater volume.

No Parts Requiring Replacement or Renewal

A few territories now open for established dealers.

J. ANDREW WHITE, 37 West 43rd Street, New York

**135
Volts!!
Only
\$38**

*There is a great demand
Your dealer may not be able to supply you*

MAIL THIS COUPON TODAY

J. Andrew White, 37 West 43rd Street, New York.

Enclosed is \$38, for which ship me your new and better "B" Radio Power Supply at once, my money to be refunded if I am not satisfied and return the unit in 10 days.

Name

Street, RFD or Box No.....

Shipping Point.....

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

THOUSANDS OF FANS HELP IN MUSIC WAR

CROWDS SWARM WAY INTO BALL GIVEN FOR FUNDS

Southern California Stations Unite First Time to Aid N. A. B. in Financing Copyright Fight

LOS ANGELES.—Los Angeles listeners finally got their silent night—but for one night only, and on that night the interest was not in hunting the elusive wave of a far off broadcaster but in the big Radio ball and frolic of the United Broadcasters of Southern California.

Banding together as a body for the first time in their history, the stations of southern California promoted the big Radio ball and for one night forgot rivalry and jealousy—but, as one announcer put it, for one night only—and invited the public to turn out and see the Radio stars whose voices heretofore formed the only link between them and the public.

Raises Funds for Copyright Fight

The purpose of the ball, as explained by the United Broadcasters, was to let the general public in on the fight that is being waged by the National Association of Broadcasters for adequate and equitable legislation on copyrighted music, and the way the Radio public turned out at \$2 a head showed conclusively that they are with the broadcasters in this fight. The entire gross proceeds of the ball were forwarded to the headquarters of the National Association, the expense of the ball being entirely borne by the stations themselves.

Phil Cohen, local attorney for the American Society of Composers, Authors and Publishers, the organization that is the cause of all the agitation over the copyright question, attended the ball.

Thousands of Fans Attend

The ball was held at one of the largest and finest ballrooms in Los Angeles, El Patio, and was attended by thousands of fans to the capacity of the hall. Every announcer from all southern California stations, except the church broadcasters who could not be expected to participate in an event of this kind, was on hand to personally meet the public as well as a number of famous movie stars, among them being Leatrice Joy, Jetta Goudal, Ruth Roland, Alice Calhoun and Helene Costello. Adriene Dore, winner of second prize at the Atlantic City bathing beauty contest and judged America's most beautiful "girl in evening gown," was also present.

The program started at 8 p. m., Pacific time, and lasted until the last DX hunter had seen and heard his fill. Each of the cooperating stations, KFL, KHJ, KNX, KPSN, KFWE, KMTR, KFON, KFQZ, KNRC and KFXB, put on a short program with their particular stars, while dance music by massed bands furnished the crowd with entertainment between the many diversified acts.

Sport Broadcasts

Basketball

Saturday, February 27

WSUI, Iowa City, Iowa (483.6m-620kc), University of Chicago-University of Iowa, 7:30 p. m. Central time.

KUOA, Fayetteville, Ark. (299.8m-1000kc), University of Arkansas-Texas Christian university, 7:30 p. m. Central time.

WOL, Ames, Iowa (270m-1110kc), University of Washington-Ames, 7:30 p. m. Central time.

KFKU, Lawrence, Kan. (275m-1040kc), University of Kansas-University of Nebraska, 7:30 p. m. Central time.

WEAO, Columbus, Ohio (293.9m-1020kc), Northwestern university-Ohio, 8 p. m. Eastern time.

KUOM, Missoula, Mont. (244m-1230kc), Oregon Agricultural college-University of Montana, 8 p. m. Mountain time.

WIP, Philadelphia, Pa. (508.2m-590kc), University of Pennsylvania-Columbia university, 8:30 p. m. Eastern time.

Thursday, March 4

WOL, Ames, Iowa (270m-1110kc) Kansas Agricultural college-Ames, 7:15 p. m. Central time.

Hockey

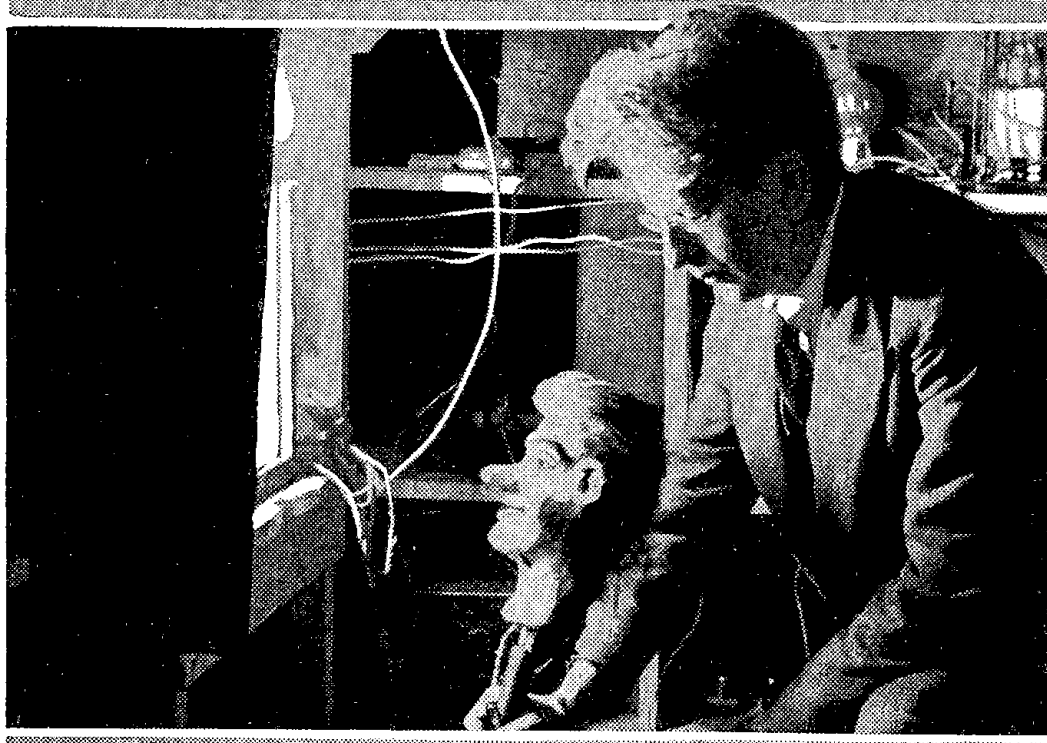
Tuesday, March 2

WBZ, Springfield, Mass. (333.1m-900kc), Boston Bruins-Canadians, 8 p. m. Eastern time.

New Station for Chili

WASHINGTON.—A new broadcasting station is under construction at Santiago, Chile, and is expected to be in operation by June 1. The station, which will be owned and operated by the Compania Radio Chilean, will operate on 400 meters with 1,500 watts power. The call letters of the station will be CMBA.

SENDS LIVING PICTURES BY RADIO



J. L. Baird, of Glasgow, Scotland, above, has demonstrated a new form of Radio television with the device pictured here. He may exhibit in the United States soon.

"I DO NOT transmit photographs, or want to," declares J. L. Baird, the noted English engineer and inventor, who has invented an apparatus for television.

"I transmit," says Mr. Baird, "anything that happens to come before the transmitting end of my thoughts, its movements, and its form, with full detail. Television stands in the same relation to movement as broadcasting does to sound."

In a demonstration of his device in London, England, the inventor moved over several switches, started a motor, and lit several tubes. At first slowly, but with increasing speed, a thin sepia-colored line of light began to move across a ground plate glass screen at the end of a short black tunnel.

Inventor's Head Shown

When everything was running at the right speed the screen was evenly lit with a flickering light very similar to that produced by the early cinematograph.

"I will now put a doll's head before the transmitting apparatus and you can see the detail," said Mr. Baird, and in stooping to pick up the doll's own head and shoulders came before the eye of the apparatus, and the whole process of stooping down, picking up the doll's head, and placing it in position was clearly visible on the screen, even to the light and shade on his face as he moved about.

In another room a special portable receiver stood, called by Mr. Baird the "television." This was started and adjusted much as a Radio receiver is adjusted, and it reproduced what the transmitter was "seeing." This included the head of a man who walked about and opened and shut his mouth and eyes.

Radio engineers are confident that the era of commercial television is not far distant, and it is asserted that television sets, as well as Radio sets, will be placed on the market at a reasonable cost this year. Five hundred of Mr. Baird's sets are now being manufactured.

Efforts are being made, it is reported, to have Mr. Baird demonstrate his apparatus in the United States next fall at the Radio World's Fair in New York city. Arrangements are being negotiated.

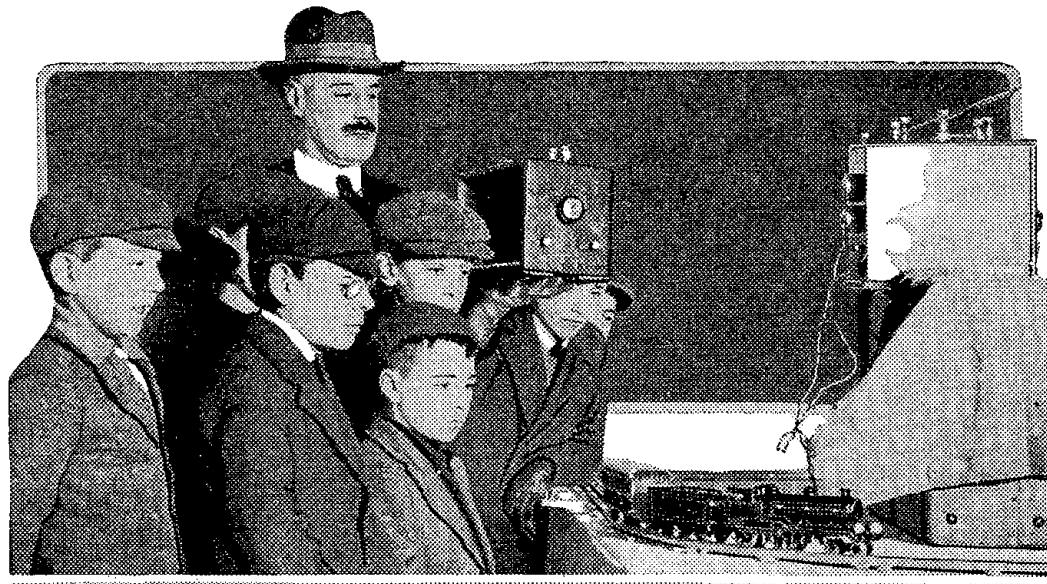
Canadian Broadcasters Unite to Promote Radio

Association to Improve Sending and Receiving Conditions

TORONTO.—All Radio stations in Canada are represented in the Canadian Association of Broadcasters which has recently been organized. The necessary formalities were concluded here at a meeting of representatives of the Canadian broadcasting stations. The following officers were elected: J. N. Cartier, CKAC, Montreal, president; M. Johnston, CFCA, Toronto, vice president; A. R. McEwan, Canadian National Railways Radio department, Montreal, secretary-treasurer; G. M. Bell, CKCK, Regina, and R. H. Combs, CKNC, Toronto, directors.

The announced purpose of the association is to improve the standard of broadcasting, to promote the interests of the owners of receiving sets, and to spread by means of Radio a wider knowledge of Canada, its advantages and opportunities.

ETHER IMPULSES CONTROL TRAIN



Major Raymond Phillips, London, England, holding control box in his hand, tells English schoolboys how ether waves can be made to control miniature train.

LONDON.—A model train controlled entirely by Radio was a feature of the School Boys' exposition which was recently conducted here.

Major Raymond Phillips, inventor of the system, declares there is no reason why it should not be applied to passenger trains.

In demonstrating his invention, he stood about sixty feet from the model. In his hand was a little box with an ordinary "buzzer" attached to it. As he touched the handle the train started away with a roar, but at another touch stopped,

and then went backwards for a distance.

The achievement is accomplished by an adaptation of the ordinary principles of Radio transmission.

"I could take the driver away from a passenger train," the inventor stated, "without making any difference to the running. All that would be needed would be a fireman to stoke up the boiler, which would supply the steam in the ordinary way. Radio would operate the regulator of the locomotive and brakes."

The device does not transmit power to the locomotive.

SMASH PRICE FIXING IN NEW WHITE BILL

HOUSE COMMITTEE ADDS TEETH FOR MONOPOLY

Also Inserts Provision for "Federal Radio Commission" to Regulate and Administer Radio

By L. M. Lamm

WASHINGTON, D. C.—The White Radio bill, as it has been reported to the house of representatives by the merchant marine committee, contains several important changes over the bill as it was introduced early in the session.

For one thing the committee inserted a new monopoly clause in the bill which was also contained in the White bill of the last session of congress. This section, known as section four, as it is now contained in the bill reads as follows:

Anti-Monopoly Teeth Added

"Section 4. It shall be unlawful for any person, firm, company, or corporation, in any manner or by any means, (a) to send or carry, or to cause to be sent or carried, from one state, territory, or possession of the United States or the District of Columbia to any other state, territory, or possession of the United States; or (b) to bring, or to cause to be brought, into the United States or into any of its territories, or possessions from any foreign country, any Radio vacuum tubes or other Radio apparatus or any of the parts of either, whether patented or unpatented, accompanied or then or at any time affected or impressed by or with any condition, agreement, instruction, obligation, or limitation, the purpose or effect of which is to fix the price at which the purchaser may resell the same, or to prohibit or restrict the parties by whom or the purposes for which said tubes and apparatus or the parts thereof may be used."

Want Federal Commission

The committee has also inserted a provision in its reported bill which states that this act shall not apply to the Philippine Islands or the Canal Zone and provides that in Radio international matters these two places shall be represented by the secretary of state.

A still further change was made in the bill in that the United States was divided up into five zones instead of nine, and that there are to be five members of what is to be called, according to the new bill, the "Federal Radio Commission," instead of nine members as provided for in the original White bill.

Not more than three of these members are to be of the same political party and "no member of the commission shall be financially interested in the manufacture or sale of Radio apparatus or in the transmission or operation of Radio telegraphy, Radio telephony, or Radio broadcasting." The other changes in the bill as reported out by the committee are minor ones.

WGY Celebrates with Voice of 50,000 Watts

Broadcast Birthday Program Up from Nine Cities

SCHENECTADY, N. Y.—WGY, the broadcaster with the 50,000-watt voice, celebrated its fourth birthday on February 20 by broadcasting a program picked up from nine cities. Six other stations broadcast the program simultaneously.

When WGY first went on the air it had a 1,000-watt voice. Today it is licensed to speak regularly with 5,000 watts power and on Saturday and Sunday the station may express itself with ten times greater power or superpower. Further, WGY sometimes speaks with four different voices simultaneously for its words and music may be picked up on 41 meters, 109 meters, 1560 meters and 379.5 meters.

Hearing on Radio Monopoly Is Postponed Until April 1

WASHINGTON, D. C.—At the request of attorneys for the Radio Corporation of America, the taking of further testimony by the Federal Trade Commission in its Radio monopoly case was postponed from February 15 until April 1. This case has been postponed time after time, but generally at the instance of the commission itself. The hearing when it is continued will be held in New York city.

Associate Justice Broadcasts

NASHVILLE, Tenn.—Associate Justice Edward T. Sanford of the United States supreme court was speaker of honor over WSM here recently when the George Peabody College for Teachers held an alumni reunion via the air. Over ten thousand alumni in various parts of the country listened in.

CINCY'S CIVIC RADIO BOLSTERS BUSINESS

WSAI LIFTS VOICE OF CITY TO NATION OF LISTENERS

Programs Go to 400,000—Business Picks up—Citizens Gain New Self Respect

CINCINNATI.—When a city has reached the stage where it can pick business out of the air, it has achieved about the last word in commercial enterprise. The distinction belongs to Cincinnati.

Some weeks ago Cincinnati began a series of twenty Monday night community Radio concerts, broadcast over station WSAI, and made Radio and commercial history in so doing. It was the first time that a community, as such, had found its voice, and that voice was lifted to make the world happier. "These super-programs," the community broadcasting committee of the Chamber of Commerce announced, "are Cincinnati's contribution to the happiness of the world."

Unsolicited Business Turns Up

Business was not solicited—not even suggested—in connection with any of the programs. Indeed, it was made a hard and fast rule at the very outset that the concerts would be kept free from any suggestion of commercial advertising. Not even the name of the owner of the broadcasting station is permitted to figure in the announcements.

And yet, such is the magnetic power of Radio in the highest form of its application, that it is already yielding returns far beyond the expectations of those who fathered and fostered the community broadcasting project. The best and most lasting return, of course, is good will; and that the programs inspired from the beginning. And coming now, in increasing volume, is a return in the way of business to Cincinnati manufacturers and merchants.

Programs Go to 400,000 People

Many Cincinnati concerns have adopted a policy suggested by the community broadcasting committee, of sending monthly announcements to their respective mailing lists, in which the programs for the ensuing month are listed. Nearly 400,000 such announcements were mailed out last month. In addition, the programs are printed in the house organs of scores of other concerns.

The Cincinnati community concerts are under the direction of Fred Smith, one of the more popular Radio announcers. In conjunction with Edward J. Hoff, chairman of the community broadcasting committee, he has developed programs of an exceptionally high artistic standard. This goes, too, for the "Syncopated Hour," with which each program is concluded.

WENDALL HALL MAKES BIG RECORD CONTRACT

"Red-Headed Music Maker" to Be Exclusive Star

CHICAGO.—Wendell Hall, noted song composer, whose name has been linked with Radio for the last five years, has scored the greatest "hit" of his meteoric career. The "Red Headed Music Maker," as he is familiarly known to Radio fans all over the world, has signed a \$100,000 contract with the Brunswick-Balke-Coller company to make records for them exclusively.

Papers were signed recently in New York which make the international Radio favorite one of the highest salaried artists of Syncopation and Jazz fame. Mr. Hall will record his latest compositions for Brunswick and also will sing many other popular song hits. He is to make sixteen recordings a year.

"A Celebrity a Day," New Feature at Station WGN

CHICAGO.—A novel feature, entitled "A Celebrity a Day," has been inaugurated by Station WGN, here. Each day a recognized leader in some field appears before the WGN microphone and gives a talk pursuant to his particular line of endeavor. Among those who have taken part in the new feature are: Richard Barthelmess, screen star; Garr Williams, cartoonist; Fielding H. ("Hurry-Up") Yost, Michigan athletic mentor; and Frank O. Lowden, former governor of Illinois.

"Alarm Clock Hour" at KMA

SHENANDOAH, Iowa.—To find a spot on the air where it would not be interfered with by any other station, KMA, May Seed and Nursery company here, now has an "alarm clock hour" of entertainment beginning at 6:00 a. m. Central time.

Voice Culture Is Given Through Denver Station

KOA Broadcasts Vocal Instructions To Students and Teachers

DENVER.—What is believed to be America's first Radio course in voice culture, was launched here recently by Station KOA of the General Electric broadcasting chain.

Thousands of listeners, especially voice teachers and pupils in small centers of population, have seized upon this opportunity to learn more concerning the principles of voice training. Lessons are given during the Monday evening educational program and are intended primarily as a supplement to personal instruction by resident teachers.

KGW WILL INSTALL HIGH-POWERED SET

PORTLAND STATION TO USE 1,000-WATT EQUIPMENT

Arrangements Complete to Have Super-Station Operating and New Studios Ready by April

PORTLAND, Ore.—Station KGW, the Morning Oregonian broadcaster here, has announced that within the next two months a superpower transmitter of 1,000 watts of power will be installed to replace the 500-watt equipment now in use. All arrangements have been com-

pleted for the inauguration of the new station around the middle of April.

The set now in use at KGW has been in daily use for the past four years, but with the improvements planned the station will enjoy the distinction of being the highest-powered, precision-built transmitter in the Northwest. Beautifully furnished double studios with an adjoining control room and artistically designed reception room for waiting artists, and a three-room office suite will add to the dignity of the enlarged station.

Berlin Broadcasts at 2LO

LONDON.—Irving Berlin, famous song-composer, who is here on honeymoon with his bride, formerly Ellen Mackay, daughter of the president of the Commercial Cable company, has broadcast from 2LO on the subject of the composition of popular melodies.

Radiotone Loud Speaker

Now Only \$19⁹⁵
Was \$25⁰⁰

The BEST Radio Affords

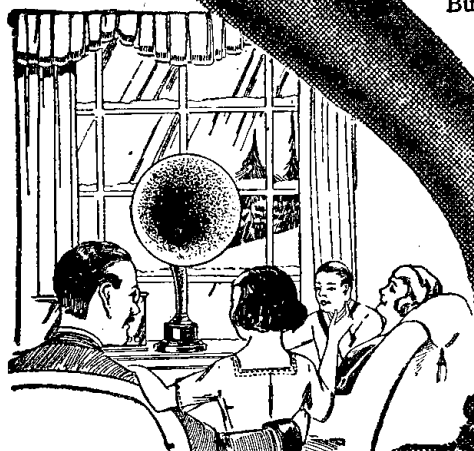
\$1.00 down!



"A Wonder" says user:—

"The Loud Speaker is a wonder. I never heard anything like it. I put it to a little test a few nights ago and it was heard clear and loud nearly one-half mile from my place through an open window."

Burton W. Cooswell, Brockton, Mass.



With the Radiotone all the family can enjoy your radio at the same time!

Makes Your Radio Complete

The Radiotone is the last word in sound reproduction and amplification for radio sets. It is super-sensitive. Brings in distant stations with full volume so every one in the room can hear distinctly and easily. Wonderful clearness and absolute purity of tone. No distortion. No crouching in front of the loud speaker to hear announcements.

The Radiotone has a 14-inch horn made of Thorite in one piece without seam or joint, acoustically correct. This eliminates the metallic clang you often hear in other loud speakers. The reproducing unit is entirely enclosed at the base of the horn. The well balanced construction does away with all vibrations. The Radiotone has a graceful shape with a beautiful black florduline finish. It stands 23 inches high and weighs only 15 lbs. No extra batteries needed for the Radiotone—just plug it in as you do your head set. Nothing to wear out or get out of order. Sent complete with cord and plug.

30 Days Trial!

When the Radiotone comes, there's nothing to pay. Use it freely at our risk, on trial for 30 days. See how much more use and fun, you and all the family get from your radio with this loud speaker. See how loud, clear and distinct the Radiotone brings in all stations—better than any other loud speaker you've ever heard, giving you the best that is in your set. After 30 days trial if you think you can get along without the Radiotone, return it to us and we will refund your dollar plus all transportation charges. No red tape. The trial costs you not a cent.

Straus & Schram, Dept. R-9812 Chicago, Ill.

Enclosed find \$1. Ship special advertised Radiotone Loud Speaker, I am to have 30 days free trial. If I keep the Radiotone, I will pay you \$3.00 monthly, total reduced price, \$19.95. The Radiotone is to become my property as soon as you receive the final payment. If not satisfied, I am to return it within 30 days and you are to refund my money and any express charges I paid.

Radiotone Loud Speaker No. Y8728A—\$19.95

My Name.....
(Head of the family must sign this order. If you are not of age, have your parent or guardian order for you.)

My Street Address.....
R.F.D. or Box No.....

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

My Shipping Point..... I have lived in this Town..... years

And before that I lived in..... Town..... State..... for..... years

Occupation is..... Age..... Married.....
Give names of merchants who know you personally

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

Name..... Town..... State.....
If you have ever bought goods on credit by mail, tell us from whom. If there is anything else you wish to tell us about yourself, write on a piece of paper and enclose it with this coupon. But the coupon alone, fully filled out, ought to do. That's all we want to know and we're ready to ship the goods at once. No formalities. No C.O.D. We trust rich and poor alike when they merely show us that they are honest.

\$3.00 a Month

But if you decide to keep the Radiotone, pay only \$3.00 a month until you have paid the special reduced price—only \$19.95. See if you can equal this offer anywhere on such amazingly liberal terms. You'll scarcely feel those small monthly payments. Surely, now, you can afford to have the Radiotone—the best loud speaker—and get the most fun out of your radio set for all the family.

Send Coupon NOW!

Seize this opportunity on this special offer. Only \$1.00 with the coupon brings the Radiotone on 30 days' trial, satisfaction guaranteed, your dollar refunded if not satisfied. Send the coupon now while this special offer lasts.

Straus & Schram
Dept. R-9812 Chicago, Illinois

LEMON OR CUSTARD PIES HARD TO MAKE

HOW TO KEEP UNDERCRUST FIRM IS BIG PROBLEM

Miss Betty Crocker Gives Two Methods of Preparing Great American Dessert Properly

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 WEAF, WEAF, WCAE, WGR, WEAB, 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

ONE of the questions we have had to answer hundreds of times is "How can I make a custard pie or perhaps a cream or lemon pie, without having a soggy undercrust?" And another that comes as often is "How can I make a nice creamy meringue that will stand up and not shrink and be tough?" I am going to try to answer these problems for you.

It is very important that the undercrust of any pie be well baked and not soggy, not only because a soggy crust is unpalatable, but also because it is indigestible. There are several ways of baking crust for the one crust pie. For cream, chocolate or lemon pies, the crust is usually baked before the filling is put in. You may also use this plan for custard pie if you wish. Sometimes for pumpkin and custard, we bake the crust in a very hot oven for five minutes, then add the filling and continue baking at a lower temperature. If the crust is not baked first, it may be protected by a coating of egg white so that the liquid of the filling will not soak into it. Beat the egg white just enough to break it up, then brush it over the pie crust before the filling is put in. This is a good method to use for juicy fruit pies or custard or pumpkin pies when the filling is baked in the uncooked crust. When the crust is

PAVES THE WAY TO MEN'S HEARTS



Miss Vivette Corman, shown above, has won thousands of friends among the housewives of the country through the daily Table Talks of Westinghouse Station KYW, at 11:35 a. m., Central time, and the correspondence received at the station shows she has a host of admirers among the married men, who claim the Table Hour has given them a lot to be thankful for.

baked before the filling is added, the egg white is unnecessary.

Difficult Problem

It is very difficult to bake custard pies successfully, because of the fact that the crust and filling require entirely different temperatures. All pie crusts or

pastry of any kind should be baked in a very hot oven so that the steam and the layers of air in the dough may expand quickly to make a flaky crust. On the other hand, the custard filling is made of eggs and milk, both of which are tough

(Continued on page 12)

SHORT WAVES

By Marcella

"That adorable" (Gladys's adjective) announcer of KYW who keeps his voice in trim from the Congress hotel studio and known as Harold Isbell, can also be crossed off the prospect list, for he is happily married. My, my, this KYW outfit sure keeps the ministers busy! Harold is in charge of the "Insomnia Club." Formerly of KFI, Los Angeles. No, I'm not sure whether his wife was ever in the movies. He lives in Maywood, a western suburb of Chicago, but that's nothing against him. He has nice, curly hair and wears the latest in clothes. No mustache. What's the idea—are mustaches becoming popular with us ladies again? Well, yes, I do like a neat one, but hate them waxed.

Anna, who is interested in Paul Johnson, the tall, handsome, brunette medic-announcer of WCCO, will no doubt be grieved to learn that after announcing a four-hour American Legion revue from the Gold Medal station, Paul had to go to the hospital and have his tonsils removed. However, he is still six feet two or three inches tall and his voice is even more sympathetic now. Married? No.

Why should a broadcasting station engineer receive so much applause, eh? "Romeo and Juliet," both of 'em, want to know if Walter C. Evans, "that charming Chief Engineer of KYW," is married. The answer is yes.

Jack Nelson, WJJD's charming voice, is handsome, thin and—married. Another heartbreaker eliminated! But I'm sure, if you write to Mrs. Nelson, she will be glad to tell you all about what a fine husband Jack is.

How-Do-You-Do Man Harry Geise, ex-WIBO, Chicago, regarding whose whereabouts many of my girl friends seem anxious, is now out in the land of palm and pepper trees, grease paint and celluloid—in other words, Hollywood, where men are men and long pants and hats to be shunned. Harry has been appearing at the various Los Angeles and Hollywood stations and probably will soon be a fixture at one of them. He likes Holly— (Continued on page 12)

WOMEN'S PROGRAMS INDEX

Saturday, February 27				Tuesday, March 2				Friday, March 5			
Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific
9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.	9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.	9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.
WWJ (352.7m-850kc)	Tonight's dinner.			WWJ (352.7m-850kc)	Tonight's dinner.			WWJ (352.7m-850kc)	Tonight's dinner.		
11	10	9	8	11	10	9	8	11	10	9	8
WEAF (389.4m-770kc)	Home service talk.			WEAF (389.4m-770kc)	Home service talk.			WEAF (389.4m-770kc)	Home service talk.		
WHT (399.8m-750kc)	Women's club, Jean Sargent.			WHT (399.8m-750kc)	Women's club, Jean Sargent.			WHT (399.8m-750kc)	Women's club, Jean Sargent.		
12 n.	11	10	9	12 n.	11	10	9	12 n.	11	10	9
WGN (302.8m-990kc)	Household hints.			WGN (302.8m-990kc)	Household hints.			WGN (302.8m-990kc)	Household hints.		
1 p. m.	12 n.	11	10	1 p. m.	12 n.	11	10	1 p. m.	12 n.	11	10
KMA (252m-1190kc)	Domestic science topics.			KMA (252m-1190kc)	Domestic science topics.			KMA (252m-1190kc)	Domestic science topics.		
12:30	1:30	10:30	9:30	12:30	1:30	10:30	9:30	12:30	1:30	10:30	9:30
WGN (302.8m-990kc)	Discussion of fashions.			WGN (302.8m-990kc)	Discussion of fashions.			WGN (302.8m-990kc)	Discussion of fashions.		
12:35	1:35	10:35	9:35	12:35	1:35	10:35	9:35	12:35	1:35	10:35	9:35
KYW (535.4m-560kc)	Table talk.			KYW (535.4m-560kc)	Table talk.			KYW (535.4m-560kc)	Table talk.		
4	3 p. m.	2 p. m.	1 p. m.	4	3 p. m.	2 p. m.	1 p. m.	4	3 p. m.	2 p. m.	1 p. m.
KJR (384.4m-780kc)	Tonight's dinner.			KJR (384.4m-780kc)	Tonight's dinner.			KJR (384.4m-780kc)	Tonight's dinner.		
Monday, March 1				Wednesday, March 3				Thursday, March 4			
Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific
9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.	9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.	9:30 a. m.	8:30 a. m.	7:30 a. m.	6:30 a. m.
WWJ (352.7m-850kc)	Tonight's dinner.			WWJ (352.7m-850kc)	Tonight's dinner.			WWJ (352.7m-850kc)	Tonight's dinner.		
11	10	9	8	11	10	9	8	11	10	9	8
WEAF (389.4m-770kc)	Home service talk.			WEAF (389.4m-770kc)	Home service talk.			WEAF (389.4m-770kc)	Home service talk.		
WHT (399.8m-750kc)	Women's club, Jean Sargent.			WHT (399.8m-750kc)	Women's club, Jean Sargent.			WHT (399.8m-750kc)	Women's club, Jean Sargent.		
12 n.	11	10	9	12 n.	11	10	9	12 n.	11	10	9
WGN (302.8m-990kc)	Household hints.			WGN (302.8m-990kc)	Household hints.			WGN (302.8m-990kc)	Household hints.		
1 p. m.	12 n.	11	10	1 p. m.	12 n.	11	10	1 p. m.	12 n.	11	10
KMA (252m-1190kc)	Domestic science topics.			KMA (252m-1190kc)	Domestic science topics.			KMA (252m-1190kc)	Domestic science topics.		
12:30	1:30	10:30	9:30	12:30	1:30	10:30	9:30	12:30	1:30	10:30	9:30
WGN (302.8m-990kc)	Discussion of fashions.			WGN (302.8m-990kc)	Discussion of fashions.			WGN (302.8m-990kc)	Discussion of fashions.		
12:35	1:35	10:35	9:35	12:35	1:35	10:35	9:35	12:35	1:35	10:35	9:35
KYW (535.4m-560kc)	Table talk.			KYW (535.4m-560kc)	Table talk.			KYW (535.4m-560kc)	Table talk.		
4	3 p. m.	2 p. m.	1 p. m.	4	3 p. m.	2 p. m.	1 p. m.	4	3 p. m.	2 p. m.	1 p. m.
KJR (384.4m-780kc)	Tonight's dinner.			KJR (384.4m-780kc)	Tonight's dinner.			KJR (384.4m-780kc)	Tonight's dinner.		

AN EVENING AT HOME WITH THE LISTENER IN IN CENTRAL TIME

Table listing radio stations by call letters, location, and broadcast times for Saturday through Friday. Includes stations like ATQ, CFCA, OFCN, etc.

Table listing radio stations by call letters, location, and broadcast times for Saturday through Friday. Includes stations like WORD, WOS, WPG, etc.

STATIONS IN ORDER OF WAVE LENGTHS

Table listing radio stations in order of wave lengths, with columns for Meters, Call, and Station name. Includes stations like 217.3 WOK, 226 WBBM, etc.

LEMON OR CUSTARD PIE

(Continued from page 11)

ened if baked at a high temperature. That means that if the oven is hot enough for the crust, the filling will be watery, and if the temperature is right for the filling the crust will be soggy. So no wonder that you have had trouble.

This is the way we solve that problem. Put the custard pie into a very hot oven for about 15 minutes to set the crust, then reduce the heat a slow oven so that the filling will not be overcooked. If you do not have a thermometer to gage your oven temperature, I would advise you to bake the crust five minutes in a very hot oven (about 500° F.) then add the filling and continue baking in a moderate oven. This is the way we make custard pie in our Gold Medal Model Kitchen:

Two eggs, 1/4 cup sugar, 1/2 teaspoon of salt, 2 cups of milk, 1/2 teaspoon of vanilla, nutmeg.

Method: Beat the eggs slightly. Add sugar, salt, milk and flavoring. Pour into the crust. Place in a very hot oven and bake 15 minutes, 450° F. Reduce the temperature to 350° F. moderate oven and continue baking until done. This amount will make one nine-inch pie. If you use the other plan which I suggested, bake the crust five minutes in a very hot oven, then add the filling and bake about 40 minutes in a moderate oven, 350° F.

Recipe for Lemon Pie

There are many kinds of fillings for lemon pie, but the favorite seems to be the clear lemon filling covered with meringue. This is the kitchen tested recipe for lemon pie:

One cup sugar, 1/4 teaspoon of salt, 6 tablespoons of flour, 1 1/2 cups of water, 5 tablespoons of lemon juice, grated rind of 1 lemon, 1 teaspoon of butter, 2 eggs.

Method: Mix sugar, salt and flour together. Add water and cook until clear. Add lemon juice, grated rind and butter. Add the beaten egg yolks and cook 2 minutes. Pour into a baked pie shell. Make a meringue of two egg whites and 2 tablespoons of sugar. Cover pie with meringue. Bake 20 minutes in a slow oven, 300° F.

And now for the meringue. The texture of the meringue will depend very much upon the freshness of the eggs used, and it will be tender or tough according to the temperature used in baking. Always remember that eggs should never be cooked at a high temperature because long cooking or high temperature toughens eggs. Therefore, your meringue should be baked in a slow oven, and never in a hot oven. Meringue made of granulated sugar seems to be the most satisfactory because it has a much better flavor than one made with powdered sugar. A meringue made of powdered sugar is lighter and fluffier and stands up better, but I think you will find that meringue made with granulated sugar is more satisfactory.

I hope that I have answered some of your questions and given you some suggestions that will help you to make a more perfect pie.

A mammoth glee club concert was broadcast recently by WEA, New York, when the third annual concert of the Associated glee clubs, directed by Walter Damrosch, was sent over the ether.

SHORT WAVES

By Marcella

(Continued from page 11)

wood, likes California, likes the climate, (adv.), and intends to stay and, in the words of Rob Wagner, become a Californian. And finally, to crush many maidens' hearts, I must add that he is married and has a daughter.

To get rid of a bunch of correspondence all at once, I shall now dwell upon the "Ray-O-Vac" twins. This will take care of the nice, complimentary notes from D. H., "Miss Blarney," and a number of other friends who seem anxious regarding this duo. Both are married. Both sing. Russell Wildey is the pianist. Both are natives of Chicago, and have dark complexions and hair, which is natural, considering the soft coal smoke prevalent in their home town.

Another boy chum gets curious! J. W. McC. wants me to "find out if Kay Ronayne, my favorite Radio entertainer, thinks Rube Bloom is the best piano player in the country? If not, who, or any ideas she may have?" Well, J. W., Kay tells me that she thinks Murray Bloom is the best. Close anyway, but she hastened to remark to me to tell you that she always accompanies herself. And she never gets the piano out of time with her singing, which proves she is a good accompanist.

"Sweet Adeline" is on the right trail. Inquiries about a bachelor by the name of Lambdin "Tot" Kay, of WSB. Ever heard of him? Sure. Where has he gone? Still at Atlanta, although you probably tuned in for him while he was away for a few days helping out some other broadcaster. He is popular that way.

Why ask me if I am married, John N? I told you several issues back that I was free and footloose. Sure, send on the candy, I have a pet Pekinese that loves it!

Do we of the Digest ever list Jack Little under any other name in the programs, asks L. H. No, dear sir or madam, as the case may be, I nor we never do. It's always Jack Little in print, although he doesn't always advise us early enough of his route to keep you informed.

Uxtry, Uxtry! Phillips Carlin, popular WEA announcer to be divulged. Watch Marcella's further efforts in a future issue, may be the next. I'm only now trying to find out if he is married or not, and what his favorite dessert is. When I tell you, I bet he'll be inundated with his pet delicacy, if your letters are a barometer of your fervor.

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

WEMC TO OPEN SUPERPOWER STATION

Saturday, February 27

brook, soprano; Will Rossiter, Romo Vincent; Johnny Poats, baritone; artists.

WRR, Dallas, Texas (246m-1220ke), 12-1 p. m., musical program; Helen Culppepper; Dr. Fred Freeland, pianist; John Thorwald, tenor; 6-7, dinner hour concert, Jack Gardner's orchestra.

WSAI, Cincinnati, Ohio (325.9m-920ke), 7:50 p. m., radio chime concert, Robert Badgley; 8:15, Bicycle Playing Card sextet; 12 midnight, Freda Sanker's orchestra.

WSB, Atlanta, Ga. (428.3m-700ke), 8 p. m., Atlanta Atwater Kent hour; 10:45, Rogers Red Head club.

WSM, Nashville, Tenn. (282.8m-1060ke), 6:30 p. m., concert, Francis Craig's orchestra; 8, barn dance program and features.

WSMB, New Orleans, La. (319m-940ke), 9:30 p. m., Cotton Pickin' twins; Ray McNamara, pianist.

WSOE, Milwaukee, Wis. (246m-1220ke), 8:30 p. m., Sunday school lesson; 9, Lakefront studio program; Frank Hegli, violinist; Adolph Suppan, clarinetist; Carl Bauman, pianist.

Mountain Time Stations

KFWA, Ogden, Utah (261m-1150ke), 4-5 p. m., organ recital, Paramount theater; 5-6, Ogden Radio dealers program; 9-10:30, music, Paramount theater; 10:30-12, Ole Reeves and his dance orchestra.

KFXF, Colorado Springs, Colo. (250m-1200ke), 8:30-11 p. m., musical program.

KOA, Denver, Colo. (322.4m-930ke), 12:15 p. m., Bialto theater organ recital, Marjorie Nash; 9, dance program, Harmony Peerless orchestra; 10:30, dance program, Scheuerman's Colorado orchestra.

Pacific Time Stations

KFI, Los Angeles, Calif. (467m-642ke), 5:30-8 p. m., matinee; 6:15, KFI's seeing California; 6:30, vest pocket program; 7-8, Paul Roberts, pianist; Frank Barry, tenor; 8-9, All-American string quartet; 9-10, program, KFI, KPO; 10-11, Packard Radio club; 11-3 a. m., KFI midnight frolic, Don Meaney, master of ceremonies.

KFOA, Seattle, Wash. (454.3m-660ke), 9:30-11 p. m., Jackie Souders' club.

KFON, Long Beach, Calif. (232.4m-1290ke), 6-6:30 p. m., Brayton's theater organ; 8-9, Press-Telegram studio; 9-11, KFON artists frolic.

KFWB, Hollywood, Calif. (252m-1190ke), 8-9 p. m., Lyric string trio; Eunice Wynn, blues singer; Ray Kellogg and Bill Hatch, the jazz twins; Ashley sisters in vocal duets; 9-11, Oakland Six dance orchestra, Len Nash, leader.

KGW, Portland, Ore. (491.5m-610ke), 12:30-1:30 p. m., concert; 6-7, dinner concert; 9-12 midnight, dance music, Multnomah hotel; intermission piano solos, Curt Kremer.

KHJ, Los Angeles, Calif. (405.2m-740ke), 8-11 p. m., program, Motor Transit company with Uncle Remus.

KJR, Seattle, Wash. (384.4m-780ke), 8:30-10 p. m., program, I. C. Warner company.

KMTR, Hollywood, Calif. (238m-1260ke), 6-7 p. m., Starr Piano company studio; 8-10, KMTR concert orchestra.

KNX, Hollywood, Calif. (336.9m-890ke), 5:30 p. m., Leighton's Arcade cafeteria orchestra; 6:30-7, Atwater Kent orchestra; 7:30-8, feature program; 8-10, KNX studio program; 10-11, Coconut Grove dance orchestra, 11-2 a. m., Fillmland frolic.

KPO, San Francisco, Calif. (428.3m-700ke), 1-2 p. m., Rudy Seiger's Fairmont hotel orchestra; 2:30-3:30, matinee program; 3:30-5:30, Cyrus Trobbs's Palace hotel concert orchestra; 6:35-7:30, States restaurant orchestra; 8-9, band music; 9-10, program, for Earle C. Anthony, Inc.; 10-12, Fairmont hotel dance orchestra; Maurice Gansky, tenor; Merton Borjes, pianist.

KGO, Oakland, Calif. (361m-830ke), 4-5:30 p. m., concert orchestra, Hotel St. Francis; 8-10, program, Salvation Army Western Territorial band; Ellen Clark, pianist; Roy Getney, Russian baritone; Jennings Pierce, tenor; 9:45, "A Step On the Stairs," Radio Digest serial mystery play; 10-12, Girvin-Deuel's California Collegians.

KPSN, Pasadena, Calif. (315.6m-950ke), 8-9 p. m., Star-News concert; Louise Klos trio, other artists, 9-10, dance orchestra, Maryland hotel.

KTAB, Oakland, Calif. (240m-1250ke), 12-1 p. m., luncheon concert.

Sunday, February 28

Headliners Today

Eastern 5 p. m.	Central 4 p. m.	Mountain 3 p. m.	Pacific 3:30
KOA (322.4m-930ke)	Music hour		3:30
WBAL (246m-1220ke)	Max Rosenstein, violinist		5:15
WEMC (285.5m-1050ke)	Opening of superpower station		6:15
WEAF (491.5m-610ke)	WEEL, WCAP, WFI, WJAR, WGR, WCAE, WSAI, WWJ, WOC, WCCO, WGN, WEAR, KSD, WTAG, Atwater Kent program		7
KTBS (374.8m-800ke)	Classic hour		7:30
KPRC (296.9m-1010ke)	Minstrel chorus		

Sunday, silent night for: CFAC, CHIC, CKNC, CNRA, CNRC, CNRE, CNRM, CNRO, CNRR, CNRT, CNRW, CNRF, KFAB, KFAU, KFKX, KFKU, KFOA, KFVE, KFVA, KFXF, KXK, KMA, KMTR, KOAC, KOB, KOWW, KSAC, KSO, KUOA, KWSC, PWB, WABO, WAHG, WCAD, WDAF, WEAQ, WEEB, WEBW, WFI, WGES, WGH, WGP, WGST, WHAD, WHAS, WHAZ, WJAZ, WJLD, WJR, WKAF, WKAQ, WKAR, WMAQ, WMZ, WMC, WNYC, WOI, WRC, WRVA, WSB, WTAM, WTIC.

Eastern Time Stations

CFCA, Toronto, Can. (356.9m-840ke), 11 a. m., St. Paul's Anglican church; 7, Timothy Eaton Memorial church.

CHIC, Toronto, Can. (356.9m-840ke), 5 p. m., organ recital, George H. Graham.

CKCL, Toronto, Can. (357m-840ke), 3-4 p. m., St. John's Presbyterian church choir; 4-4:55, Memorial Central Y. M. C. A.

KDKA, Pittsburgh, Pa. (309.1m-970ke), 11 a. m., church service; 4 p. m., Dr. Charles Heinrich, organist.

WBAL, Baltimore, Md. (246m-1220ke), 6:30-7:30 p. m., twilight program; WBAL concert orchestra; Max Rosenstein, violinist.

WBBR, New York, N. Y. (273m-1100ke), 2 p. m., Watchtower orchestra; 2:20, Fred Twaroschik, tenor; 2:45, Fred Twaroschik; 3:30, Fred Twaroschik; 3:40, Watchtower orchestra; 9, Watchtower string quartet, 10, Watchtower string quartet.

WBZ, Springfield, Mass. (333.1m-900ke), 10:45 a. m., Community church; 6 p. m., Ary Duffer, violinist; Alexander Blackman, violatist; George Brown, cellist; Hans Ebell, pianist; 7, Copley Plaza orchestra; 8, program, Holy Cross college.

WCAP, Washington, D. C. (468.5m-640ke), 11 a. m., First Church of Christ, Scientist; 4 p. m., Bethlehem chapel.

WCAU, Philadelphia, Pa. (277.6m-1080ke), 5 p. m., recital; 5:51, undenominational church services, Rev. John W. Stockwell, pastor; 5:35, recital; 6:45, Clarence Seaman and his Hotel Pennsylvania concert orchestra; 7:45, Cathay Tea Garden concert orchestra; 8:30, Bonwit-Teller Light Opera company; 9, Potash and Perlmutter.

WCX, Detroit, Mich. (516.9m-580ke), 7:15 p. m., serv-



Crystal Palace orchestra; 3:30, Arrowhead inn tea dance orchestra; 9:30, Shackley trio.

WGCP, New York, N. Y. (252m-1190ke), 3 p. m., Wm. Voelk's Oriole serenaders; 3:30, Milton Yokeman, tenor; 3:45, Kanter, Cohen, Moore, ukulele, guitar, banjo; 4, Sylvia Miller, soprano; 4:15, orchestra.

WGR, Buffalo, N. Y. (319m-940ke), 10:45 a. m., Westminster Presbyterian church; 7:45 p. m., Central Presbyterian church; 9:15, jointly with WEAF, Atwater Kent program.

WGY, Schenectady, N. Y. (379.5m-790ke), 11 a. m., Union Presbyterian church; 12:30 p. m., Symphony society concert; 3, musical program; 5, Dr. Frank Sill Rogers, organist, assisted by T. Roy Keefer, violinist; 7:30, Union Presbyterian church; 9, program, WJZ; 10, Godfrey Ludlow, violinist.

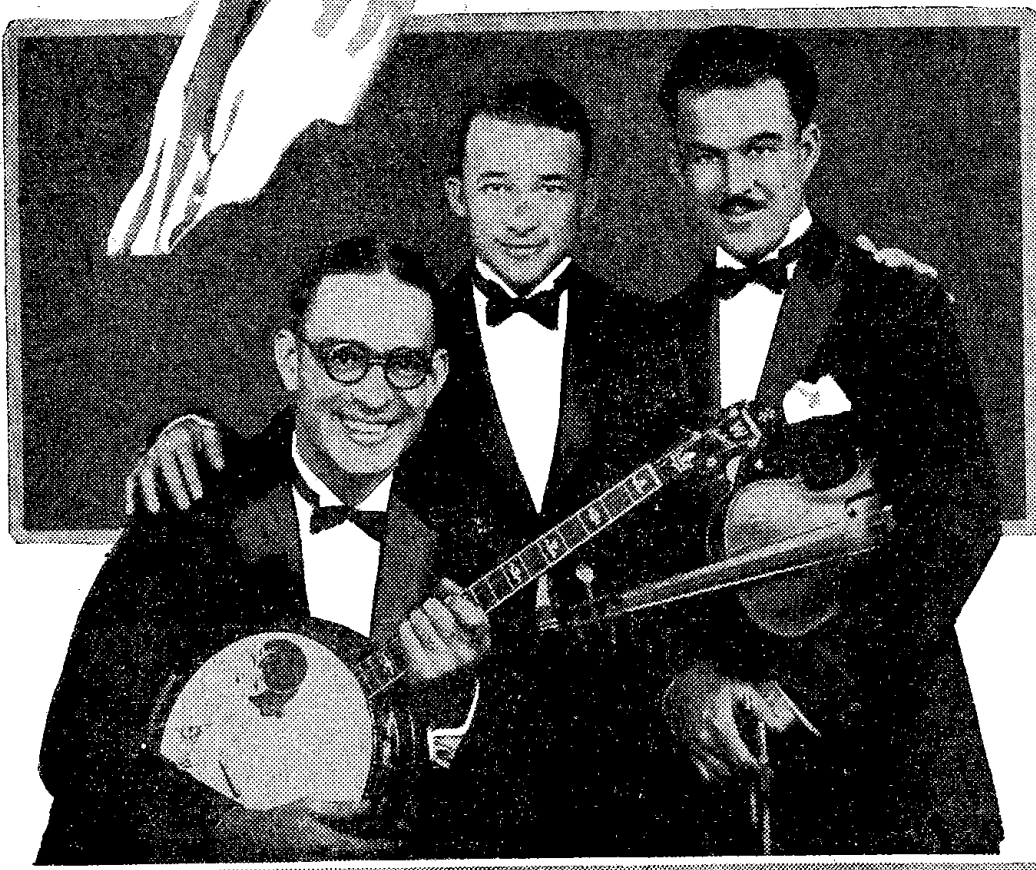
WHAR, Atlantic City, N. J. (275m-1090ke), 10:45 a. m., morning services, Chelsea Baptist church; 2:15 p. m., sacred recital, Seaside hotel trio; 2:45, sermon; 7:50, Chelsea Baptist church; 9, "With the Classics."

WIP, Philadelphia, Pa. (508.2m-590ke), 4 p. m., "The Blight of Bigotry," talk by Arthur Walwyn Evans; 7:15, services, Holy Trinity church; 9:30, Ben Stad and his WIP Little Symphony orchestra.

WJAX, Jacksonville, Fla. (336.9m-890ke), 11 a. m., and 7:30 p. m., church services.

WJZ, New York, N. Y. (454.3m-660ke), 12:30 p. m., Sunday symphonic society; 2:30, Radio forum; 4:55, St. George's Vespers service; 7, Hotel Pennsylvania orchestra; 8, Bakelite hour; 9, orchestral concert; 10, Godfrey Ludlow, violinist.

A charming hostess is Anne Louise Lawless, left, who receives the visitors and guests of Station WBZ, Springfield. The three bonny gentlemen below are called the Sunny South trio, and are from left to right, Bill Eastwood, banjoist; Milton Marcour, pianist; Oscar Marcour, violinist. They play during the dinner hour on Mondays, Fridays, Saturdays at WSMB.



ices, Central Methodist Episcopal church, Guy Phillips, organist.

WEAF, New York, N. Y. (491.5m-610ke), 2-3 p. m., Greater New York Federation of Churches; 3-4, Young People's conference; 4-5:30, men's conference in Bedford Branch Y. M. C. A.; WEAF, WEEL, WTAG, WCAE, WSAI; 6, George Barrere's Little symphony orchestra; 7, moment musical; 7:20-9:15, musical program, Major Edward Bowes and "Capitol Family" to WEAF; 9:15-10:15, Atwater Kent Radio hour to WEAF, WEEL, WCAP, WJAR, WGR, WCAE, WSAI, WWJ, WOC, WCCO, WJAR, KSD, WTAG, WFI, WGN; 10:15, "The Arctic from the Air," Donald B. MacMillan.

WEAR, Cleveland, Ohio (389.4m-770ke), 3:30 p. m., Godyear concert orchestra afternoon musical; 7, Loew's theater orchestra; 7:45, fireside hour; 8:30, Vincent Percy, organist.

WEEL, Boston, Mass. (348.6m-860ke), 2 p. m., Golden Rule hour of music; 3, Chamber of Commerce organ recital; 7:20, Major Edward Bowes and his Capitol family; 9:15, Atwater Kent artists; London string quartet.

WEMC, Berrien Springs, Mich. (285.5m-1050ke), 8:15 p. m., Martha Hutchinson, soprano; Mrs. Leila Beuchel, contralto; Maitland Alfred, tenor; T. H. Madison, violinist.

WFI, Philadelphia, Pa. (394.5m-760ke), 6 p. m., George Barrere and his little symphony orchestra; 7, moment musical; 7:30, Arch St. Presbyterian church.

WGBS, New York, N. Y. (315.6m-950ke), 3 p. m., Arcadia cafe concert orchestra; 7, Benjamin Franklin hotel organ recital; 7:30, Benjamin Franklin concert orchestra.

WLWL, New York, N. Y. (288.3m-1040ke), 8 p. m., Paulist Choristers, sermon, Rev. J. H. Sullivan.

WNAK, Buffalo, N. Y. (266m-1130ke), 10:25 a. m., services, First Presbyterian church; 7:30 p. m., service, Churchill Tabernacle.

WVCA, New York, N. Y. (340.7m-880ke), 11 a. m., Fifth Church of Christ, Scientist; 3 p. m., Minot Simons, D. D., "What to Think in Religion," All Souls church, Unitarian; 3:30, Donald Flamm's frolicers; 5:30, Woodmansten Inn orchestra; 6, Roemers Homers; 7, Ernie Golden and his Hotel McAlpin orchestra; 7:30, Olcott Vail and his Hotel McAlpin string ensemble; 8:45, Mayolians; 11, Jack Denny's orchestra.

WOO, Philadelphia, Pa. (508.2m-590ke), 10:30 a. m., services, Bethany Presbyterian church; 2:15 p. m., services, Bethany Sunday school; 6, organ recital, Clarence K. Bawden.

WPG, Atlantic City, N. J. (299.8m-1000ke), 3:15 p. m., Arthur Scott Brook, organist; 4:15, vocal and instrumental recital; 9:15, Hotel Traymore orchestra; 10, Arthur Scott Brook, organist.

WREO, Lansing, Mich. (285.5m-1050ke), 6-7 p. m., dinner concert; Speed-Wagon serenaders; Gold Standard ensemble; 10, dance program, Speed-Wagon serenaders.

WTAG, Worcester, Mass. (268m-1120ke), 4-5:30 p. m., music, Gloria Trumpeters; Mr. and Mrs. Howard Kimsey, baritone and accompanist; 7:20-9:15, musical program.

Atwater Kent Program, February 28, over WEAF and Chain*

London String Quartet—James Levey, 1st violin; Thomas Petre, 2nd violin; H. Waldo Warner, viola; C. Warwick Evans, cello.

- I. Two movements from American Quartet in F..... Dvorak
 - (a) Lento
 - (b) Finale
- II. An Irish Melody.....Bridge (Londonderry Air)
- III. Andante from Quartet in A, Opus 18, No. 5.....Beethoven
- IV. Nocturne.....Borodine
- V. (a) A Cherry Ripe.....Bridge
- (b) Variations from Emperor Quartet.....Haydn

*The WEAF chain for the Atwater Kent hour (9:15 p. m. Eastern, 8:15 p. m. Central time) includes WEAF, WFI, WGR, WCAE, WCAP, WJAR, WTAG, WGN, KSD, WCCO, WOC, WSAI, WEAR, WEEL, WWJ.

gram, Major Edward Bowes and the Capitol family; 9:15-10:15, Atwater Kent Radio hour; London string quartet.

WTIC, Hartford, Conn. (475.9m-630ke), 3 p. m., concert, Hartford Symphony; 5, organ recital.

Central Time Stations

CKY, Winnipeg, Can. (384.4m-780ke), 7 p. m., St. Stephen's United church; 9, program.

KFAB, Lincoln, Neb. (340.7m-880ke), 4-5 p. m., vesper service; 9-10, Sunday evening musical.

KFDM, Beaumont, Texas (315.6m-950ke), 11 a. m., service; 7:30 p. m., First Presbyterian church.

KFMX, Northfield, Minn. (336.9m-890ke), 7-8 p. m., college vesper service.

KNFN, Shenandoah, Iowa (263m-1140ke), 10:45 a. m., First M. E. church; 2:30 p. m., Golden Rule song service; 3, Swedish Mission church; 6:30, Golden Rule circle; 7, Christian church service.

KFRU, Columbia, Mo. (499.7m-600ke), 7:30 a. m., sunrise service; 9:20, Bible class; 7:30, evening student service.

KLDS, Independence, Mo. (441m-680ke), 11 a. m., Stone church services; Robert Miller, organist; Stone church choir; Mrs. Arthur Riddolls, soprano; 3 p. m., sacred program; 6:30, vesper service; KLDS quartet; Mary Fields, soprano; Mrs. Mary Curtis, soprano; Mrs. Frank Goode, contralto; Gladys Goode, contralto; Irwin Moorman, cornetist; Wingfield Lewis, baritone; sermonet, 9:15, Pauline Becker Etzenhauser, organist; Lillian Green, violinist; Herbert Fraher, baritone; Margaret Gard, contralto.

KMA, Shenandoah, Iowa (252m-1190ke), 12:15-1:15 p. m., sacred song service, Mrs. May; 4-5, church choir music; 5-6, Bible study, G. H. Van Houten.

KMMJ, Clay Center, Neb. (229m-1310ke), 2:30 p. m., sacred program; 8:30, religious service.

KPRC, Houston, Texas (296.9m-1010ke), 9:50 a. m., services Trinity Lutheran church; 8 p. m., Trinity Lutheran church services; 9:30, Prairie View State Normal chorus, colored.

KSD, St. Louis, Mo. (545.1m-550ke), 6:15 p. m., St. Louis Post-Dispatch concert orchestra.

KTBS, Hot Springs National Park, Ark. (374.8m-800ke), 11-12 noon, services, Central Avenue Methodist church; Arthur Platz, organist; 9-9:30, classic hour, Eastman hotel orchestra; 9:30-10, Toni Cochard and Clyde Foley, popular songsters; New Arlington hotel grand ensemble, Lon Chassy, director; 10-11:30, Arkansas Traveler Limited special train frolic, Benny Ford and his DeSoto orchestra.

KYW, Chicago, Ill. (536m-560ke), 11 a. m., Central church; 2:30 p. m., studio chapel service; 4:30, studio concert; 7, Chicago Sunday evening club; 9:30, classical concert.

WAMD, Minneapolis, Minn. (244m-1230ke), 6:15 p. m., George Osborn's orchestra; 6:45, WAMD players; 9:30, Gayle Wood.

WBAP, Fort Worth, Texas (475.9m-630ke), 11 a. m., First Presbyterian church; 12:30 p. m., kiddies' hour; 5-6, Morrow's Family quartet; 9:30-11, Chief Gonzales' Texas Hotel Royals.

WBBM, Chicago, Ill. (226m-1330 ke), 12:30-2 p. m., classical program; 4-6, afternoon concert; 8-10, Maurice Silverman; Moulin Rouge orchestra; Vivian Sheffer, contralto; Pauline Stiller Atlas, violinist; Rudy Winter, Floyd Falch; 12-2 a. m., Nutty club; Moulin Rouge orchestra.

WCAL, Northfield, Minn. (336.9m-890ke), 8:30 a. m., Norwegian church; 9:15 p. m., St. John's Lutheran church.

WCBD, Zion, Ill. (344.6m-870ke), 8 p. m., semi-chorus and Hire trio; Arthur Rendall, clarinetist; Richard E. Hire, violinist; Klowann and Studebaker, clarinetists; E. B. Paxton, baritone; Mr. and Mrs. Sparrow, duets; Miss Reynolds and Miss Carey, duets; Mrs. Thomas and Mr. Barton, duets; Eula Myhre, pianist, Mrs. Edna Paxton, reader.

WCCO, Minneapolis-St. Paul, Minn. (416.4m-720ke), 10:50 a. m., Hennepin Avenue M. E. church; 3 p. m., Bible study, Lutheran Bible Institute; 4:10, House of Hope, Presbyterian church; 6:20, Second Church of Christ, Scientist.

WDAF, Kansas City, Mo. (365.6m-820ke), 3-4 p. m., Ottawa, Kan.; 4-4:45, vesper, Our Redeemer Lutheran.

WEBB, Chicago, Ill. (370.2m-810ke), 10:40-12 noon, Seventh Church of Christ Scientist; 5-6 p. m., Oriole orchestra; Dr. Alexandra Schur, baritone-bass; 7:15, orchestra; 8:15, news, Oriole orchestra; William Young, pianist; Sidney Ellstrom.

WENR, Chicago, Ill. (266m-1130ke), 6-7 p. m., dinner concert, Rauland-Lyric trio; Russell Hendrickson, cellist; Frank Westphal, pianist; vocal; 8-10, All-American Pioneers; Archie Rawls, tenor; J. E. Peterson, basso; Dorothy Cutler, pianist; Art Bilquist, singer; Clara Gorska-Gels, soprano; 12-2 a. m., midnight frolics; Frank Westphal and his All-American Pioneers; banjo and saxophone numbers; vocal.

WGES, Oak Park, Ill. (250m-1200ke), 10:15-12 noon, Austin M. E. church; organ; choir; 5-7:40, Moody Bible school program; pipe organ; 11-12, organ, mezzo-soprano; tenor.

WGN, Chicago, Ill. (302.8m-990ke), 11:45-12:45 p. m., Sunday noon musical hour, Chicago theater; 12:45-1:45, Chicago theater complete performance; 2-3, Edwin Stanley Seder's organ concert; 3-4, concert, Chicago Philharmonic orchestra; 4-5, musical program; 5-5:15, old-time favorite songs; 7-7:20, musical program; 7:30-7:45, old-time favorite songs; 7:45-8:15, musical program; 9:15-10, musical program.

WHAS, Louisville, Ky. (399.8m-750ke), 10 a. m., services, St. Boniface church; choir, Mrs. A. Molengraff, organist; 4:30-5:30 p. m., evensong choral service, Christ church cathedral; Ernest Simon, organist.

WHB, Kansas City, Mo. (365.6m-820ke), 9:40 a. m., Linwood Boulevard Christian church; 11:15-12:30, Independence Boulevard Christian church; 8-9:15, Fourth Church of Christ, Scientist; 11:15-1, Linwood theater Radio features.

WHO, Des Moines, Iowa (326m-570ke), 11 a. m., St. Paul's Episcopal church; 7:30-8:15 p. m., Bankers' Life trio; 11-12, Bankers' Life Little symphonic orchestra.

WIBO, Chicago, Ill. (266m-1330ke), 2-4 p. m., Mr. Bute and quartet; Chester Newman, baritone; Bernice Taylor, soprano; Charlotte Edwards, contralto; 6-8, Helen Snyder, soprano; Earl Rigelow, pianist; Henry Corbin, baritone; Fred Noble, cornetist; Laura Remer, contralto; 6, string trio; 10-12, Elsie Orr, soprano; Walter Preston, tenor; Eugene Wallenius, baritone; Marie Tully, soprano; Irene Beasley, soprano; string trio.

WJAZ, Chicago, Ill. (322.4m-930ke), 7-9 p. m., special musical program, Spanish Garden studio.

WJJD, Moosheart, Ill. (370.2m-810ke), 7:45 a. m., Catholic services; 9:40-10:30, Protestant services; 3-4 p. m., Moosheart Sunday concert.

WKAF, Milwaukee, Wis. (261m-1150ke), 4-6 p. m., Jean Hammond's Tune Tinkers; Viola Sontag, pianist.

WKRC, Cincinnati, Ohio (422.3m-710ke), 6:45 p. m., Walnut Hills Christian church; 10, classical program; vocal and instrumental numbers; 11, dance program, Marion McKay and his orchestra.

WLIB, Chicago, Ill. (302.8m-990ke), 5-7 p. m., musical program.

WLS, Chicago, Ill. (344.6m-870ke), 6 p. m., prelude; 7-7:55, WLS Little brown church in the vale; Little brown church choir; Ralph Emerson, organist.

WLW, Cincinnati, Ohio (422.3m-710ke), 11 a. m., morning worship, Seventh Presbyterian church, Jesse Halsey, minister; 4 p. m., Philippus Evangelical church; 7:30, First Presbyterian church; 8:30, concert, H. & S. Fogue company orchestra.

WMBB, Chicago, Ill. (250m-1200ke), 3-5 p. m., Trianon orchestra, Dell Lampe, director; Woodlawn theater orchestra, Walter Kipp; Lucile O'Hara, soprano; Tommie Hughes, baritone; Bob Duffy, Ray Miller, Nina Smiley, mezzo-soprano, popular concert program, 7:40-9, Fifth Church of Christ, Scientist; 9-11, Trianon orchestra, Dell Lampe, director; Woodlawn theater orchestra, Walter Kipp; Maxwell Prehame, tenor; Billie Allen Hoff; Ned and Ted; Harmony duo; popular program.

WMC, Memphis, Tenn. (499.7m-600ke), 11 a. m., First Methodist church.

WNAD, Norman, Okla. (254m-1180ke), 9:30 p. m., Ernest Sharp, vocalist; Helen Rubin, violinist.

COAST ARTILLERY BAND AT WCOA

Sunday, February 28

WOAI, San Antonio, Texas (394.5m-760kc), 11 a. m., First Presbyterian church; 7:30 p. m., Central Christian church; 9:30, Super-Heterodyne music.

WOAW, Omaha, Neb. (526m-570kc), 9 a. m., Gospel tabernacle; 1:30 p. m., matinee program; 6, Bible study; 9, chapel service.

WOC, Davenport, Iowa (483.6m-620kc), 1-2 p. m., orchestra concert; Paul J. Vipperman, tenor; 6-7, Gordon Memorial Lutheran church; 9:45-11:45, musical program, the Palmer Little Symphony.

WOL, Ames, Iowa (270m-1110kc), 10:45 a. m., college chimes; 11, chapel services.

WOK, Chicago, Ill. (217.3m-1380kc), 1-2 a. m., Tearney's Town club orchestra; Carl Lorraine's Pershing Palace orchestra; Husk O'Hare's Coconut Grove orchestra; program; 6-1, Tearney's Town club orchestra; Husk O'Hare's Pershing Palace orchestra; Capitol theater complete musical program; program.

WORD, Batavia, Ill. (275m-1090kc), 2:30 p. m., program, Chicago Rapid Transit company; 7, Webster hotel trio; I. B. S. A. choral singers; 9, Webster trio; I. B. S. A. choral singers.

WOS, Jefferson City, Mo. (440.9m-680kc), 9:30 a. m., Christian church; 5 p. m., vesper services; 7:30, First Baptist church.

WQJ, Chicago, Ill. (447.5m-670kc), 9:30-11 a. m., sermon, People's church, Dr. Preston Bradley; 100-voice choir; Clarence Eddy, organist; 3-4 p. m., program, Irving Park Lutheran church choir; 8-10, Ralph Williams and his Rainbow Gardens orchestra; Pontella trio; Eusebia Mitchell, baritone; Marvyl Larson, soprano; Madeline Ruff, pianist; Prof. Ascan W. Kittner, baritone; Lorena Anderson, soprano.

WSAI, Cincinnati, Ohio (325.9m-820kc), 7:45 p. m., radio chime concert; 8, sermon, Avondale Methodist church; 9:15, Union Central Life Insurance company orchestra.

WSB, Atlanta, Ga. (428.3m-700kc), 7:30 p. m., First Methodist church.

WSM, Nashville, Tenn. (282.8m-1060kc), 7:30 p. m., First Presbyterian church.

WSUI, Iowa City, Iowa (483.6m-620kc), 9:15 p. m., Garrison quartet.

Mountain Time Stations

CFAC, Calgary, Can. (434.5m-690kc), 11 a. m., First Church of Christ Scientist.

KFXF, Colorado Springs, Colo. (250m-1200kc), 11-1 p. m., First Presbyterian church; 7:30-9, First Methodist church.

KOA, Denver, Colo. (322.4m-930kc), 11 a. m., services, Warren Memorial Methodist Episcopal church; 3 p. m., music hour, Warren Memorial Methodist Episcopal church, Hazel Allen, organist; 7:45, services, Warren Methodist Episcopal church.

Pacific Time Stations

KFI, Los Angeles, Calif. (467m-842kc), 7-7:30 p. m., program, A. H. Grebe & company Synchronphase string ensemble; 7:30-8, Louise Kloss string trio; 8-9, Dan L. McFarland, organist; 9-10, Mabelle Hein's Blue Bird band; 10-11, Packard Six dance orchestra.

KFON, Long Beach, Calif. (232.4m-1290kc), 6-6:30 p. m., Brayton's theater organ; 7:45-9, service, First Church of Christ, Scientist.

KFWB, Hollywood, Calif. (252m-1190kc), 9-11 p. m., Warner Brothers Sunday night movie frolic with Jack Smith's dance orchestra; Babe Brown, ukulele; Esther White, blues singer; Starke Sisters, vocal duets, and others.

KGO, Oakland, Calif. (361m-830kc), 11 a. m., Trinity Episcopal church; 3:30, concert, Little symphony orchestra; 7:45, musical service, Trinity Episcopal church.

KGW, Portland, Ore. (491.5m-610kc), 10:25 a. m., St. Stephens Pro-Cathedral; 6, familiar melodies; 7:30-9, East Side Baptist church; 9-10, Chevrolet Symphony orchestra.

KHJ, Los Angeles, Calif. (405.2m-740kc), 4-5 p. m., Masonic service; 7-7:30, First M. E. church, Arthur Blakely, organist; 8-10, program, Martin Music company; John Martin, pianist; Ruth Pirtis, soprano.

KJR, Seattle, Wash. (384.4m-790kc), 11-12:30 p. m., First M. E. church; 5-6, Spargur string quartet; 7:15-7:30, organ recital, Mrs. Montgomery Lynch; 7:30-9, First M. E. church; 9-10:30, Puget Sound Savings and Loan association orchestra.

KNX, Hollywood, Calif. (336.9m-890kc), 2-4 p. m., City Park band program; 6:30-7, Unitarian church service; 8-9, First Presbyterian church of Hollywood; 9-10:30, Sunday night classical concert.

KPO, San Francisco, Calif. (428.3m-700kc), 9:45-10:45 a. m., undenominational and non-sectarian church service; Uda Waldrop, organist; 5-6 p. m., Marshall W. Giselmann, organist; 6-6:30, Waldemar Lind and the States restaurant orchestra; 6:35-8:35, Palace hotel concert orchestra; 8:35-10, Rudy Seiger's Fairmont hotel orchestra.

KPSN, Pasadena, Calif. (315.6m-950kc), morning and evening church services; 8:45-9:45 p. m., Maryland's artists ensemble.

KQP, Portland, Ore. (319m-940kc), 7:50-9 p. m., First Church of Christ, Scientist; 9-10, program.

KTAB, Oakland, Calif. (240m-1250kc), 9:45-10:05 a. m., Bible lecture, Prof. E. G. Linsley; 11, services; 7:45 p. m., service; 9:30-11, concert.

Monday, March 1

Headliners Today

Eastern	Central	Mountain	Pacific
7:30 p. m.	6:30 p. m.	5:30 p. m.	4:30 p. m.
WCOA (222m-1350kc)	Thirteenth Artillery band.		
WEAA (475.9m-630kc)	Municipal band.		
WSB (428.3m-700kc)	Scottish ballads.		
WSM (282.8m-1060kc)	Wednesday Music club.		
WABC (499.7m-600kc)	Cortese ensemble.		
ICSD (545.1m-550kc)	Piano recital.		
WEAF (491.5m-610kc)	"La Traviata," opera.		
WPG (299.8m-1000kc)	Ethel Dobson, soprano.		
WGR (319m-940kc)	Dulcimer recital.		
WSAI (325.9m-820kc)	Community program.		

Monday silent night for: CNRA, CNRC, CNRE, CNRM, CNRO, CNRR, CNRT, CNRW, KFAU, KFDW, KFEQ, KFMC, KFWA, KHJ, KLDL, KUBA, KYW, WBBM, WBCN, WCAD, WCBQ, WCOA, WDBJ, WEBJ, WEBW, WENR, WGBS, WGES, WGN, WHAS, WHT, WIBO, WIP, WJAZ, WJJD, WKAQ, WLBB, WLS, WMAQ, WMBB, WOA1, WOC, WOK, WORD, WQJ, WRC, WREO.

Eastern Time Stations

CKNC, Toronto, Can. (356.9m-840kc), 8-10 p. m., Little symphony orchestra; Verdi quartet; Madeline Bell, soprano; Ella McQuillan, contralto; Lawrence De Foe, tenor; Edgar Smith, bass.

KDKA, Pittsburgh, Pa. (309.1m-970kc), 6:30 p. m., dinner concert; 8:15, program; 9, Rudd Light Opera hour.

WABQ, Haverford, Pa. (260.7m-1150kc), 11 p. m., Ardmore theater.

WBAL, Baltimore, Md. (246m-1220kc), 6:30-7:30 p. m., dinner program, WBAL dinner orchestra; 7:30-8, Frederick D. Weaver, organist; 8-9, Josephine Beasley, pianist; A. Douglas McConna, tenor; 9-10:10, Edith Gwinm, soprano; Neenah Woods, contralto; Arthur Morgan, violinist.

WBBR, New York, N. Y. (273m-1100kc), 8 p. m., Irene Klempner, soprano; 8:20, George Twaroschik, violinist; 8:40, Irene Klempner; 8:50, George Twaroschik.

WBZ, Springfield, Mass. (333.1m-900kc), 6:30 p. m., Hotel Kimball orchestra; 7:30, Rene Dagenais, organist; 8, Capitol theater orchestra; 8:30, Bay State quartet; 9, Aleppo Drum Corps; 9:30, WBZ Movie club.

WCAP, Washington, D. C. (468.5m-640kc), 7-11 p. m., musical program.

WCAU, Philadelphia, Pa. (277.6m-1080kc), 7:30, recital, N. Snellenburg and Co.; 8, Carolyn Thomas, soprano; 8:30, Ruppert and McCullough, banjoists; 9, Malis Merry Minstrels; 9:30, Carl Smith's Monday Nighters; 10, Arlene R. Smith, soprano; Kathryn Fighorne, contralto; 10:30, Parodians' dance orchestra.

WCOA, Pensacola, Fla. (222m-1350kc), 7:30 p. m., 13th Coast Artillery band; Miss Willie Ida Thomson, violinist; John D. Thomas, violinist; John D. Thomas, pianist; Harry Davis, tenor; Rainbow orchestra.

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

WDBO, Winter Park, Fla. (239.9m-1250kc), 9:30-11 p. m., St. Cloud band.

WEAF, New York, N. Y. (491.5m-610kc), 11:05 a. m., Ethel Littwin, pianist; 2:30 p. m., Government club meeting; 4:30, Louis Lawrence trio; 5, Vincent Lopez and orchestra from Tea room of Ritz-Carlton hotel; 6, dinner music, Rose room of Hotel Waldorf-Astoria; 7:20, Louis Caton, tenor; 8, Pop concert to WEAF; WOO; 8:45, Tower health talk to WEAF, WEEL, WCAP; 9, A and P Gypsies to WEAF, WEEL, WCAP, WWJ, WJAR, WOO; 10, La Traviata, WEAF.

America's most famous harpist, Nellie Zimmer and her famous harp trio below, have been charming the audience of KTHS, Hot Springs National Park. Miss Zimmer is shown standing. To the right is Fawn Post Trowbridge, soprano, a regular feature at KGO, Oakland.



grand opera company to WEAF, WOO, WCAP, WJAR, WTAE, WCAE; 11-12, Ben Bernie and orchestra.

WEAB, Cleveland, Ohio (389.4m-770kc), 7 p. m., Allen theater orchestra.

WEEL, Boston, Mass. (348.6m-860kc), 5 p. m., Rainbow Ramblers; 6:30, Joe Rines and his Hunters' Cabin orchestra; 8:15, Black Iron Shimmers; 10, Scotty Holmes and his orchestra.

WEMC, Berrien Springs, Mich. (285.5m-1050kc), 8:15 p. m., Lighthouse orchestra; Charles Garber, saxo-

phonist; Jeanette Richardson, soprano; Dr. Birt Summers, pianist; Thomas Johnson, baritone; Prof. H. L. Pearson, reader.

WFI, Philadelphia, Pa. (394.5m-760kc), 1 p. m., Tea Room ensemble; 3, Hazel Loughlin, pianist; Robba Chaiken, soprano; 6:30, Bellevue Stratford concert orchestra; 7, Bellevue Stratford dance orchestra.

WGBS, New York, N. Y. (315.6m-950kc), 1:35 p. m., Mary Frances Baker, soprano; 1:45, Gilbert Holland, baritone; 2:30, string trio; 3:15, Florence Blum, dramatic soprano; 3:20, Helen Varick Boseoll, George, Jr., program.

WGCP, New York, N. Y. (252m-1190kc), 3 p. m., Irving Firstenberg, organist; 3:30, Le Roy Montecarlo, tenor; 3:45, Lucille Hegamin, contralto; 4:15, Uncle Robert's Pals; 5:10, Pollack and Dorn, songs; 8:30, studio program; 9:15, studio program; 9:40, Bob Ward and three little Wards; 10, Strickland's orchestra.

WGHB, Clearwater, Fla. (266m-1130kc), 6:30-7:30 p. m., Florence Arlin, soprano; 8:30-9:30, Helen M. Bishop, soprano; 11:45-11, Radio Ramblers.

WGHP, Detroit, Mich. (270m-1110kc), 6-7 p. m., dinner concert, Hotel Tuller; 7:30-7:50, children's evening chat; 8-10, Little symphony orchestra, Dirk Van Emmerik, conductor; T. Stanley Perry, tenor; 12-1 a. m., General Marks and his orchestra.

WGR, Buffalo, N. Y. (319m-940kc), 2:30 p. m., WGR's afternoon program; 6:30, Clef Dwellers orchestra; 8, Jack Bishop in a popular program; 8:30, Knell's Tokio dance orchestra; 9, program, Wheat's division, General Ice Cream company; 10, Fred Phelps in a popular program; 10:30, dulcimer recital, George Marshall, 11, Vincent Lopez' Hotel Statler dance orchestra, John F. Gunderman, Jr., organist.

WGY, Schenectady, N. Y. (379.5m-790kc), 2 p. m., Asia restaurant orchestra; 2:30, music; 6:30, dinner program, Porter E. Potts' Hotel Van Curler orchestra; 7:45, Stuart Swan, pianist.

WHAR, Atlantic City, N. J. (275m-1090kc), 2 p. m., Seaside hotel trio; 8, Seaside hotel quartet; 11:30, orchestra.

WHAZ, Troy, N. Y. (379.5m-790kc), 9 p. m., concert, 10:30, King Jazz.

WIP, Philadelphia, Pa. (508.2m-590kc), 1 p. m., Gimbel tea room orchestra; 3, recital, Skibonsky studios, Charles D. Long, basso, Flora Ripka, pianist, Elsa Schumann, soprano; 6:05, Benjamin concert orchestra.

WIAX, Jacksonville, Fla. (356.9m-890kc), 3:30 p. m., Harding Park band concert, Vessella's band, Oreste Vessella, conductor; 7:30, music memory contest; 8-9, popular program, orchestra, vocal, etc.; 9-10, classical program, vocal and instrumental.

WJR, Pontiac, Mich. (516.9m-580kc), 7 p. m., Jean Goldkette's Petite symphony orchestra, soloists; 9, Paige and Jewett Sixes; 11:30, "Merry Old Chief," and Jewett Jesters.

WJZ, New York, N. Y. (454.3m-660kc), 1 p. m., Meyer Davis' Park Lane orchestra; 4:30, Sherry's Fifth Avenue trio; 7, Hotel Commodore dinner concert; 7:55, John B. Kennedy; 8, B. Fisher and company's Astor Coffee orchestra; 9, Fred E. French company; Henry Hadley and his Philharmonic orchestra; 10:30, Harry Leonard's Waldorf Astoria grill orchestra.

WLIT, Philadelphia, Pa. (394.5m-760kc), 2 p. m., Arcadia cafe concert orchestra; 4:30, Alice Wigman, pianist; 9, Stanley hour of Music; 10, Arcadia cafe dance orchestra; 10:30, Fay's vaudeville features; 10:45, El Patio dance orchestra.

WLWL, New York, N. Y. (288.3m-1040kc), 9 p. m., commonweal period; 9:15, piano recital; 10, music; 10:15, study club; 10:30, songs.

WMAK, Buffalo, N. Y. (266m-1130kc), 7:30-8:30 p. m., Murray Whitman and his senders; 8:30-9, New Olympic theater; 9-10, musical program.

WMCA, New York, N. Y. (340.7m-890kc), 6 p. m., Olcott Vail and his Hotel McAlpin string ensemble; 6:30, Ernie Golden and his Hotel McAlpin orchestra; 7:30, Kurtz Carnival Kings; 8, Terminal music hour; 9, Christian Science lecture, William W. Porter, C. S. B.; 10:15, Woodmansten Inn orchestra; 11:30, Jack Denny's orchestra; 12, McAlpin entertainers.

WNYC, New York, N. Y. (526m-570kc), 6:20 p. m., piano selections; 7:35, dance program; 8:30, concert hour; 9:30, instrumental novelty; 10, Richmond Versatile orchestra; 10:35, Richmond Versatile orchestra.

WOO, Philadelphia, Pa. (508.2m-590kc), 11 a. m., organ recital; 12:02, Crystal tea room orchestra, Robert E. Golden, director; 4:45, organ recital; 7:30, Hotel Sylvania dance orchestra; 11, Sylvania dance orchestra.

WOR, New York, N. Y. (405.2m-740kc), 6:30 p. m., Billy Wathey's sport talk; 6:45-7:30, Jacques Jacobs' hotel ensemble; 8:30-9:30, Al Reed's hour; 9:45, Percy Boat, baritone; 10, Sydney Lobsenz, pianist; 10:15, Percy Boat, baritone; 10:30, Sydney Lobsenz, pianist; 11-12, Hofbrau Haus orchestra.

WPG, Atlantic City, N. J. (299.8m-1000kc), 4:30 p. m., Chalfonte-Haddon Hall music; 6:45, Arthur Scott Brook, organist; 7, Hotel Morton music; 8:40, program; 9, Hotel Ambassador orchestra; 10, program; 11, Silver Slipper supper club orchestra.

WRC, Washington, D. C. (468.5m-640kc), 12 noon., organ recital, Henri Smidt-Gregor; 12:30 p. m., Lenten services; 1, Shoreham hotel orchestra; 4:30, musical program.

WTAG, Worcester, Mass. (268m-1120kc), 12:05-2 p. m., noon-day luncheon music, WTAG orchestra; 9-10, Robin Hood hour of music; 10-11, grand opera.

WTIC, Hartford, Conn. (475.9m-630kc), 12:05 p. m., Travelers club orchestra; 6:50, Hub tri; 8:15, piano, violin and tenor solo; 9, popular program; Colonial quartet; 9:15, Colonial quartet and Hotel Cond orchestra; 10:30, Travelers Symphonie ensemble and soloists.

WVJ, Detroit, Mich. (352.7m-850kc), 12:05 p. m., Jules Klein's Hotel Statler orchestra; 3, Detroit News orchestra; 6, dinner concert; 8, Detroit News orchestra, 9, A. and P. Gypsies.

Central Time Stations

KFAB, Lincoln, Neb. (340.7m-880kc), 5:30-6:30 p. m., dinner concert; 8:30-10:30, Buick entertainers; Olive Fletcher and Ruby Teater; Harriet Cruise-Ortle of the air; Geraldine Schmidt, blues singer; Shick Merriam, pianist; Belshaw's orchestra; Humboldt high school trio.

KFNF, Shenandoah, Iowa (263m-1140kc), 1:30-2:30 p. m., mothers' hour; 7, Smith-Belding orchestra.

KFRU, Columbia, Mo. (499.7m-600kc), 4:30 p. m., Bella Vista Quadrant orchestra; 6:15, dinner music.

KFUO, Fayetteville, Ark. (299.8m-1000kc), 8 p. m., Alberta Stone, soprano.

KMA, Shenandoah, Iowa (252m-1190kc), 11:30-12:30 p. m., noonday rural program; musical saw, J. A. Showets; 6-7, popular dinner hour program; 9-11, Farnham trio; How Do You Do Boys, Grady and Doc.

KPRC, Houston, Tex. (296.9m-1010kc), 12 noon., Frank Tilton, boy pianist; 7:30 p. m., Malon Gann's dance orchestra; 9, E. W. Rodgers, cabaret entertainer; Mrs. Corinne Hart, pianist.

KSD, St. Louis, Mo. (545.1m-550kc), 7 p. m., recital, Gunborg Aspen, Norwegian soprano; 9, piano concert, Opal Sweeza and Clara Meyer.

KSO, Clarinda, Iowa (241.8m-1240kc), 7:30-9:30 p. m., Carl Stum, Hay Mow Fire contest.

KTHS, Hot Springs National Park, Ark. (374.8m-800kc), 9-9:30 p. m., old-fashioned favorites; Meyer Davis' New Arlington hotel orchestra; 9:30, Lawson Reid, organist; 9:45, Poolcy hour, Brick English and his ten-piece novelty orchestra; 10:45, duets, Edward Richter, cellist; Lon Chassy, violinist; John Heyn, accompanist; 11-12 midnight, Firestone frolic.

KYV, Chicago, Ill. (536m-560kc), 12:05-1 p. m., noon-day concert; 1-2, luncheon concert, Congress hotel; 6-7, dinner music.

WAMD, Minneapolis, Minn. (244m-1230kc), 6 p. m., stringed orchestra; 7:20, classical program; 11, Sky-rocket frolic.

WBAP, Fort Worth, Tex. (475.9m-630kc), 12:05-12:30 p. m., Sunflower Girl; 6-6:30, Chief Gonzales' Texas Hotel Royals; 7:30-8:30, Fort Worth Chapter of I. O. O. F.; 9:30-11, Trail Blazers; 11-12 midnight, Majestic theater.

WCAL, Northfield, Minn. (336.9m-890kc), 8:30 p. m., Norwegian program.

WCGO, Minneapolis, Minn. (416.4m-720kc), 12 noon., Donaldson's concert orchestra; 2:30 p. m., concert; 4, readers' club; 6:30, dinner concert, Gordon Cooke ensemble; Meta Ashwin Birnbach, soprano; Louise Jenkins, accompanist; University of Minnesota program; 9, classical concert.

WDAF, Kansas City, Mo. (365.6m-820kc), 6-7 p. m., Trianon ensemble; 8-9:30, Jack Little; 11:45-1 a. m.,

High Lights of the Week

GEOURGE Washington university will make its entrance among the broadcasters of the East when a special program arranged by the students and faculty of that institution is broadcast by Station WRC, Washington, D. C., February 27th. Among the organizations who will take part in the program are the university glee club, the university string quartet, the university debating team, which has won honors both in the United States and abroad, and members of the faculty of the school.

An old friend returns to the air Sunday evening when WEMC, Berrien Springs, opens its new super-power station. Students of the college will entertain. The London String quartet will please the fans who enjoy the Atwater Kent program Sunday evenings through the WEAF chain.

The new voice of Pensacola, WCOA, will give a military program Monday with the 13th Coast Artillery band and members. Sgt. Leo Donna Rumma, the Soldier Caruso, who has made a name for himself, will sing.

Comedy will rule the air from KGO, Tuesday evening, March 2, when James (Jim) Madison, famous maker of the Madison Budget of jokes, familiar to stage people, will appear before a KGO microphone, reading some of his latest. He will also present a comic musical skit, "Musical Mem-

ories," assisted by the Sierra male quartet, which will show the evolution of the American popular song. Jigs and reels played on Joe Flanagan's accordion will lighten up the ether at WGBS this same evening.

Wednesday is the date set for the old-time fiddlers contest at KWSC. Washington will send representatives from all parts of the state. Another western attraction will be the hour in the "Southland" with the Blue Bell Four at KOA.

"Chinese Civilization" is the interesting title of the talk to be given by C. Chen, at WGY during the Chinese program Thursday. The WGY orchestra will feature oriental music. A midnight frolic called "The Silver Forest," is the Thursday feature of WEZ. The affair will be conducted along the lines of the famous Ziegfeld midnight frolic atop the New Amsterdam theater in New York.

A new educational feature at WTIC will be the cartoon lesson Friday by Bud Kingston, Radio and art editor of the Two Heralds of Bridgeport. Mr. Kingston will review any sketches his listeners wish to send in. Two well-known artists, Walter Gieseking, pianist, and Josef Szigeti, violinist will be featured on the Baldwin hour this same evening from the WJZ chain.

IRISH JIGS AND REELS FROM WGBS

Tuesday, March 2

Rudy Seiger's Fairmont hotel orchestra; 2:30-3:30, matinee program; 3:30-4:30, Cyrus Trobbs's Palace hotel orchestra; 4:40-7, Waldemar Lind and the States restaurant orchestra; 7-7:30, Rudy Seiger's Fairmont hotel orchestra; 8-9, program; 9-10, program, Mona Motor Oil company; Gypsy and Marta, harmony team; 10-11, Palace hotel orchestra.

KPSN, Pasadena, Calif. (315.6m-950kc), 8-9 p. m., Star-News concert; Adolf Tandler instrumental group.

KTAB, Oakland, Calif. (240m-1250kc), 8-10 p. m., Western States Life insurance company.

Wednesday, March 3

Headliners Today

Eastern	Central	Mountain	Pacific
8:30 p. m.	7:30 p. m.	6:30 p. m.	5:30 p. m.
WHAAS (399.8m-750kc)	Virginia Vetter's entertainers.		
WDAF (365.6m-820kc)	One-act play.		
WBEZ (333.1m-900kc)	Concert company.		
9:30	8:30	7:30	6:30
KFAB (340.7m-880kc)	Original songbird.		
10	9	8	7
WGR (319m-940kc)	Classical program.		
10:15	9:15	8:15	7:15
KOA (322.4m-930kc)	"An Hour in the Southland."		
KTHS (296.9m-1010kc)	Kobusch and Shay.		
10:30	9:30	8:30	7:30
KWSC (348.6m-860kc)	Old-time fiddlers' contest.		

Wednesday, silent night for: CHIC, CNR, CNRA, CNRC, CNRE, CNRM, CNRR, CNRT, CNRV, KFAU, KFDM, KFE, KFBU, KUOA, KFXE, KGO, KLDS, KMMJ, KOB, KTAB, WABQ, WBAL, WBAF, WBBR, WCAD, WCAL, WCBD, WEBW, WFAA, WGBS, WGGP, WGST, WHAR, WHAZ, WIP, WJAD, WJAZ, WLWL, WMC, WOAI, WOAW, WOI, WPG, WRC, WRO.

Eastern Time Stations

CFCA, Toronto, Can. (356.9m-840kc), 11 p. m., Gilbert Watson and his orchestra.

KDKA, Pittsburgh, Pa. (309.1m-970kc), 12:20 p. m., Trinity church Lenten service; 6:30, dinner concert; 8:30, Independent Wall Paper Pierrots; 9, Helen Greenwood, soprano; Hulda Ledridge, pianist; Vincent Koren, tenor; Natcho Vasileff, cellist.

WEZ, Springfield, Mass. (333.1m-900kc), 6:30 p. m., Hotel Kimball, dinner concert; 7, Lincoln Supply company; 8, Melvin D. Fox, baritone; Helen P. Wheeler, mezzo-soprano; 8:30, Pauline Settle, pianist; Alberta M. Kelleher, violinist; 9, WBZ concert company.

WCAP, Washington, D. C. (468.5m-640kc), 7-11 p. m., U. S. Navy band orchestra.

WCAU, Philadelphia, Pa. (277.6m-1080kc), 6:45 p. m., Parodians dance orchestra; 7:30, recital, N. Snellenburg and company; 8, talk; 8:10, Kane's Musical Adventurers; 9, Rigo's Royal Gypsy band; 9:30, Jones Jolly Four; 10:05, Chapman's Inter-Varsity dance orchestra; 10:45, Frank Cook, old-time songs; 11, Artie Bittong's Cheer-up club.

WCOA, Pensacola, Fla. (222m-1350kc), 7:30 p. m., galaxy artists.

WCX, Detroit, Mich. (516.9m-580kc), 6-7 p. m., Gold-kette's ensemble; 8-9, studio program.

WDBO, Winter Park, Fla. (239.9m-1250kc), 9-10:30 p. m., Orpheus singers.

WEAF, New York, N. Y. (491.5m-610kc), 12 n. chapel services, Columbia university; 4, Ray Nichols recording orchestra; 4:30, Helen Ketzinger, soprano; 5, Vincent Lopez and orchestra from Tea Room of Hotel Ritz-Carlton; 6, dinner music, Rose Room of Hotel Waldorf-Astoria; 7, United Synagogue of America; 7:30, chamber music to WEAF; WJAR, WCAU, WSAI, WTAG, WEEL, WGR; 9, Ipana troubadours to WEAF, WEEL, WCAP, WWJ, WCCO, WGR, WSAI, KSD; 10, Roxy and gang to WEAF, WEEL, WTAG, WCAP, WWJ, WJAR, WGN; 11-12, Hughie Barrett and orchestra, Hotel Commodore.

WEAO, Columbus, Ohio (293.9m-1020kc), 9 p. m., orchestra concert.

WEAR, Cleveland, Ohio (389.4m-770kc), 7 p. m., Hotel Cleveland orchestra.

WEBJ, New York, N. Y. (272.6m-1100kc), 8 p. m., Kenwood Club orchestra; 8:45, Carrie Cohen, concert pianist; 9, Michele Bontempo, operatic baritone; 9:30, Rudolph Jostkowski, concert violinist.

WEEL, Boston, Mass. (348.6m-860kc), 3:05 p. m., E. Payson Re and his orchestra; 5, Black and White vaudeville orchestra; 6:15, Joe Rines and his Hunters' Cabin orchestra; 7:30, Katherine White, soprano; Mrs. Cox, accompanist.

WEMC, Berrien Springs, Mich. (285.5m-1050kc), 8:15 p. m., Mrs. Gwendolin Lacey-Chaney, pianist; Ellis Homer, fellow, soloist.

WFI, Philadelphia, Pa. (394.5m-760kc), 1 p. m., Tea room ensemble; 3, Josh Sadders' Plantation serenaders; 6:30, Bellevue Stratford concert orchestra; 7, Bellevue Stratford dance orchestra.

WGBS, New York, N. Y. (315.6m-950kc), 1:35 p. m., Hilda Bergvall, soprano; 1:45, Albert Cartier, baritone; 3, Bushwick hospital program; 3:15, negro impersonations; 3:30, songs and Gladys M. Rodgers, musical comedy.

WGGP, New York, N. Y. (252m-1190kc), 3 p. m., Ona Welch, pianist; 3:20, Bobby Grey, songs; 3:45, Tracey Mohr, songs; 4:15, studio program; 4:30, Jeanne A'Dair, soprano; 4:45, Alfred Hall, baritone; 5:10, Charlotte Trystmann, pianist; 7, Clarence Williams trio; 7:20, health talk; 7:35, Charles Coleman's entertainers; 8, McDermott, Haegny and Steele trio.

WGH, Clearwater, Fla. (266m-1130kc), 6:30-7:30 p. m., dinner music; 8:30-9:30, Mrs. J. G. Shuck, contraalto; Mrs. Carl Carrier, pianist; Norman L. Scott, baritone; Ola Bishop, soprano; 11:45-1, Radio Ramblers.

WGHP, Detroit, Mich. (270m-1100kc), 6-7 p. m., dinner concert, Hotel Tuller; 7:40-7:50, children's evening chat; 8-10, Little symphony orchestra, Dick Van Emmerik, conductor; Mme. Gizi Szanto, pianist; quartet; 12-1 a. m., Gerald Marks and his orchestra, Hotel Tuller, assisting artists.

WGR, Buffalo, N. Y. (319m-940kc), 2:30 p. m., WGR's afternoon program; 6:30, Gene Zacher's orchestra; 8, Audubon Terrace Meadow Larks; 10, Rosa Piazardini, Salvatore, Mary Piazardini in classical program; 10:30, H. E. Weasner in popular songs; 11, Vincent Lopez' Hotel Statler dance orchestra; John F. Gunderman, Jr., organist.

WGY, Schenectady, N. Y. (379.5m-790kc), 7 p. m., dinner program, Eastman theater orchestra; 8:05, musical program; 8:30, concert, Mendelssohn club.

WIP, Philadelphia, Pa. (508.2m-930kc), 1 p. m., Gimbel Tea Room orchestra; 3, recital, Erection School of Music; 6:05, Benjamin Franklin concert orchestra; 7, Uncle Wyp's bedtime stories; William Lamb, cornet.

WJAX, Jacksonville, Fla. (336.9m-890kc), 8:30 p. m., Hemming park band concert, Vessella's band, Oreste Vessella, conductor; 7:30, music memory contest; 8-10, popular program.

WJR, Pontiac, Mich. (516.9m-580kc), 7 p. m., Jean Goldkette's Petite symphony orchestra, soloists; 9, Winter Haven, Fla., hour; 11:30, "Merry Old Chief," Jewel's Jesters.

WJZ, New York, N. Y. (454.3m-660kc), 1 p. m., Hotel Madison concert and dance orchestra; 4:30, Waldorf Astoria tea music; 7, Hotel Commodore dinner concert.

WLIT, Philadelphia, Pa. (394.5m-760kc), 12:02 p. m., daily almanac; Stanley theater organ recital; 12:20, religious service; 12:30, Arcadia cafe concert orches-

tra; 2, Arcadia cafe concert orchestra; 8, recital; 9, concert; 10, Arcadia cafe dance orchestra.

WLWL, New York, N. Y. (288.3m-1040kc), 9:15 p. m., entertainers; 9:45, McCray concert; 10:30, songs.

WMAK, Buffalo, N. Y. (266m-1130kc), 7:30-10 p. m., musical program.

WMCA, New York, N. Y. (340.7m-880kc), 6 p. m., Olcott Yall and his Hotel McAlpin String ensemble; 7:30, Ernie Golden and his Hotel McAlpin orchestra; 7:45, Woodmanstein Inn orchestra; 11, Hofbrau Haus entertainers; 11:30, Jack Denny's orchestra; 12, McAlpin Hotel entertainers.

WNYC, New York, N. Y. (526m-670kc), 5:40 p. m., Agnes Vernon's Juveniles; 6, Chris Meehan, tenor; 6:20, Chris Meehan, tenor.

WOO, Philadelphia, Pa. (508.2m-590kc), 11 a. m., organ recital; 12:02 p. m., crystal tea room orchestra; Robert E. Golden, director; 4:45, organ recital; 7:30, Ritz Carlton dance orchestra; 8, recital; 9, WOO orchestra; 10, Fox theater studio program; 10:30, Ritz Carlton dance orchestra.

WOP, New York, N. Y. (405.2m-740kc), 6:30-7 p. m., Jacques Jacobs' Hotel Shelton ensemble; 9:30, Ballin and Race, piano duo; 10, Erie railroad glee club; 11:30-12, Katinka orchestra.

WRC, Washington, D. C. (468.5m-640kc), 12 noon, Gertrude Smallwood, organist; 12:30 p. m., Lenten serv-

KSO, Clarinda, Iowa (241.8m-1240kc), 7:30-9:30 p. m., Sweet Israel singers; 10, Florida-Bound concert.

KTHS, Hot Springs National Park, Ark. (374.8m-800kc), 9-9:30 p. m., Neapolitan folk songs, Meyer Davis' New Arlington hotel orchestra; 9:30, ballad selections, Mrs. Al Belding, contraalto; 9:40, Eastman hotel dance orchestra; 10-10:45, frolic, Southern Majestic hotel orchestra.

KYW, Chicago, Ill. (536m-560kc), 12:05-1 p. m., noon-day concert; 1-2, luncheon concert, Congress hotel; 6, dinner music; 7:30, music; 8, musical program, Congress hotel; 10-12:30, midnight revue; 1 a. m., Insomnia club.

WAMD, Minneapolis, Minn. (244m-1230kc), 7:10 p. m., classical program; 11, frolic.

WBAP, Fort Worth, Tex. (475.9m-630kc), 6-6:30 p. m., Chief Gonzales' Texas Hotel Royals.

WBBM, Chicago, Ill. (226m-1330kc), 4-6 p. m., concert; 8-10, barber shop three; Sy Berg and Bob Witt; Moulou Rouse orchestra; Phillip Nilles, tenor; Rudy Winter; Floyd Falch; 12-2 a. m., Lew Russell; Charlie Garland; Two Jays, Jesse and Jordan; Harold Anderson, accordionist; Moulou Rouse orchestra; Spencer, Laverne and Shayne, xylophone trio; Claire Matthews; Floyd Falch; Ariston trio.

WCCO, Minneapolis-St. Paul, Minn. (416.4m-720kc), 2:30 p. m., concert; 4, readers' club; 7, mid-week

stein, tenor; quartet; personnel: Messrs. Myers, Moore and Eaton; Marion Carlson, pianist; 9-12, dance programs.

WIBO, Chicago, Ill. (226m-1330kc), 2-4 p. m., Shut-in program; 6-8, dinner concert; old-fashioned songs; Walter Preston; WIBO string trio; Dorothy Rae, soprano; Florence Osterman, contraalto; Joe North, baritone; Earl Bigelow, pianist; 10-12, popular program; open request night; Prof. Black, cryptologist; Marie Tully, soprano; Hickey and Johnson; William Molnair, tenor; Erwin Cornelius, uke soloist; Lenore Friedman, soprano; Pearl Holzman, pianist; Irene Beasley, the Jordans.

WJAZ, Chicago, Ill. (322.4m-930kc), 9-1 a. m., continuous dance program, Opera club.

WJJD, Mooseheart, Ill. (370.2m-810kc), 2-3 p. m., Howard L. Peterson, organist; 4-5, music, children; 5:30-7, Jack Nelson; Palmer House symphonic players; Howard L. Peterson, organist; Palmer House Victorians; 8-9, music, children; 10-11, R. V. Thomas; John Norton; Palmer House Victorians; 12:30 a. m., "Settin' Up Hour."

WKAF, Milwaukee, Wis. (261m-1150kc), 10-11 p. m., Campus Skylarks; May Scholler, soprano.

WLIB, Chicago, Ill. (302.8m-990kc), 7:30-8 p. m., "Auld Sandy"; 7:40-8, music; 11-1 a. m., dance music, songs, Correll and Gosden; Hawaiian guitar music, Langdon brothers.

WLS, Chicago, Ill. (344.6m-870kc), 6 p. m., WLS trio; 6:40, Ralph Emerson, organist; 7, lullaby time; 7:20, "Common Sense in Music," Dr. Spaeth.

WLW, Cincinnati, Ohio (422.3m-710kc), 7 p. m., Hotel Gibson orchestra; 8-9, compositions by Howard Bennett; 9:10, Venetian trio; 10, Castle Farm; 10:30-11, Crosley male quartet; 11:15, Gusts, Grace Donaldson, Hortense Rhodes; 11:30, popular dance music, Castle Farm; 12, Johanna Grosse.

WMAQ, Chicago, Ill. (447.5m-670kc), 4:45 p. m., Starrett School for Girls; 6, Chicago theater organ; 6:30, Hotel La Salle orchestra; 8, Columbia School orchestra.

WMBB, Chicago, Ill. (250m-1200kc), 7-8 p. m., Trianon duo; Neva Carlson, mezzo-soprano; Eleanor Kaplan, violinist; Erwin House, baritone; Preston Graves, pianist; 9-11, Trianon orchestra, Dell Lampe, director; Woodlawn theater orchestra, Walter Kipp; Cecil and Esther Ward, Hawaiian guitar artists; Billie Allen Hoff, blues singer; Bob Bennett, pianist; popular program.

WOAI, San Antonio, Tex. (394.5m-760kc), 3 p. m., concert; 8:30, Fort Sam Houston program.

WOAW, Omaha, Neb. (526m-570kc), 12:45 p. m., Phyllis Griswold, organist.

WOC, Davenport, Ia. (483.6m-620kc), 4-4:45 p. m., musical program, Billy Hokenson, trombone; Aita Richmond, soprano; John Drier, singer; 5:45-6, chimes concert; 7-7:30, "The Mystery Meryon's Pers"; 9-9:30, Edwin Swindell, organist; 9:30-10:30, musical program.

WOI, Ames, Iowa (270m-1110kc), 12:30 p. m., college chimes.

WOK, Chicago, Ill. (217.3m-1380kc), 4:30-7 p. m., Capitol theater organ; program; 10-1:30, Fearnley's Town club orchestra; Carl Lorraine's Pershing Palace orchestra; Husk O'Hare's Coconut Grove orchestra; Capitol theater program; program.

WORD, Batavia, Ill. (275m-1090kc), 7 p. m., program, North Shore line; 9, Webster trio; I. E. S. A. choral singers; 11, program.

WQJ, Chicago, Ill. (447.5m-670kc), 7-8 p. m., dinner concert, Ralph Williams and his Rainbo Gardens orchestra; Christian A. Grinnam, pianist and composer; Jean St. Anne, baritone; Agnes Pringle, violinist; Jessie Pringle, pianist and soprano; 10-11 a. m., Ralph Williams and his Rainbo Skylarks; Ambros, Wm., tenor; Melodians; Clarence Theders, tenor; Joe Warner, character songs; Oxford Girls, harmony singers; 1-2, Ginger hour, Ralph Williams and his Little Skylarks.

WSAI, Cincinnati, Ohio (325.9m-920kc), 10:15 p. m., Congress Playing Card string quartet.

WSB, Atlanta, Ga. (468.5m-640kc), 10:45 p. m., Biltmore Salon orchestra.

WSM, Nashville, Tenn. (282.8m-1060kc), 6:30 p. m., Francis Craig's orchestra; 8, Kiwanis club; 10, Golden Echo quartet.

CLASSICAL CONCERTS INDEX

Saturday, February 27				Sunday, February 28				Monday, March 1				Tuesday, March 2			
Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific
6 p. m.	5 p. m.	4 p. m.	3 p. m.	6 p. m.	5 p. m.	4 p. m.	3 p. m.	6 p. m.	5 p. m.	4 p. m.	3 p. m.	6 p. m.	5 p. m.	4 p. m.	3 p. m.
WCX, WEAF, WMCA, WRO.				WCAU.	WCAU, WCAU, WEAF, WEAR, WEEL, WJAR, WTAG, WWJ.			KGO, WCX, WEAF, WMCA, WRO, WWJ.				WBEZ, WEEL, WHT, WLS, WQJ, WWJ.			
KGO, KYW, WEAR, WENR, WMAQ, WNYC, WOAW, WOK, WRC.				KYW, WAMD, WBZ, WEAR, WGBS, WGGP, WKAQ, WLS, WORD.				KFMX, KMA, KNX, KTHS, WAMD, WCCO, WEAF, WEEL, WGR, WHAD, WJAR, WLS, WMAQ, WNYC, WOC, WSOE.				KEL, KLD, S, WPAP, WCAE, WCAU, WCB, WCO, WEAF, WEEL, WGR, WHAR, WHAS, WJAR, WNYC, WOC, WORD, WRC, WSAI, WSB, WTAG.			
				KFMX, KMA, KNX, KTHS, WAMD, WCCO, WEAF, WEEL, WGR, WHAD, WJAR, WLS, WMAQ, WNYC, WOC, WSOE.				KGO, KGW, KMA, KPO, KTHS, WCAE, WLS, WLW, WOC, WSAI.							
				KGW, KPO, KHJ, KNX, KPO, KTHS, KYW, WHN, WKRC, WOC.											
				KHJ, KNX, WOC.											
				1 a. m. 12 m											
				12 m											
				12 m											

Wednesday, March 3

Eastern	Central	Mountain	Pacific
6 p. m.	5 p. m.	4 p. m.	3 p. m.
WCX, WEAF, WMCA, WRO, WWJ.			
KGO, WEAR, WHAD, WJR, WMAQ, WOK, WTTIC.			
KFNE, KPRC, KSD, KYW, WAMD, WBZ, WCX, WEAF, WEEL, WHT, WLW, WMBB, WMCA, WQJ, WTAG, WWJ.			
KDA, KGO, KPRC, KSD, KYW, WBZ, WCCO, WDAP, WEEL, WGR, WHAD, WHAS, WJAR, WMAQ, WOR, WOS, WORD.			
KFMX, KMA, KNX, KTHS, WAMD, WCCO, WEAF, WEEL, WGR, WHAD, WJAR, WLS, WMAQ, WNYC, WOC, WSOE.			
KGO, KGW, KMA, KPO, KTHS, WCAE, WLS, WLW, WOC, WSAI.			
KGW, KPO, KHJ, WHAD, WLW.			
1 a. m. 12 m			

Thursday, March 4

Eastern	Central	Mountain	Pacific
6 p. m.	5 p. m.	4 p. m.	3 p. m.
WCX, WEAF, WIP, WMCA, WRO, WWJ.			
KGO, KSD, WEAF, WEAR, WGBS, WHAD, WJR, WMAQ, WOAW, WOK, WWJ.			
KYW, WBBR, WBZ, WCAU, WCCO, WCX, WEAR, WEEL, WGR, WGY, WHAR, WHT, WLS, WLW, WMBB, WOAW, WQJ, WTAG, WTTIC.			
KEL, KLD, S, WPAP, WCAE, WCAU, WCB, WCO, WEAF, WEEL, WGR, WHAR, WHAS, WJAR, WNYC, WOC, WORD, WRC, WSAI, WSB, WTAG.			
KNX, KPRC, KTHS, KYW, WAMD, WGR, WGY, WHAD, WMC, WOAW, WOC, WSAI.			
KGO, KPO, KTHS, WBAP, WKRC.			
KGW, KPO, WHO, WKRC.			
1 a. m. 12 m			

Friday, March 5

Eastern	Central	Mountain	Pacific
6 p. m.	5 p. m.	4 p. m.	3 p. m.
WGO, WCX, WMCA, WRO, WWJ.			
KGO, WEAF, WGY, WHAD, WJR, WMAQ, WOAW, WOK, WOR, WTTIC.			
KYW, WAHG, WAMD, WBZ, WCAU, WCX, WEEL, WEEL, WHT, WLS, WQJ, WWJ.			
KFDM, KFN, KFOA, KGO, KHJ, KSD, KYW, WBAP, WBZ, WCAU, WDAP, WEEL, WHAD, WJAR, WMAQ, WMCA, WSAI.			
KFAB, KFDM, KOA, WCCO, WHAD, WMAQ.			
KFMX, KHJ, KNX, KPO.			
12 m			

Central Time Stations

KFAB, Lincoln, Neb. (340.7m-880kc), 5:30-6:30 p. m., dinner concert; 8:30-10:30, Belshaw's orchestra; Gloomy Gus, entertainer; Ed. Ellingson; Harmony Boys, vocal and piano; Slick Merriam, poetic pianist.

KFNF, Shenandoah, Iowa (263m-1140kc), 7 p. m., concert, Seed bunch.

KFRU, Columbia, Mo. (499.7m-600kc), 4:30 p. m., Bella Vista Quadrangle orchestra; 9-11, Stephens College Conservatory of Music.

KLDS, Independence, Mo. (441m-680kc), 2:30 p. m., matinee program; 8, Ada Griffith, cellist; Bertha Burgess, soprano; Marian Thorpe, harpist; Ladies' duet; Junior high school girls chorus; William T. Hood, baritone; male quartet.

KMA, Shenandoah, Iowa (252m-1190kc), 11:30-12:30 p. m., noonday rural program; banjo solos, Charles Skinner; 6-7, musical numbers; 9-11, Bobbie and Babe Riddle, singing and clogging; Willy Cunningham, Scotchman; familiar songs, Mrs. May, director.

KPRC, Houston, Tex. (296.9m-1010kc), 12 noon, luncheon program; 7:30 p. m., Jack Willrich's orchestra, Virginia Willrich, piano-accordionist; 8:30, Edna Adams, sweetheart of the air, E. E. Sawyer, accompanist; 9:15, Kobusch and Shay; popular entertainers; 11, Capitol theater orchestra.

KSD, St. Louis, Mo. (545.1m-550kc), 7:30 p. m., program, Hotel Statler orchestra.

church service; 9, Nash-Finch concert orchestra; 10:05, Emmet Long's Golden Pheasant dance orchestra; 11:30, organ recital, Eddie Dunstaecker.

WDF, Kansas City, Mo. (365.6m-820kc), 6-7 p. m., Trianon ensemble; 8-10, one-act play, WDAF players; glee clubs, Kansas City Junior college; Jack Little; 11:45-1 a. m., Ted Weens' Victor Recording orchestra; Ben Bernie's orchestra; Jack Little.

WEBH, Chicago, Ill. (370.2m-810kc), 3-4 p. m., special features; 7-8, brass quartet; Oriole string trio; 9-9:45, Florence Behrends; Frank Greif, tenor; Eugenia Dolberg, pianist; Oriole orchestra; James Murray, Frank Pasquah, marimba band, trombone duo; 11-12:30 a. m., Oriole orchestra; Howard Neumiller, pianist; Florence Behrends; Irene Beasley, impromptu review Oriole orchestra.

WFAA, Dallas, Tex. (475.9m-630kc), 12:30-1 p. m., Sears-Robuck program; 1:30-2, Mario H. Bolack, pianist; 2:30-3, Ernest Wayland, singer and pianist.

WGN, Chicago, Ill. (302.8m-990kc), 11-11:30 a. m., organ concert, Chicago theater, Dean Foster; 12:01-12:30 p. m., noon hour entertainment for children; 12:40-2:30, luncheon concert music; 2:30-3, Lyon and Healy artists recital; 3:25, Port o' Missing Men; 3:30-4:15, tea time music; 4:30-5, organ; 6:30-6:45, dinner concert music; 6:45-7, old-time favorite songs; 8-9, Evanston's Men's chorus; 10-10:10, Radio comic strip; 10:10-10:30, play shop; 10:30-10:45, old-time songs; 10:45-11, songs, Correll and Gosden, Freda Leonard and Jewell Barnett; Hawaiian guitar music, Langdon brothers.

WHAS, Louisville, Ky. (399.8m-750kc), 1-2 p. m., concert, Barney Rapp's orchestra; 3-3:30, organ recital, Myrtle Zahn; 4-5, concerts; 7:30-9, Virginia Vetter's entertainers.

WHB, Kansas City, Mo. (365.6m-820kc), 2-3 p. m., Morrill Moore, organist; 7-8, Milo Finley trio; Girls' Banjo orchestra.

WHO, Des Moines, Iowa (526m-570kc), 6-7 p. m., Bankers Life Little symphonic orchestra; 7:15-8:15, Irene Doran's little symphony orchestra; 8:15-9, Herman Kir-

Mountain Time Stations

KFWA, Ogden, Utah (261m-1150kc), 4-5 p. m., organ recital, Paramount theater; 5-6, Ogden Radio dealers program; 9-10:30, music, Paramount theater; 10:30-12, dance music, Old Cresces and his orchestra.

KOA, Denver, Colo. (322.4m-930kc), 12:15 p. m., Rialto theater organ recital, Marjorie Nash; 6:30, string orchestra concert; 8, instrumental program, Scheuerman's Colorado orchestra; 8:15, studio program, "An Hour in Scotland"; Blue Bell Four; staff artists, Ralph Freese, tenor; Hulda Edwards, soprano; G. Crowley, pianist; Julian Riley, violinist; 10-12, dance program, Broadmoor Rhythm Rustlers.

Pacific Time Stations

KFI, Los Angeles, Calif. (467m-642kc), 11:05, program, Gelfand company; 5:30-6 p. m., Oriole dance orchestra; 6, nightly doings; 6:15, KFI's Seeing California; 6:30, vest pocket program; 7-7:30, program, A. H. Grebe and company, presenting Synchrophase String ensemble; 7:30, Nick Harris detective story; 8-9, program, California Petroleum company; 9-10, program, Chevrolet Motor company of California; Chevrolet String ensemble; 10-11, Patrick-Marsh dance orchestra; Betty Patrick, soloist.

KFON, Long Beach, Calif. (232.4m-1290kc), 6-6:30 p. m., Brayton's theater organ; information; 7-8, investors' hour with music; 8-9, Press Telegram studio; 9-10, program, Sam Abrams, the tailor; 10-11, dance music.

KFWB, Hollywood, Calif. (252m-1190kc), 8-9 p. m., California serenaders, Sol Hoopii's Hawaiians, Paul Ford, baritone; 9-9:30, Bill Hatch's Oakmont Country club orchestra; 9:30-10, Mutual Motors joke contest; 10-11, Warner Brothers studio.

KGO, Oakland, Calif. (361m-830kc), 3-4 p. m., Domenica Patero Robbins, contraalto; Nora C. Hanson, soprano; Robert Norman, tenor; 4-5:30, Hotel St. Francis concert orchestra; 5:30, Mr. Pix-it; 6-6:55, dinner concert, Kohler and Chase.

KGW, Portland, Ore. (491.5m-610kc), 6-7 p. m., Olds, Wortman and King and company; 8-9, Seventh United States Infantry band; 9-10, music; 10-11, Sherman, Clay and company.

KHJ, Los Angeles, Calif. (405.2m-740kc), 6-7:30 p. m., children's hour with Dick Winslow, juvenile reporter; Vivian Marple and Mickey McBan, screen juveniles; Uncle John; 7:45, history story, Prof. Hertzig; 8:30-10, program, Lions Club of Santa Ana.

KJR, Seattle, Wash. (384.4m-780kc), 1:30-3:30 p. m., Post-Intelligence matinee program; 7-8:30, Sears-Robuck program; Bab's lady orchestra; 8:30-10, Post-Intelligence program.

KMTR, Hollywood, Calif. (238m-1260kc), 8-10 p. m., KMTR concert orchestra, Loren Powell, director; 10-11, Starr Piano company studio.

KNX, Hollywood, Calif. (336.9m-890kc), 5:30 p. m., Leighton's Arcade cafeteria orchestra; 6:30-7, Atwater Kent concert orchestra; 7-8, studio program; 8-9, feature program; 9-10, Joe Daley's comedians; 10-11, dance music; 11-12, Ambassador hotel dance orchestra playing in Coconut Grove.

KPO, San Francisco, Calif. (428.3m-700

“INTERURBAN” KGO PLAY THIS WEEK

Thursday, March 4

Headliners Today

Eastern	Central	Mountain	Pacific
8 p. m.	7 p. m.	6 p. m.	5 p. m.
WMBB (250m-1200ke) Spanish music.			
8:30	7:30	6:30	5:30
WOC (483.6m-620ke) Plow Boys.			
9	8	7	6
WSB (428.3m-700ke) Atlanta Bell Hops orchestra.			
10	9	8	7
WGY (379.5m-790ke) Chinese program.			
10:30	9:30	8:30	7:30
WBAP (475.9m-630ke) Saxophone quartet.			
11	10	9	8
KGO (361.2m-830ke) “Interurban” KGO players.			
WBZ (309.1m-900ke) Repertoire frolic.			
11:20	10:20	9:20	8:20
WCCO (416.4m-720ke) Anniversary program.			

Thursday, silent night for: CHIC, CKNC, CNRA, CNRE, CNRO, CNRR, CNRT, CNR, CNRW, KFAB, KFAU, KFDM, KLEG, KFEX, KFOA, KFUD, KFVE, KFWA, KGW, KILX, KMOX, KOA, KOAC, KOB, KWSG, PWA, WABQ, WAFD, WAHG, WCAP, WCEE, WDOO, WEAD, WEBI, WEBW, WHAD, WHAZ, WJJD, WOR, WOS, WSM, WSUI, WTAM.

Eastern Time Stations

CFCA, Toronto, Can. (356.9m-840ke), 9 p. m., musical program; 11, Canada Dry Ginger Ale orchestra.
KDKA, Pittsburgh, Pa. (309.1m-970ke), 12:20 p. m., Trinity church luten service; 6:30, KDKA Little symphony orchestra; 8:30, Richard Kountz, KDKA Little symphony orchestra; 9, concert; 11, concert.
WBAL, Baltimore, Md. (246m-1220ke), 6:30-7:30 p. m., WBAL dinner orchestra; 7:30-8, recital, Frederick D. Weaver, organist; 8-10, Paul Hodson, pianist; Edna Profen, soprano; Mand Albert, contralto; Richard Cumins, baritone; Robert Lee, violinist.
WBBF, New York, N. Y. (273m-1100ke), 8 p. m., Watchtower instrumental trio; 8:10, vocal selections, Ruth de Boer and Elvira Kiefer; 8:40, vocal selections; 8:50, Watchtower instrumental trio.
WBZ, Springfield, Mass. (333.1m-900ke), 6:30 p. m., Hotel Kimball orchestra; 7, Hotel Lenox ensemble; 7:30, Angelo Catterucci, accordionist; 8, Leo Reisman's orchestra; 9, Grace Tucker, pianist; 9:15, Anna M. Wollmann, soprano; 9:30, organ recital; 10:05, Edwin J. McInelley and orchestra; 11, Repertory theater.
WCAU, Philadelphia, Pa. (277.6m-1080ke), 6:30 p. m., Cathay Tea Garden dance orchestra; 7:30, Snellenburg's symphony orchestra; 8, The Mitchell Gondolier; 8:15, recital; 8:45, The Kandy Kids; 9, Barry O'Moore, the Irish tenor; 9:30, Musical Chords; 10, Sesqui-Centennial hour; 11, Parodians dance orchestra; 11:30, Club Cadix revue.
WCX, Detroit, Mich. (516.9m-580ke), 6-7 p. m., Goldkette's ensemble; 8-9, studio program.
WDBO, Winter Park, Fla. (239.9m-1250ke), 8-10:30 p. m., community program.
WEAF, New York, N. Y. (491.5m-610ke), 11 a. m., Ruth Wagner, soprano; 11:20, Ruth Wagner, soprano; 4 p. m., Helene Koster, soprano; 4:15, Nathan Weinberg, violinist; 4:30, George Kanony, baritone; 5-6, Vincent Lopez and orchestra; 6-7, dinner music, Rose Room of Hotel Waldorf-Astoria; 7, mid-week hymn singing; 7:30, the Smith Brothers; 8, the Larkinites, WEAF, WVEI, WGR, WWJ, WFI, WTAG, WOC, WCCO, KSD, WCAE, WEAR; 8:30, Hire's Harvesters, WEAF, WVEI, WFI, WCAE, WLIB, WSAI, WWJ; 9, Cicquot Club Estimos, WEAF, WVEI, WJAB, WTAG, WFI, WCAE, WSAI, WEAR, WGR, WWJ, WOC, WCCO, KSD, WGN; 10, Goodrich Silvertown Cord orchestra, WEAF, WVEI, WCAE, WIAR, WFI, WGN, WGR, WWJ, WTAG, WOC, WCCO, KSD, WSAI, WADC; 11-12, Vincent Lopez and orchestra from Casa Lopez.
WEAO, Columbus, Ohio (293.9m-1020ke), 4:30 p. m., music.
WEAR, Cleveland, Ohio (389.4m-770ke), 7 p. m., Hotel Statler concert orchestra; 8:30, Workrite Radio artists; 10, Vincent Percy, organist, assisting artists.
WEI, New York, N. Y. (272.6m-1100ke), 7 p. m., Blenheim theater ensemble; 7:45, Sara V. Tufts, soprano; 8, Thomas Prytherch, Welsh tenor; 8:30, Astoria Collegians.
WEEI, Boston, Mass. (348.6m-860ke), 3:05 p. m., Lou Klayman and his orchestra; 3:45, Eliot Daniel, pianist; 5, Fieur Brousseau, soprano; 5:30, Harry Marshad and his orchestra; 6:05, Harry Marshad's orchestra; 7:30, musical.
WFI, Philadelphia, Pa. (394.5m-760ke), 1 p. m., tea room ensemble; 3, club program, Junior Section of Southeastern District, Mrs. R. Maurice Snyder, chairman; 6:30, Bellevue Stratford concert orchestra; 7, Bellevue Stratford dance orchestra.
WGBS, New York, N. Y. (315.6m-930ke), 1:30 p. m., Crete Carton, soprano; 2, Leonard Garfunkel, pianist; Lilya Ross, soprano; 3, Mary Milstead, soprano; 7:30, Edward Bozale, tenor; 8, William F. Sweeney, baritone; 9, Crystal Palace orchestra; 9:45, Fife brothers; 10:30, Vanderbilt hotel orchestra; 11:30, “The Matinee Girl.”
WGCP, New York, N. Y. (252m-1190ke), 3 p. m., Elvira Rosa Geiger, pianist; 3:15, Osborne and Tucker; 3:30, Davis and Gallis, songs; 4:10, The “3” Harps; 4:30, Joe Ross, harmonica; 4:45, George Wright, tenor; 5:05, Sylvia Schatz, pianist; 5:15, Doris Freedman, songs; 10:30, Irving Eisenberg, organist; 10:45, Katherine Adolph, soprano; 11, Plotit and Val, songs; 11:15, Frankie Meadows, songs; 11:30, Strickland's orchestra; 11:45, members of Princess Flavia company.
WGH, Clearwater, Fla. (266m-1130ke), 6:30-7:30 p. m., dinner music; 8:30-9:30, the Realatordores; 11:45-1, Radio Ramblers.
WGHP, Detroit, Mich. (270m-1110ke), 6-7 p. m., dinner concert, Hotel Tuiler; 10-11, Skylark dance band and entertainers; 11-12, frolicers; 12-1 a. m., Gerald Marks and his orchestra.
WGR, Buffalo, N. Y. (319m-940ke), 2:30 p. m., WGR's afternoon program; 6:30, Vincent Lopez' Hotel Statler dance orchestra.
WGY, Schenectady, N. Y. (379.5m-790ke), 2 p. m., music; 6:30, dinner program, Ten Eyck concert trio; 7:45, program, Syracuse university; 11:30, Stephen E. Boisclair, organist.
WHAR, Atlantic City, N. J. (275m-1090ke), 2 p. m., Seaside hotel trio; 8, Seaside hotel trio; 9, studio concert; 11:30, dance orchestra.
WIP, Philadelphia, Pa. (508.2m-590ke), 1 p. m., Gimbel tea room orchestra; 3, recital, Philip Jenkins studio; 6:05, Pangea cafe orchestra; songs, Margaret Keenan; 8:15, The Sesqui-Centennial hour; 8:45, educational talk; 9, The Philomel chorus; 10:15, Nelson Maples and his S. S. Leviathan dance orchestra.
WJAX, Jacksonville, Fla. (336.9m-890ke), 3:30 p. m., Hemming Park band concert, Vessella's band, Oreste Vessella, conductor; 7:30, music memory contest; 8-9, classical recital; 11-12, popular program.
WJR, Pontiac, Mich. (516.9m-580ke), 7 p. m., Jean Goldkette's Petite symphony orchestra, soloists; 7:30, Arctic specials; 9, Mulkey celebrities.
WJY, New York, N. Y. (454.3m-660ke), 8:15 p. m., American orchestral concert.
WJZ, New York, N. Y. (454.3m-660ke), 1 p. m., Hotel Pennsylvania concert orchestra; 4:30, Hotel Commodore tea concert; 7:20, Hotel Vanderbilt orchestra; 10:45, Freddie Rich and his Hotel Astor grill orchestra.
WLIT, Philadelphia, Pa. (394.5m-760ke), 12:20 p. m., religious service; 12:35, Benjamin Franklin concert orchestra; 2, Arcadia cafe concert orchestra; 4:30, artist recital; 7:30, Dream Daddy's bedtime stories.
WLWL, New York, N. Y. (288.3m-1040ke), 9:15 p. m., violin; 10, music; 10:30, songs.
WMAK, Buffalo, N. Y. (266m-1130ke), 6:15-7:15 p. m., dinner music.



Here is a modern Pied Piper of Hamelin, Miss Hazel Knox. She charms the children away from home on long ether trips every night at WBAL, Baltimore.

NEWS BULLETINS

Daily Except Sunday

Eastern	Central	Mountain	Pacific
9:45 a. m.	8:45 a. m.	7:45 a. m.	6:45 a. m.
KDKA (309.1m-970ke).			
10	9	8	7
WGN (302.8m-990ke).			
10:35	9:35	8:35	7:35
WCCO (416.4m-720ke).			
11	10	9	8
WOAI (394.5m-760ke).			
12 n.	11	10	9
CFCA (356.9m-840ke); KDKA (309.1m-970ke); KPRC (296.9m-1010ke);			
12:30 p. m. 11:30	10:30	9:30	
WCAE (461.3m-650ke).			
1	12 n.	11	10
KGW (491.5m-610ke); KNX (336.9m-890ke).			
1:15	12:15 p. m.	11:15	10:15
WOAI (394.5m-760ke).			
3:45	2:45	1:45 p. m.	12:45 p. m.
WHAS (399.8m-750ke).			
4	3	2	1
WCX (516.9m-580ke).			
4:30	3:30	2:30	1:30
WCAE (461.3m-650ke); WFAA (475.9m-630ke).			
6	5	4	3
CFCA (356.9m-840ke).			
6:30	5:30	4:30	3:30
WPG (299.8m-1000ke).			
7	6	5	4
KOIL (278m-1080ke); WOC (483.6m-620ke).			
7:15	6:15	5:15	4:15
WMAK (265.6m-1130ke); WOAI (394.5m-760ke).			
8	7	6	5
WIBF (384.4m-780ke); WMCA (340.7m-880ke).			
9	8	7	6
WSAI (325.9m-920ke).			
9:30	8:30	7:30	6:30
KPO (428.3m-700ke).			
10	9	8	7
KLLX (508.2m-590ke).			
10:45	9:45	8:45	7:45
WEBH (370.2m-810ke).			

Sunday

Eastern	Central	Mountain	Pacific
8 p. m.	7 p. m.	6 p. m.	5 p. m.
WMAK (265.6m-1130ke).			
8:15	7:15	6:15	5:15
WEBH (370.2m-810ke).			
9	8	7	6
WPG (299.8m-1000ke).			
12	11	10	9
KFWB (252m-1190ke).			

KYW, “The World Crier,” broadcasts news every half hour from 8 a. m. to 2 a. m.

cal program; 9:30-11, popular tunes; 11-12, Pantages theater.
WBBM, Chicago, Ill. (226m-1330ke), 4-6 p. m., concert, 8-10, Ziegler sisters; Moulin Rouge orchestra; Two Jays; Charlie Garland; Brewers' Zig Zag trio; Maurice Silverman; Pauline Stiffler Atlas, violinist; Floyd Falch; 10-12, Harry and Sandy; Moulin Rouge orchestra; Harry Brailsford, mandolin; Pearl Jarret, pianologues; Fred Jacobson; Moulin Rouge cafe stars.
WCAL, Northfield, Minn. (336.9m-890ke), 7 p. m., program, Norwegian Lutheran church.
WCBD, Zion, Ill. (344.6m-870ke), 8 p. m., Treble Clef chorus; omet quartet; mixed quartet; Dorothy Bull, soprano; Newheart and Stewart, duets; John Studebaker, clarinetist; Gerald Mason, cornetist; Mrs. May Bagge, reader; Gladys Gaylor, pianist.
WCCO, Minneapolis-St. Paul, Minn. (416.4m-720ke), 12 noon, concert, Donaldson's orchestra; 4 p. m., readers' club; 7:30, musical program; 10:20, anniversary program.
WDAF, Kansas City, Mo. (365.6m-820ke), 6-7 p. m., Trianon ensemble; 11:45-1 a. m., Ted Weems' Victor Recording orchestra; Ted Meyn, organist; Billy Adair's orchestra; Jack Little.
WEBH, Chicago, Ill. (370.2m-810ke), 3-4 p. m., features, Uptown theater; 7-8, recital; 9-9:45, Oriole orchestra; Belle Forbes Jutz, soprano; saxophone quintet; Smoky Seven Jazz band; 11-12:30 a. m., Oriole orchestra; Belle Forbes Cutter, soprano; Oriole string trio.
WFAA, Dallas, Tex. (475.9m-630ke), 4:30-5 p. m., Jack A. Davis, pianist and baritone; Jack Bell, tenor; 6:30-7:30, Baker hotel orchestra; 8:30-9:30, Edith Beilharz, violinist, assisting musicians.
WGN, Chicago, Ill. (302.8m-990ke), 11-11:30 a. m., morning organ concert, Chicago theater, Dean Fossler; 12:01-12:30 p. m., noon hour entertainment for children; 12:40-2:30, luncheon concert music; 2:30-3, Lyon & Healy artist recital; 3:25, Port o' Missing Men; 3:30-4:15, tea time music; 4:30-5, organ recital, Edward Benedict; 8:45, dinner concert music; 6:45-7, old-time favorite songs; 10-10:10, “Sam 'n' Henry,” Radio comic strip; 10:10-10:30, play shop; 10:30-10:45, old-time songs; 10:45, dance music; songs, Correll and Gosden, Freda Leonard and Jewell Barnett.
WHAS, Louisville, Ky. (399.8m-750ke), 1-2 p. m., Benson concert trio; 3-3:30, organ recital, Myrtle Zahn; 4-5, concerts; 7:30-9, concert, 138th Field Artillery band.
WHB, Kansas City, Mo. (365.6m-820ke), 8-9 p. m., Dan Doores, violinist; Messiah double quartet; Ruth Herbert, soprano; Mrs. David Bjorkman, accompanist; Marjorie Standard, pianist; Ethel Rosa Sarman, reader; 9-9:30, Cleared Bars quintet.
WHO, Des Moines, Iowa (526m-570ke), 7:30-8 p. m., Raleigh quintet; 8-9, Bankers Life trio; 11-12, Bankers Life “Corn Sugar” orchestra.
WIBO, Chicago, Ill. (226m-1330ke), 2-4 p. m., Shut-in program; 6-8, dinner concert; songs made famous by John McCormack, Walter Prentiss; Helen Snyder, soprano; Harriet Hebert, contralto; William Molnare, tenor; string trio; Chester Newman, baritone; Swedish program; 12 midnight, jamboree; Ted Florio, pianist; Dan Russo, violinist; Marie Tully, soprano; Wayne Meyers, reader; Henry Davis; Erwin Cornelius, ukule soloist; Jack Goodman.
WJAZ, Chicago, Ill. (322.4m-930ke), 9 p. m., Lois Albright, pianist; Verma McCombs, contralto; Nesta Smith, violinist; Esther Gelo, soprano.
WJJD, Mooseheart, Ill. (370.2m-810ke), 2-3 p. m., Howard L. Peterson, organist; 4-5, music, children; 5:30-7, Jack Nelson; Palmer House symphonic players; Howard L. Peterson, organist; Palmer House Victorians; 8-9, music, children; 10-11, Palmer House Victorians; 12:30, Palmer House Victorians; Jack Nelson.
WKAF, Milwaukee, Wis. (261m-1150ke), 8:30-10 p. m., Trixie Ann Tracy's Royal Hawaiians; Michael Swedish, baritone; Spencer Reuter, tenor.
WLH, Chicago, Ill. (302.8m-990ke), 7-7:30 p. m., musical program; 7:30-8, Hire's Harvesters; 11-1 a. m., dance music; songs, Correll and Gosden; Hawaiian guitar music, Langdon Brothers.
WLW, Cincinnati, Ohio (422.3m-710ke), 4 p. m., piano recital, Adelaide Apfel; 7, Hotel Gibson orchestra; 8, sonata for piano and violin, William and Rosemary Stoess; 8:15, Cincinnati Conservatory of Music; 9:30, musical program, Harry Hess; 10, Doherty Melody Boys; 10:45, cello solos, Arthur Brecht, Cincinnati symphony orchestra; 11:15, Irene Downing, player-roll artist; Tommy Reynolds; 11:45, Castle Farm; 12:15 a. m., “Night Howls,” Cosley Pups in midnight frolic.
WMAQ, Chicago, Ill. (447.5m-670ke), 4:45 p. m., pupils, Adolph LaFite, pianist; 6, Chicago theater organ; 6:30, Hotel La Salle orchestra; 9:20, United Lutheran churches; 9:55, chimes.
WMBB, Chicago, Ill. (250m-1200ke), 7-8 p. m., Tri-

WMCA, New York, N. Y. (340.7m-880ke), 6 p. m., Olegit Vail and his Hotel McAlpin string ensemble; 6:30, Woodmansten Inn orchestra; 7, Jack Denny's orchestra; 7:30, Pace Institute program; 10:30, Tango Gardens orchestra; 11, Ernie Golden and his Hotel McAlpin orchestra; 12, Broadway night.
WNYC, New York, N. Y. (526m-570ke), 7:10 p. m., dance program; 7:35, dance program; 8, studio concert; 9, 32nd Annual Dinner of the Bronx of Trade.
WOO, Philadelphia, Pa. (508.2m-590ke), 11 a. m., organ recital; 12:02 p. m., Crystal Tea Room orchestra, Robert E. Golden, director; 4:45, organ recital; 7:30, Hotel Adelphia orchestra.
WOR, New York, N. Y. (405.2m-740ke), 6:30-7:15 p. m., Jacques Jacobs Hotel Shelton ensemble.
WPG, Atlantic City, N. J. (299.8m-1000ke), 1:30 p. m., Hotel Morton music; 4:30, Chalifont-Haddon Hall music; 6:45, Arthur Scott Brook, organist; 7, Elks' Home music; 8:15, concert, Dorothy Johnstone Boseler's ensemble of seven harps, assisted by Elsa Meiske, soprano; 10, Atlantic City Estates orchestra; 11, Silver Slipper supper club orchestra.
WRC, Washington, D. C. (468.5m-640ke), 12 noon, Homer L. Kitt studio, organ recital; 12:30 p. m., Lenten services; 1, Hotel Mayflower orchestra; 7, New Willard hotel orchestra; 8, concert, U. S. Army band; 10:45, Meyer Davis' Swannee orchestra.
WTAG, Worcester, Mass. (268m-1120ke), 12:05-2 p. m., noonday luncheon music, WTAG orchestra; 4:30, entertainment.
WTIC, Hartford, Conn. (475.9m-630ke), 6:30 p. m., “Twenty Minutes in Happyland”; 6:50, Hotel Bond trio.

WWJ, Detroit, Mich. (352.7m-850ke), 12:05 p. m., Jules Klein's Hotel Statler orchestra; 3, Detroit News orchestra; 6, dinner concert.

Central Time Stations

KFNH, Shenandoah, Iowa (263m-1140ke), 7 p. m., Pleasant Ridge Community Farm band.
KFRU, Columbia, Mo. (499.7m-600ke), 4:30 p. m., Bella Vista Quadrangle orchestra.
KMA, Shenandoah, Iowa (252m-1190ke), 11:30-12:30 p. m., noonday rural program; Farnham trio; 2-3, Garden club; 9-10, Delmonico Dreamers.
KPRC, Houston, Tex. (296.9m-1010ke), 12 noon, Optimists' club program; 7:30 p. m., Blanchard's dance orchestra; 8:30, Skyline studio program.
KSD, St. Louis, Mo. (545.1m-550ke), 7:30 p. m., Esmeralda Berry, pianist.
KSO, Clarinda, Iowa (241.8m-1240ke), 8 p. m., Clarinda band; 10, Florida-Bound concerts.
KTHS, Hot Springs National Park, Ark. (374.8m-800ke), 9 p. m., string quartet, Eastman Four; 9:30, Arthur Platz, tenor; Elizabeth Bowe, accompanist; 9:50, dance music, Meyer Davis' New Arlington hotel orchestra; 10:15-10:45, popular piano melange, Elmer Menard.
KYW, Chicago, Ill. (536m-560ke), 12:05-1 p. m., noonday concert; 1-2, luncheon concert, Congress hotel; 4, afternoon frolic; 6-7, dinner music; 8:20, musical program, Congress hotel; 9, music; 11:30, evening at home.
WAMD, Minneapolis, Minn. (244m-1230ke), 11 p. m., frolic.
WBAP, Fort Worth, Tex. (475.9m-630ke), 6-6:30 p. m., Chief Gonzales' Texas Hotel Royals; 7:30-8:30, classi-

CHINESE MUSIC FEATURE OF WGY

Thursday, March 4

non duo; 9-11, Trianon orchestra, Dell Lampe, director; Woodlawn theater orchestra, Walter Klipp; Lucile O'Hara, soprano; Tommie Hughes, baritone; Bob Duffy, tenor; Clinton Keithley, singer and pianist; Celeste specialties.

WMC, Memphis, Tenn. (499.7m-600kc), 8:45 p. m., Cortese ensemble.

WOAI, San Antonio, Tex. (394.5m-760kc), 8:30 p. m., Mistletoe Melody Maids.

WOAW, Omaha, Neb. (526m-570kc), 12:45 p. m., Gilbert Jaffy's orchestra; 4:15, Adams' orchestra; 6, Dorothy Chenoweth Lowden, harpist; E. M. Mills, trumpet; 6:20, Manna Kea trio; 6:50, Randall's Royal Fontenelle orchestra; 9, de luxe; 10:30, Herb Feleman's orchestra; 12, Roseland Radio frolic; Frank Hodek's Nightingale orchestra.

WOC, Davenport, Ia. (483.6m-620kc), 5:45-6 p. m., chimes concert; 7-7:30, musical program; 7:30-8, "Plew Boys" quartet; 11-12, Le Claire hotel orchestra; song numbers, Peter MacArthur, baritone.

WOL, Ames, Iowa (270m-110kc), 12:30 p. m., college chimes.

WOK, Chicago, Ill. (217.3m-1380kc), 4:30-7 p. m., Capitol theater organ; program; 10-1:30, Tearney's Town club orchestra; Carl Lorraine's Pershing Palace orchestra; Husk O'Hare's Coconut Grove orchestra; Capitol theater program; program.

WORD, Batavia, Ill. (275m-1090kc), 8 p. m., Webster hotel trio; 8:15, International Sunday school lesson; 8:30, program, Cosmopolitan School of Music.

WQJ, Chicago, Ill. (447.5m-670kc), 7-8 p. m., Boston Store hour; concert trio, violin, cello and piano; Clement Laskowski, tenor; 10-11 a. m., Ralph Williams and his Rainbo Skylarks; Ambrose Wyrick, tenor; Jerry Sullivan; Rose Vanderbosch, soprano and pianist; Hal Lansing, uke soloist; Lew Butler; Anne Keim, mezzo-soprano; Bert Davis; Marie Pollitt, and artists; 1-2, Ginger hour, Ralph Williams, the Ginger Man, and Little Skylarks.

WSAI, Cincinnati, Ohio (325.9m-920kc), 7 p. m., musical program; 8, Clicquot Club Eskimos; 9, Silver-town Cord orchestra.

WSB, Atlanta, Ga. (468.5m-640kc), 8 p. m., Atlanta Bell Hops' orchestra; 10:45, Dr. Charles A. Sheldon, Jr., organist.

Mountain Time Stations

CFAC, Calgary, Can. (434.5m-690kc), 9 p. m., Mrs. F. A. Maclean, contralto, assisted by the C. N. R. orchestra.

KFWA, Ogden, Utah (261m-1150kc), 4-5 p. m., organ recital, Paramount theater; 5-6, Ogden Radio dealers program.

KFXF, Colorado Springs, Colo. (250m-1200kc), 8:30-11 p. m., musical program.

KOA, Denver, Colo. (322.4m-930kc), 12:15 p. m., Rialto theater organ recital, Marjorie Nash; 6:30, dinner concert, Brown Palace string orchestra.

Pacific Time Stations

KFI, Los Angeles, Calif. (467m-842kc), 5:30-6 p. m., Bamboo Gardens orchestra; 8:15, KFI's Scenic California; 8:30, vest pocket program; 7-8, program by students university of Southern California; 8-9, program, Rexall Stores of Southern California and Arizona; 9-10, program from Chickering hall; 10-11, Packard Six dance orchestra.

KFON, Long Beach, Calif. (232.4m-1290kc), 6-6:30 p. m., Braxton's theater organ; 7-7:30, studio program; 7:30-8, Long Beach Municipal band; S. Hewitt's book chat; 8:15-9, Long Beach Municipal band; 9-11, dance music.

KFWB, Hollywood, Calif. (252m-1190kc), 8-9 p. m., Hy Kach and his dance orchestra, Lola Gill, ballads and Frances St. George, the Jazzmania girl of KFWB; 9-10, program, Don P. Smith, Inc., Diana-Moon dance orchestra; Sol Hoopii's Hawaiians and Ashley sisters, vocal duets; 10-11, Warner Brothers frolic, Sunset Canyon Country club dance orchestra.

KGO, Oakland, Calif. (361m-830kc), 4-5:30 p. m., Hotel St. Francis concert orchestra; 8, "Interurban," rural comedy; music, Arion trio; 10-11 a. m., Brokaw and his orchestra.

KGW, Portland, Ore. (491.5m-610kc), 6-7 p. m., Olds, Wortman and King company.

KHJ, Los Angeles, Calif. (405.2m-740kc), Jeanne de Bard, Charlotte Palen and Uncle John; 8-10, program, Cochran Bros. with Caswell Coffee orchestra.

KJR, Seattle, Wash. (384.4m-780kc), 1:30-3 p. m., Post-Intelligencer program; 7-8:30, Eureka mixed quartet program.

KMTR, Hollywood, Calif. (238m-1260kc), 6-7 p. m., Starr Piano company studio; 8-10, KMTR concert orchestra, Loren-Powell, director.

KNX, Hollywood, Calif. (336.9m-890kc), 5:30 p. m., Leighton's Arcade cafeteria orchestra; 6:30-7, Atwater Kent concert orchestra; 7-8, H. L. Crockett company with Ilya Bronson, concert cellist; May McDonald Hope, pianist and Corrine Redd, soprano; 8-9, program, Willys-Overland dealers; 9-11, KNX feature program; 11-12, Coconut Grove dance orchestra.

KPO, San Francisco, Calif. (428.3m-700kc), 1-2 p. m., Rudy Seiger's Fairmont hotel orchestra; 2:30-3:30, matinee program; 3:30-4:30, Cyrus Trobber's Palace hotel concert orchestra; 6:40-7, Waldemar Lind and the States restaurant orchestra; 7-7:30, Rudy Seiger's Fairmont hotel orchestra; 8-10, Shrine night; 10-11, Cabrera cafe orchestra.

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

KQP, Portland, Ore. (319m-940kc), 8-9 p. m., studio program; 9-11, Studabaker Six orchestra.

KTAB, Oakland, Calif. (240m-1250kc), 8-10 p. m., studio program.

Friday, March 5

Eastern	Central	Mountain	Pacific
7 p. m.	7 p. m.	6 p. m.	5 p. m.
WTIC (475.9m-930kc) Cartoon lesson.			
8:15	7:15	6:15	5:15
WGY (379.5m-790kc) Serial play.			
8:30	7:30	6:30	5:30
WGHB (266m-1130kc) The Monkey Man.			
9:30	8:30	7:30	6:30
WFAA (475.9m-630kc) An Ideal Radio program.			
10	9	8	7
WJZ (454.3m-660kc), WGY (379.5m-790kc), WBZ (333.1m-900kc) Baldwin hour of music.			
10:15	9:15	8:15	7:15
KOA (322.4m-930kc) Elks quartet.			
11	10	9	8
WPT (394.5m-760kc) Morning Glory club.			
11:25	10:25	9:25	8:25
KTHS (374.8m-890kc) Accordion specialties.			

Friday, silent night for: CFAC, CHIC, CKNC, CKY, CNRC, CNRM, CNRO, CNRR, CNRW, KFAU, KFEQ, KFIC, KOA, KFWA, KFXF, KGO, KFAU, KLDK, KPRC, KUON, PWC, WBBR, WCAD, WCBM, WEAQ, WEBW, WGBS, WGST, WHAZ, WIP, WJAZ, WKRC, WLW, WLWL, WMAK, WNAJ, WRC, WREO, WRVA, WSAI, WSUI, WSMB, WTAM.

Eastern Time Stations

KDKA, Pittsburgh, Pa. (309.1m-970kc), 12:20 p. m., Sunday school lesson, James C. Mace; 6:30, dinner concert; 9, concert; 10:05, Teaberry time.

WABQ, Haverford, Pa. (260.7m-1150kc), 11 p. m., Ardmore theater.

WBAL, Baltimore, Md. (246m-1220kc), 6:30-7:30 p. m.,

WBAL, Baltimore, Md. (246m-1220kc), 6:30-7:30 p. m., musical program; Post Office Glee club of negro voices; 9-10, WBAL string trio; John Wilbourn, tenor.

WBZ, Springfield, Mass. (333.1m-900kc), 6:30 p. m., Hotel Kimball orchestra; 8, Edwin J. McEnelly and his orchestra; 8:30, Boston Symphony orchestra artists; 10, Baldwin hour of music, WJZ, WGY, Joseph Szigeti, violinist; Walter Gieseking, pianist.

WCAP, Washington, D. C. (468.5m-640kc), 6-12:30 p. m., Mozart string quintet; playlet.

WCAU, Philadelphia, Pa. (277.6m-1080kc), 6:45 p. m., Hotel Pennsylvania concert orchestra; 7:30, recital, N. Snellenburg and company; 8:30, The Singing Ground-hog; 8:45, The Bryan Girls; 9 recital; 9:30, The Sea Girls; 10, Willie Horowitz, songs; 10:30, Jack Myers' Musical Architects.

WCX, Detroit, Mich. (516.9m-580kc), 6-7 p. m., Gold-kette's ensemble; 8-9, studio program; 9-10, dance music, Jean Goldkette's Breeze Blowers and his Victor Recording orchestra.

WBDO, Winter Park, Fla. (239.9m-1250kc), 9-10:30 p. m., Sanlando harmonizers.

WEAF, New York, N. Y. (491.5m-610kc), 4 p. m., Harriet Oohn, mezzo-soprano; 4:15, Charles Phillips, pianist; 4:30, John Quine, baritone; Vincent Lopez and his orchestra from Tea room of Hotel Ritz-Carlton; 6-7, dinner music, Rose room of Hotel Waldorf-Astoria; 7, William Scott and Club Florida orchestra; 7:45, Pauline Watson, violinist; 8, Happiness candy boys; 8:30, Eagle Neutrodne trio; 9, Chamber musicale; 9:30, Vikings; 10, Whittall "Angelo's" Persians; 10:30, musical program; 11-12, Ben Bernie and orchestra from Hotel Roosevelt.

WEAR, Cleveland, Ohio (389.4m-770kc), 7 p. m., Wor-

EDUCATIONAL FEATURES

Saturday, February 27				Monday, March 1				Tuesday, March 2				Wednesday, March 3				Thursday, March 4				Friday, March 5								
Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific					
7:30 p. m.	6:30 p. m.	5:30 p. m.	4:30 p. m.	6:30 p. m.	5:30 p. m.	4:30 p. m.	3:30 p. m.	7:15 p. m.	6:15 p. m.	5:15 p. m.	4:15 p. m.	7:30 p. m.	6:30 p. m.	5:30 p. m.	4:30 p. m.	7:15 p. m.	6:15 p. m.	5:15 p. m.	4:15 p. m.	5:30 p. m.	4:30 p. m.	3:30 p. m.	2:30 p. m.	1:30 p. m.	1:30 p. m.	1:30 p. m.	1:30 p. m.	
WHAR (275m-1090kc) Lecture period.				WNYC (526m-570kc) German lesson.				WKAR (285.5m-1050kc) "As Portrayed in Modern Literature," Irma Gross.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) French lesson.				WNYC (526m-570kc) French lesson.				WNYC (526m-570kc) French lesson.				
8:15	7:15	6:15	5:15	6:30 p. m.	5:30 p. m.	4:30 p. m.	3:30 p. m.	7:30	6:30	5:30	4:30	7:30	6:30	5:30	4:30	7:30	6:30	5:30	4:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	1:30	
KOIL (278m-1080kc) Educational period, University of Omaha.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Board of Education.				
9	8	7	6	7:30	6:30	5:30	4:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	
WSAI (325.9m-920kc) Educational period, University of Omaha.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Board of Education.				
9:15	8:15	7:15	6:15	7:30	6:30	5:30	4:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	
WUOL (270m-1110kc) Automobile course, Prof. A. Shane.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Board of Education.				
10	9	8	7	7:30	6:30	5:30	4:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	
WSUI (483.6m-620kc) College of the Air.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Board of Education.				
10:15	9:15	8:15	7:15	7:30	6:30	5:30	4:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	
CKY (384.4m-780kc) University lecture.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Board of Education.				
9:35	8:35	7:35	6:35	7:30	6:30	5:30	4:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	
KSL (299.8m-1090kc) History of Physics.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Board of Education.				
10	9	8	7	7:30	6:30	5:30	4:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	
KOA (322.4m-930kc) Spanish lesson.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Board of Education.				
11	10	9	8	7:30	6:30	5:30	4:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	
KGO (361.2m-830kc) "Better English," Wilda Wilson Church; "The New and Old in the Reconstruction," Dr. Willard Smith.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Board of Education.				
11:15	10:15	9:15	8:15	7:30	6:30	5:30	4:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	
KOA (322.4m-930kc) Voice culture.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Board of Education.				
12	11	10	9	7:30	6:30	5:30	4:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	
WSUI (483.6m-620kc) College of the Air.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Board of Education.				
12:15	11:15	10:15	9:15	7:30	6:30	5:30	4:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	
CKY (384.4m-780kc) University lecture.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "The Abuse of Political Phrases," Prof. Francis W. Coker.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Advanced French.				WNYC (526m-570kc) Board of Education.				
12:45	11:45	10:45	9:45	7:30	6:30	5:30	4:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	8:30	7:30	6:30	5:30	4:30	3:30	2:30	1:30	
KSL (299.8m-1090kc) History of Physics.				WEAF (491.5m-610kc) Columbia university lecture.				KSAC (340.7m-880kc) Society.				WYAO (293.9m-1020kc) "																

CARTOON LESSONS THROUGH WTIC

Friday, March 5

recital, Paramount theater; 5-6, Ogden Radio dealers program.

KOA, Denver, Colo. (322.4m-930kc), 12:15 p. m., Rialto theater organ recital, Marjorie Nash; 6:30, dinner concert, Brown Palace string orchestra; 8, instrumental program, Scheuerman's orchestra; 8:15, program, Love-land, Colo., Chamber of Commerce; Elks' quartet; Rose and KOA orchestras; Indian legends; Georgia Kumleh, Monte Wagner, Bobbie Trench, Georgia Kumleh, Opal Glassgow and Mrs. Andrew Rose; vocal numbers, Artie Gregg, Margaret Foote, Ruth King, Mrs. John Cunningham, Florence Buck, Ida Malcolm, Edie Smith, Jennie Finley.

KOB, State College, N. M. (348.6m-860kc), 7:30-8:30 p. m., Columbus Boys band.

Pacific Time Stations

KFI, Los Angeles, Calif. (467m-642kc), 5:30-6 p. m., program, undersheriff Biscailuz; 6:15, KFI's Seelig California; 6:30, vest pocket program; 6:45, Radio-torial period; 7-8, varied program; 8-9, Dan L. McFarland, organist; 9-9:30, Wm. MacDougall, Scotch comedian; 9:30-10, Mutual Motors mirth contest; 10-11, Louise Kios trio.

KFON, Long Beach, Calif. (232.4m-1290kc), 6-6:30 p. m., Brayton's theater organ; 7-8, courtesy program; 8-9, Press-Telegram studio; 9-10, studio program; 10-12, Long Beach Elks lodge No. 883 frolic.

KFWB, Hollywood, Calif. (252m-1190kc), 8-9, program, John Wright, The Right Tailor; John Wright orchestra; Dan Gridley, tenor, Esther White, blues singer; 9-10, Len Nash and his Country Boys dance orchestra; 10-11, Warner Brothers frolic.

KGO, Oakland, Calif. (361m-830kc), 8-4 p. m., Rose Florence presenting Romy Piazoni, soprano; Edith Young, soprano; Duke Kamoku's Royal Hawaiians; Sybil and Marian Graves, soloists; 4-5:30, Hotel St. Francis concert orchestra; 6-6:55, dinner concert, Kohler and Chase.

KGW, Portland, Ore. (491.5m-610kc), 6-7 p. m., dinner concert; 9:10-10, Duo-Art studio; 10:30, Foot Owls.

KHJ, Los Angeles, Calif. (405.2m-740kc), 8-10 p. m., program, Western Auto Supply company.

KJR, Seattle, Wash. (384.4m-780kc), 1:30-3 p. m., Post-Intelligencer matinee program; 7-8:30, Lundquist-Lilly male quartet; 8:30-10, Post-Intelligencer program.

KMTR, Hollywood, Calif. (238m-1260kc), 8-10 p. m., KMTR concert orchestra, Loren Powell, director; 10-11, Starr Piano company studio.

KNX, Hollywood, Calif. (336.9m-890kc), 6:30-7 p. m., Atwater Kent concert orchestra; 7-8, program, Jell-X-Cell company; 8-9, program, John A. Vaughn corp.; 9-10, Order of Optimistic Donuts; 10-11, Hollywood Legion Stadium fights; 11-12, Ray West's Coconut Grove dance orchestra from Ambassador hotel.

KPO, San Francisco, Calif. (428.3m-700kc), 1:30-2 p. m., Rudy Seiger's Fairmont hotel orchestra; 6:30-7, Waldemar Lind and the States restaurant orchestra; 8-9, program; 9-10, Palace hotel dance orchestra; 10-11, Waldemar Lind and the States restaurant orchestra.

KQP, Portland, Ore. (319m-940kc), 8-9 p. m., musical program.

KTAB, Oakland, Calif. (240m-1250kc), 8-10 p. m., program, Breuner's.

KWSC, Pullman, Wash. (348.6m-860kc), 7:30-9 p. m., Cougar Co-Ed orchestra.

STATION WSWS BACK UPON AIR LANE AGAIN

New 1000-Watt Transmitter Joins Ranks of Chicago Broadcasters

CHICAGO.—An old Radio favorite greatly improved and ready to meet its old friends and add a million new ones is being heard again on the air. WSWS, the S. W. Straus & Company station, formerly WCEE of Elgin, has resumed its place in the ranks of Chicago broadcasters.

Station WSWS is licensed to operate on the old wave band of former WCEE which is 275.8 meters. A division of time will be made with WORD at Batavia, Ill. A modern plant, housing a new 1,000-watt transmitter, has been constructed at Woodale, eighteen miles west of Chicago. All broadcasts will be handled by remote control from the studios in the Straus building.

The direction of program and chief announcing has been entrusted to George Junkin, formerly associated with the Drama League of America.

Talent schedules and program arrangements are in charge of John Clark, formerly assistant director of Station WHT, where his Radio playlets and continuity presentations have been a feature of that station's programs since it has been on the air.

KDKA Has Big Musical Library to Draw From

Station Needs Large Collection of Manuscripts and Music

PITTSBURGH, Pa.—Equipping a musical library to meet the demands of aerial entertainment is a task of no mean caliber.

Taking KDKA as an example, its library, translated into monetary terms, represents an investment in excess of \$5,000.

The repertory that this section has to draw from is one of the most unique and extensive collection of manuscripts and music that has ever been assembled by a single organization. Everything of importance, from Alpha to Omega in things musical, has a place in

GENERAL TALKS AND SPEECHES

Saturday, February 27

Eastern 8 p. m.	Central 7 p. m.	Mountain 6 p. m.	Pacific 5 p. m.
WCCO (416.4m-720kc)	"Fireside Philosophies," Rev. Roy L. Smith.		
WEAF (491.5m-610kc)	"Making Use of the Museum," Homer St. Gaudens.		
8:05	7:05	6:05	5:05
WAMD (244m-1230kc)	Talk, "What Prominent Outsiders Think of Minneapolis and the Great Northwest."		
8:15	7:15	6:15	5:15
WOR (405.2m-740kc)	Saturday review of literature.		
8:45	7:45	6:45	5:45
WRC (468.5m-640kc)	Zoo talk.		
9:30	8:30	7:30	6:30
WMAQ (447.5m-670kc)	"England," Clara E. Laughlin.		
9:45	8:45	7:45	6:45
KHJ (405.2m-740kc)	History story, Prof. Hertzog.		
10	9	8	7
KGW (491.5m-610kc)	"Things Our Army Does Besides Fight," Lieut. Col. H. Edmund Bullis.		
KNX (336.9m-890kc)	"Insect Life," H. W. McSpadden.		

Monday, March 1

Eastern 4:45 p. m.	Central 3:45 p. m.	Mountain 2:45 p. m.	Pacific 1:45 p. m.
WEAF (491.5m-610kc)	"Current Art Exhibitions," Mrs. Rose Berry.		
5	4	3	2
WCCO (416.4m-720kc)	Readers' club, Mrs. Walter Stevens.		
7	6	5	4
WEZ (333.1m-900kc)	"Theatrical Gosip," Sam Wren.		
WRC (468.5m-640kc)	"Show Shopping," Leonard Hall.		
WTAG (268m-1120kc)	Science talk, Fred D. Aldrich.		
7:40	6:40	5:40	4:40
WOAW (526m-570kc)	Insurance talk.		
7:45	6:45	5:45	4:45
WSAI (325.9m-920kc)	"The Foremen's Club Movement in U. S.," Mr. Edgewood.		
8:30	7:30	6:30	5:30
WPG (299.8m-1000kc)	Health talk.		
8:45	7:45	6:45	5:45
WEAF (491.5m-610kc)	Tower health talk.		
9	8	7	6
KNX (336.9m-890kc)	Travel talk, W. F. Alder.		
WBAL (246m-1230kc)	Talk, A. Douglas McComas.		
9:15	8:15	7:15	6:15
KNX (336.9m-890kc)	Travel talk, W. F. Alder.		
9:30	8:30	7:30	6:30
WHAZ (379.5m-790kc)	"Radium," Dr. R. A. Paterson.		
11	10	9	8
KGO (361.2m-830kc)	"Recreation in the National Forests," L. A. Barrett; "Developing the Farm Managers of Tomorrow," W. G. Criswell; "Chats About New Books," Joseph Henry Jackson; "Better English," Wilda Wilson Church; "Character Training in the Home," Dr. Jun Don Ball; "Vacation Journeys of Discovery," Dr. Harold C. Bryant.		

Tuesday, March 2

Eastern 3 p. m.	Central 2 p. m.	Mountain 1 p. m.	Pacific 12 n.
KMA (252m-1190kc)	Travelogue, G. H. Van Houten.		
4:30	3:30	2:30	1:30
WCCO (416.4m-720kc)	"The World of Books," H. A. Bellows.		
5:30	4:30	3:30	2:30
WEEL (348.6m-860kc)	Talk, C. S. Bird.		
7	6	5	4
CKAC (410.7m-730kc)	Safety league talks.		
7:45	6:45	5:45	4:45
WMCA (340.7m-880kc)	Tyrell's health talk.		
7:50	6:50	5:50	4:50
WTAG (268m-1120kc)	"The Romance of Numbers," Prof. Raymond K. Morley.		
8	7	6	5
WGHP (270m-1110kc)	Talk on banking, Raymond H. Berry.		
8	7	6	5
WEBC (272.6m-1100kc)	Talk, G. T. Geer.		
WCAU (277.6m-1080kc)	Building and loan talk.		
WLW (422.3m-710kc)	"Historical Appreciation of Music," Etelka Evans.		
8:30	7:30	6:30	5:30
KGO (361.2m-830kc)	"As a Woman Thinketh," Louise Landis.		
9	8	7	6
WJJD (370.2m-810kc)	Talk, Matthew P. Adams.		
WMAQ (447.5m-670kc)	Book talk, Harry Hansen.		
WNYC (526m-570kc)	"George Frederick Haendek," Herman Neuman.		
9:15	8:15	7:15	6:15
KNX (336.9m-890kc)	Travel talk, W. F. Alder.		
9:45	8:45	7:45	6:45
KHJ (405.2m-740kc)	History story, Prof. Hertzog.		
WMCA (340.7m-880kc)	"How to Drive an Automobile," Harry Raines.		
10:30	9:30	8:30	7:30
KHJ (405.2m-740kc)	Talk on dogs, H. M. Robertson.		
10:30	9:30	8:30	7:30
KFMX (336.9m-890kc)	"The Caribbean," Prof. Keith Clark.		
11	10	9	8
WCCO (416.4m-720kc)	"Outdoors in Minnesota," Izaak Walton league.		
11	10	9	8
KGW (491.5m-610kc)	Book review; word-cartoon on styles.		
12	11	10	9
KGO (361.2m-830kc)	"Wonders of the Sky," Henry M. Hyde.		

Wednesday, March 3

Eastern 3 p. m.	Central 2 p. m.	Mountain 1 p. m.	Pacific 12 n.
WFI (394.5m-760kc)	"Care and Maintenance of a Lawn," Warren E. Melner.		
4:45	3:45	2:45	1:45
WEAF (491.5m-610kc)	"Modern European Fiction," Dorothy Brewster.		
5	4	3	2
WCCO (416.4m-720kc)	Readers' club.		
6:35	5:35	4:35	3:35
WIP (508.2m-590kc)	"The Farm Boy Makes Good," H. O. Sampson.		

Eastern 7 p. m.	Central 6 p. m.	Mountain 5 p. m.	Pacific 4 p. m.
WDAF (365.6m-820kc)	Health talk; meat talk.		
WHB (365.6m-820kc)	Automotive extension lesson, John Burns.		
WMAQ (447.5m-670kc)	Lecture, Northwestern university.		
8:45	7:45	6:45	5:45
WEEL (348.6m-860kc)	"Peerless Tours," Joe Toye.		
9	8	7	6
WKRC (422.3m-710kc)	Book review, Alice B. Coy.		
WLWL (288.3m-1040kc)	"Accountancy," K. of C. WTIC (473.9m-630kc)	"The Why of Income Tax," Prof. K. L. Williamson.	
10	9	8	7
WORD (275m-1090kc)	Talk, L. M. Smith.		
9:45	8:45	7:45	6:45
KHJ (405.2m-740kc)	History story, Prof. Hertzog.		
10:15	9:15	8:15	7:15
KOA (322.4m-930kc)	"The Epic of the Cowboy," W. O. Orr.		
WLWL (288.3m-1040kc)	Talk on movies.		
11	10	9	8
KHJ (405.2m-740kc)	Talk on astronomy, Dr. Mars Baumsgard.		

Thursday, March 4

Eastern 4:45 p. m.	Central 3:45 p. m.	Mountain 2:45 p. m.	Pacific 1:45 p. m.
WEAF (491.5m-610kc)	"Homes of Our Presidents," Henry Humphrey.		
5	4	3	2
KMA (252m-1190kc)	Travelogue, G. H. Van Houten.		
5	4	3	2
WCCO (416.4m-720kc)	Readers' club.		
5	4	3	2
WDAF (365.6m-820kc)	Book talk, Louis Mecker.		
WGY (379.5m-790kc)	WGYP book chat, William F. Jacob.		
7:45	6:45	5:45	4:45
WRC (468.5m-640kc)	Smithsonian talk.		
WMCA (340.7m-880kc)	Health talk.		
8	7	6	5
WIP (508.2m-590kc)	"The Sesqui-Centennial," Hon. Harry A. Mackey.		
8:30	7:30	6:30	5:30
WPG (299.8m-1000kc)	"World Wonder Excursions," Alfred James P. McClure.		
8:30	7:30	6:30	5:30
WGWS (315.6m-950kc)	"Footlight and Lamplight," Oliver Saylor.		
WLW (422.3m-710kc)	"The Eyes Have It," Dr. C. H. Kauffman.		
9	8	7	6
WTAG (268m-1120kc)	Travel talk.		
9	8	7	6
KYW (535.4m-560kc)	"Twenty Minutes of Good Reading," Rev. C. J. Pernin.		
9:15	8:15	7:15	6:15
KNX (336.9m-890kc)	Travel talk, W. F. Alder.		
9:30	8:30	7:30	6:30
WMAQ (447.5m-670kc)	Talk, Chicago Association of Commerce; lecture, University of Chicago.		
9:45	8:45	7:45	6:45
KHJ (405.2m-740kc)	History talk.		
10	9	8	7
WRC (468.5m-640kc)	Political situation, Frederick W. Wile.		
10:30	9:30	8:30	7:30
WMAQ (447.5m-670kc)	Lecture, University of Chicago.		
10:30	9:30	8:30	7:30
KHJ (405.2m-740kc)	Health talk.		
10:45	9:45	8:45	7:45
KHJ (405.2m-740kc)	Health talk, Dr. Phillip M. Lovell.		
10:45	9:45	8:45	7:45
KGW (491.5m-610kc)	Lecture, Catholic Truth society.		
11:05	10:05	9:05	8:05
WCCO (416.4m-720kc)	Traffic safety talk.		

Friday, March 5

Eastern 3 p. m.	Central 2 p. m.	Mountain 1 p. m.	Pacific 12 n.
KMA (252m-1190kc)	Travelogue, G. H. Van Houten.		
4:45	3:45	2:45	1:45
WIP (508.2m-590kc)	"Ostia," Dr. John C. Rolfe.		
4:45	3:45	2:45	1:45
WEAF (491.5m-610kc)	"The Frontiersman Comes Into His Own," H. H. Bittler.		
5	4	3	2
WCCO (416.4m-720kc)	Readers' club.		
5	4	3	2
WOAW (526m-570kc)	Music review, Hester Bronson Copper.		
5	4	3	2
WLW (422.3m-710kc)	"My Experiences in India," Howard Thurston.		
5	4	3	2
WBSZ (333.1m-900kc)	"Appreciation of Music," Prof. John A. O'Shea.		
5	4	3	2
WCAL (336.9m-890kc)	"The Poetry of John Masefield," Dr. George Weida Spohn.		
5	4	3	2
WEEL (348.6m-860kc)	Breck's Winter Garden talk.		
WPG (299.8m-1000kc)	Educational series, G. B. Howard.		
6	5	4	3
8:15	7:15	6:15	5:15
KDKA (309.1m-970kc)	Health talk.		
WCAU (277.6m-1080kc)	Chiropractic talk.		
7:45	6:45	5:45	4:45
WTIC (475.9m-630kc)	"The Investor's Problem," Wilbur Sherwood.		
7:45	6:45	5:45	4:45
WMAQ (447.5m-670kc)	"What We Hear in Music," Mr. and Mrs. M. E. Oberndorfer.		
8	7	6	5
KYW (535.4m-560kc)	"Twenty Minutes of Good Reading," Rev. C. J. Pernin.		
8	7	6	5
WCCO (416.4m-720kc)	Health talk.		
WLWL (288.3m-1040kc)	Talk, books.		
8:45	7:45	6:45	5:45
WMAQ (447.5m-670kc)	"What We Hear in Music," Mr. and Mrs. Oberndorfer.		
9:05	8:05	7:05	6:05
9:15	8:15	7:15	6:15
KNX (336.9m-890kc)	Travel talk.		
9:45	8:45	7:45	6:45
WSOE (246m-1220kc)	Book chat, M. S. Dudgeon.		
9:45	8:45	7:45	6:45
KHJ (405.2m-740kc)	History story.		
9:45	8:45	7:45	6:45
WMAQ (447.5m-670kc)	Lecture, University of Chicago.		
10:10	9:10	8:10	7:10
KPO (428.3m-700kc)	Book reviews, Harry A. Small.		
10:15	9:15	8:15	7:15
KOA (322.4m-930kc)	"Indian Legends," Pierce Egan.		
10:30	9:30	8:	

Radio Digest

Illustrated

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Regenerative Sets Not Alone Bloop

THE blooming, or rather anti-blooming campaign recently inaugurated by this publication as a result of the hideous demonstration of radiation afforded during International Radio Week, has brought thousands of pledges. It likewise has brought hundreds of letters from listeners which show that a mistaken idea is prevalent.

This idea is that ONLY a so-called "regenerative" receiver can radiate or bloop.

Nothing could deviate more from the truth. Why this belief has gained such a following, it is difficult to understand. Some one evidently has been "grinding an axe" for the regenerative set manufacturers. As a matter of fact a super-heterodyne can be—and often is—operated so as to bloop unmercifully.

A neutrodyne or a tuned radio frequency receiver can also make the ether merry with squeals and howls. We might as well admit it. Only about two per cent of the tube sets in use won't bloop.

Radiation can be modified by set design and the circuit used. It can be made ALMOST foolproof, and even wholly so. The best cure for blooming is the education of listeners. We must learn how to listen in.

This sounds foolish, perhaps, but it is true. Many of us think we know all about it. We can tune them in from a thousand miles away, so we guess we don't radiate. Ha, there is the mistake. Just about the time we are turning them in a thousand miles away, we are setting up a disturbance in the ether that can be heard for miles around.

We believe magazines, newspapers, Radio clubs and broadcasting stations can do much to stop blooming. They can help educate listeners to operate sets in such a fashion as to avoid radiation entirely, or at least decrease it to a minimum.

We have been told by many readers that we are starting at the wrong end; that we are "looking through the wrong end of the telescope; that we should stop the manufacture of blooming receivers; and that we should "come out and say" that regenerative sets are causing the trouble.

But our answer is given. We back our statement that nearly every present day set will bloop—it all depends on the operation.

Learn how to tune the set properly. THAT is the secret of the "I Won't Bloop" pledge.

Celebrities Hold Interest

TALKS with general appeal, with popular interest, by authorities are being scheduled by the leading broadcasters. This is a good sign. Not alone does it show that broadcasting is becoming fully recognized by the leaders of today, but it shows that stations are diversifying their musical and service programs with information of the highest class.

We have listened in the past few months to a number of these talks. Commander Donald B. MacMillan, arctic explorer, has told from WJAZ and other stations what he learned on his last expedition. Floyd Gibbons, Chicago Tribune foreign staff correspondent, over WGN, described an intimate picture of the World War. Paul Scott Mower, Chicago Daily News foreign staff correspondent, was the pleasing surprise which greeted our ears from WMAQ. He told about his visit behind the Riffian lines with Abd-El-Krim. Lieutenant Smythe was tuned in both at WJZ and WAHG, telling of his canoe trip from Nova Scotia to New York.

There are others. We have not heard or noted all. The point we wish to make, however, is that talks by such men as these are, in our estimation, far more valuable and entertaining to the invisible audience than the usual run of repeated musical numbers. Talks, straight from the men who are best authorities on their respective subjects, are always welcome and not always obtainable.

We like to hear news of the world direct from the men, from the living voices of those men, who have lived the news stories they describe through the microphone. Stories direct from celebrities such as these are even better than when read from print. Such talks tenaciously hold the listeners' interest.

RADIO INDI-GEST

Radio Wanderlust

The wanderlust is in my hands tonight!
My fingers will not let the dials be!
I've wandered from the east coast to the west—
I've heard the restless splashing of the sea!

In cities—in the valleys—on the lake—
I've lingered only long enough to hear
The "Stand-by" or the "Sign-off"—then good bye!
I'm off for other stations far and near!

Across the mountains I have picked my way
To stop along the Californian coast!
But, restless, I have taken up the trail
For further conquests over which to boast!

The highways of the sky are beckoning me—
And O, I can't resist their thrilling call!
A million little songs along the way
Are singing and I'd like to hear them all!

But linger long I cannot seem to do!
For something calls me on and ever on!
It is the wanderlust!—It's magic spell
Has kept me sitting here 'till it is dawn!
CHARLES ALLEN BRANHAM

\$.00,000 Reward

The other night I listened to an evening's entertainment from several stations and did not hear "Yes Sir, That's My Baby" or "The Prisoner's Song." How about it?
LISSNER INN

One can never tell. Maybe "The Baby" was "The Prisoner's" darlink and he flew over the high prizun walls and they went out on the oshun in the grand ship all mounted in silvur and gold. Now they may both even be willink to die. We hope so.

The Scotch Get a Rest

Dear Indi: The following telegram was received at Station KFI during a rebroadcast through WGY Schenectady.

"KFI, I am hearing you on a crystal set in the Bronx. I knew I didn't have to spend a lot of money to hear the Pacific coast. Isidore Levinsky."

The Cure-All

My sister had the measles and my brother had the mumps,
And Ma took down with Rheumatiz and Pa was in the dumps;
But Santa brought a Radio, and soon as it was in
My poor old swelled-up brother most forgot his chin.
And little specked sister with the guinea egg nose
Got up and broke the looking glass and tumbled into clothes.
And Ma gave up her rheumatiz and took to playing golf,
And Pa and all the rest of us just laughed our blamed heads off.

The Radio, The Radio, Hurrah! By Jing!! Gee Whizz!!!
I'll let the world take all the rest and keep the best there is.

ALEX C. D. NOE

The Quantity of Mercy Is Restrained

There are several hundred fans who may be disappointed because we are not going to print all the last lines submitted for the alleged poem on what should happen to a pesky announcer. A wave of compassion prevents it. Oh, hearts of stone. We think there must be a lot of windows in front of which lilac blossoms wouldn't care to find seed nor canaries the courage to sing.

Lend Me Your Ear Phones

WE ARE TRYING TO FIND THE FIRST RADIO ENTHUSIAST. NOMINATIONS ARE OPEN FOR THE "FAMOUS FANS" CLUB. WE WILL START OFF THE LIST WITH BILL SHAKESPEARE, BECAUSE HIS "ARIEL" CAUSED A "TEMPEST." HAVE YOU ANYONE TO RECOMMEND FOR MEMBERSHIP?

L' Envoi

Thanks to thee, my European friend,
For the lesson thou hast taught
Of the number of vile villians here
Who remain unhung, uncaught,
Who poison the air with awful squeals
And a good set goes for naught.
F. L. DE VOTO

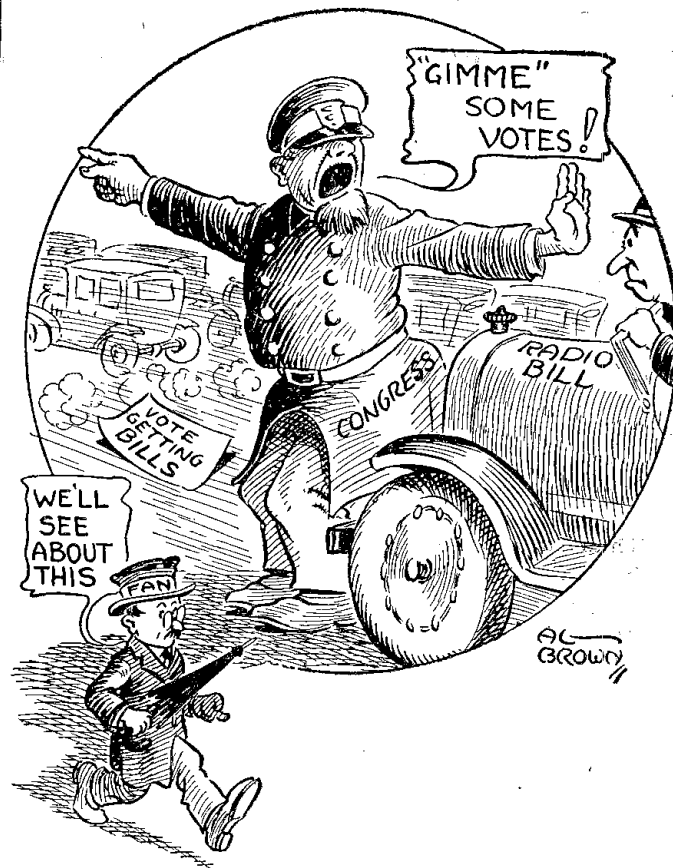
Heat Up the Incinerator, George

T. E. Blase of St. Paul asks, "What is the thing you call 'bloop'?" Well, friend, time and experience alone will tell you what a blooper is and then you can make up your own definition. But, anyway, he is everything we call him and we can't tell you what that is, because this edition must go through the mail. Look for scorching invective in our annual asbestos edition.

Must Be An Old Skate

I know a Radio fan who has water on the brain. The cold weather freezes it and causes things to slip his mind.
DAVE

The Traffic Holdup



Condensed

BY DIELECTRIC

You know they are getting ready for the Sesqui-centennial in Philadelphia, and the broadcasting stations there will consider themselves the mouthpieces of the nation during that important season. If I could suggest, without the support of General Butler, a small matter of hygiene, it would be to the effect that Station WOO seek a Radio dentist and have those teeth attended which cause a harmonic on a low wave length. As a mouthpiece, the Radio listeners have some aversion to it so long as this inexcusable faulty transmission continues. Have it removed, please.

Now we go to Ole Virginy, where WRVA at Richmond entertains. What I have to say concerning the excellence of their dance program will appear between these lines. It isn't that, that warrants using this space, but the manner of announcing. When one number is concluded the announcer grabs just enough time to give the call, city and succeeding selection before we're on our way again.

The Uptown theater in Chicago is receiving considerable attention through the broadcasting of its musical entertainment by Station WEBH. Possibly some of the features do not call forth excited comments of praise, though many of them may. The orchestra's playing of Liszt's "Les Preludes" was well done, a composition eliciting the best in a musician as it is one of the really beautiful works in the library of classics. Even those unfamiliar with it remark to that effect.

I know perfectly well how many there are who have no incentive for listening to grand opera productions. There was a time when the end of a first act seemed like the first half of eternity, but now even olives find favor with me. To those who have found something to like in this style of music, the recent series of performances by the Chicago Civic Opera company in Boston, will make friends for WNAC, in that city. The stars appearing were among the best to be heard, while the operas chosen for broadcasting could not easily have been improved upon.

Then there was Mary Garden. To have that artist appear before a mike and sing as she did at the French company dinner in New York, is something to remember. Of course, there is the chance of something going amiss whenever an especially attractive Radio program is arranged. So in this instance the recurring trouble Station WJZ had with their remote control made some listeners tear their hair and resort to foreign tongues to give greater liberty to their thoughts. Never has Dielectric heard this singer in better voice and her first appearances in this country are distinctly recalled. She is alone in a class.

Tuning to Station WHO, Des Moines, the other night in time to listen to a concert provided by the Bankers orchestra, I was very much pleased with the musical quality of the orchestration and the precision with which they played. These are the concerts which bring distant listeners back for more. Incidentally it may be remarked how distinctly the announcer gives the station call letters. Thanks.

Community concerts carry entertainment far outside the walls of local auditoriums; whether an influx of outsiders will result, remains to be seen. Purely as an enjoyable Radio feature these concerts are a success for they present (in most instances) features more or less unusual to listeners in. Cleveland inaugurated such a series and broadcasts the first through Station WEAR, opening with selections sung by a Swiss male choir and mixed voices. This music was new to most of us and very delightful.

ABC Radio Fundamentals for Everybody

Chapter VIII—Types of Batteries

By Milo Gurney

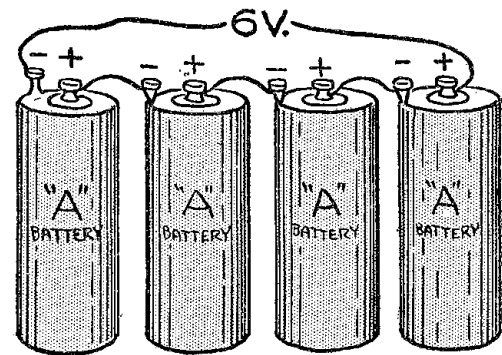
BEFORE taking up a discussion relative to the two types of batteries used as sources of direct current which are required for the operation of Radio receivers employing vacuum tubes, it appears as essential that the nomenclature applied to such batteries, by which they are designated in terms of volts and amperes, or ampere hours, be given.

The volt is a unit of pressure, while the ampere is a unit of quantity, the unit of opposition to the flow of current in an electrical circuit being termed the ohm. Thus in any electrical circuit, through which current is caused to flow, we find the three factors of voltage, current and resistance. With these three factors known, it is obvious that if a pressure

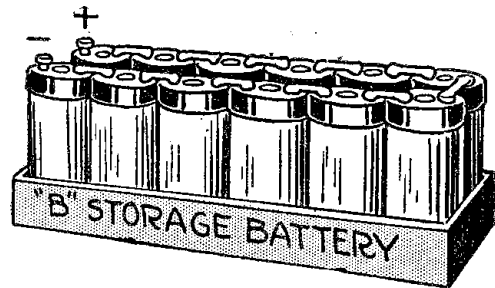
of one volt is applied against a resistance of one ohm, a current value of one ampere will flow.

Determining Strength

Radio batteries, and particularly those of the wet storage type, are rated in volts and amperes, such as 6 volts, 100 amperes, etc. Let us then assume that we have a battery which furnishes a pressure of six volts and whose capacity is 100 amperes. This means that the battery will deliver one ampere at six volts pressure for 100 hours, or 100 amperes at the same pressure for one hour, or any multiple of 100 in accordance with the



number of amperes used per hour. To further illustrate, the average five tube Radio receiver using 201-A type tubes requires a current or amperage of 1.25 amperes per hour to properly heat the filaments, their individual ampere draw being .25 of an ampere. Therefore, in order to determine the number of hours of service which a fully charged 100-ampere battery will operate such a receiver, before the battery will require recharging, it is only essential that we divide 100 by 1.25 the



result being 80. In practice, it is best to consider but 75 per cent of the total ampere hour capacity of the battery, as the determining recharge factor, in order that a sufficient margin of safety be allowed.

A like condition prevails with the use of B batteries, with the exception that they are only rated in volts, as the current draw not only continuously varies, and is of the order of thousandths of an ampere, but usually remains as sufficient to supply one's requirements only until such time as the voltage of the battery has decreased to a point where it does not have a value powerful enough to force the required current through the resistance of the circuit.

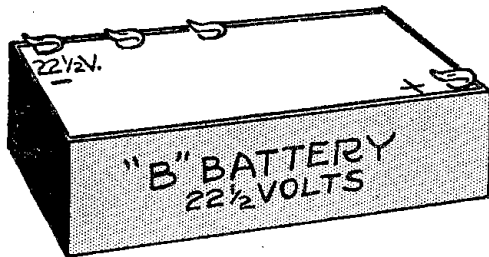
Two Sources Needed

With this explanation, we may then pass on to indicate that each Radio receiver, as before stated, requires two sources of direct, or one-way current, for its successful operation. One is the B or plate supply battery, whose function is to maintain a positive potential or charge upon the plate of the vacuum tube, the other being the A or filament supply bat-

tery, which is required for the heating of the filament of the tube. While each of these batteries supplies only direct or one-way current, their values vary in accordance with the type of tubes used in the receiver. The A battery requirements vary from 1½ to 6 volts, the B from 16 to as high as 135, while, in special cases, voltages as high as 300 are found.

Portable receivers, and many of the super-heterodyne types, employ vacuum tubes whose filaments require but .06 of an ampere of current, and three volts for proper operation. These tubes are of the 199 class, the current being supplied usually from ordinary dry cell batteries, not unlike those used for door bell operation. The majority of receivers, however, use 201-A type tubes. These consume .25

of an ampere and operate at from 5 to 5.5 volts. As this amperage drain would be excessive for dry cell batteries, a wet



or storage battery of 6 volts, and a large ampere hour capacity, is generally used.

In addition, during the current year, there has appeared upon the market, current supply devices for filament lighting

use, which operate directly from the alternating house lighting current, the function of these devices being to not only step down the voltage of the alternating current supply, but to also change it to direct current. Such converter substitutes are not sufficiently popular at the present time to warrant a detailed explanation of their operation.

B batteries, whose function has been explained, are common in both the dry and wet cell types, though through possible lack of proper charging apparatus, the dry cell type predominates, each is very efficient and of equal value.

Like the A battery substitute, the Radio market also affords B supply substitutes, which secure power from the (Continued on page 24)

No More "B" Batteries on Your Radio

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

Genuine Fansteel Balkite "B" Eliminator Sent for Only

\$1.00 Down



U.S. PAT. MAY 27, 1924

The Balkite "B" is connected to your radio just like "B" batteries and attached to an ordinary electric light socket. Replaces "B" batteries entirely and furnishes "B" current direct from regular house lighting current.

Always gives current equal to four new and fresh 22½ Volt dry "B" batteries. For sets of five tubes or less. Simplifies radio receiving. More convenient, more economical and more efficient than dry or wet "B" batteries. Operates storage battery or dry cell tubes and gives tubes longer life. Entirely noiseless. Creates no disturbance in reception. Has no bulbs, nothing to break, wear out, replace or get out of order. Requires no change in your set, no extras to buy. Operates from 110-120 AC, 60 cycle current. Measures 8 3-16 inches by 8 inches by 3¼ inches. Current costs only 1-20 of a cent per hour.

\$5.00 a Month, if satisfied after trial

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

Send Coupon

Don't miss this opportunity to get the genuine Balkite "B" at the rock-bottom cash price on easy monthly payments. Send coupon now while this offer lasts. Order by No. Y-8578A, \$1.00 with coupon; \$5.00 a month; total price \$35.00.

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

Balkite "B" Battery Eliminator, No. Y8578A, \$35.00

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ABC'S OF RADIO SETS

(Continued from page 23)

alternating lighting current. Their development is quite advanced over that of the A substitute with the result that there are several types which may be used with much satisfaction, where the purchaser is not concerned with first cost. Readers of Radio Digest have been offered an opportunity to not only study but also construct three forms or types of such B supply units, as very ably presented in the current issues by Mr. George Walters. The B supply units, as described by this capable writer, should become very popular, as they offer much of interest and satisfaction.

Care of Batteries

The need for charging an A battery is only determined by the use of a hydrometer, which is purchasable at all Radio stores or battery service stations. A fully charged wet battery should register a specific gravity between 1275 and 1300, and an indication of its charge being dissipated is shown when such a reading indicates a value around 1150. One should not therefore rely upon a voltmeter reading to determine whether the battery is fully charged, but should determine its condition solely from hydrometer readings, as outlined. Never add acid to a storage battery. The solution within the battery should at all times just cover the plates of the battery; when the solution has evaporated to the point where the tops of the plates are exposed, a quantity of distilled water should be added until the plates are again immersed. In the maintenance of a wet battery, one will

often find that the terminals become corroded with a white and green substance resembling verdigris, which refuses to respond to the usual treatment of being removed through wiping with a cloth. As each home is usually supplied with a box of ordinary baking soda, it is then well to remember that a teaspoonful of this soda dissolved in two ounces of water makes an excellent neutralizing agent for the removal of this accumulation, it being only necessary to apply the solution with a dampened cloth upon the terminals affected. Bubbles, which give off frying noises will at once appear as evidence that the cleansing process is taking place. Once they are cleaned, it is then advisable to smear the terminals with a light covering of vaseline, which will tend to stop recurrence of the nastiness of A battery accumulations.

Keep Batteries Clean

B batteries, as well as A batteries should always be kept wiped clean, thus avoiding minute short circuits. B batteries should be tested with a reliable voltmeter, for voltage only. When they have deteriorated to 75 per cent of their initial voltage value they should then be discarded, as it is not possible to renew their life. For illustration, a 45-volt B battery has served its useful life when it registers 34 volts, though it may still be used if the plate supply requirements are below this figure. In like manner a 22½-volt battery has served its useful life when its voltage has dropped to 17 volts.

(Next week's article will start a discussion explaining the most prominent types of circuits now on the market, and how they function.—Editor's Note).

GIRL AIDS DIZZY IZZY

(Continued from page 5)

Crash! Dizzy's double-duty turtle shell specks fell from his nerveless fingers and broke into a thousand pieces. For a moment he half stood and half sat as a man awakening from a long dream. Slowly his scattered senses mobilized between his ears. His naked eyes filled with tears. "I see it all—now," he gasped hoarsely. "You are right. That is the answer. You shall hear from me again. You have performed a great public service for I am none other than Dizzy Izzy, the announcer. The world is waiting to know. I shall hear the message. To me will go the honor, but I will not forget. Eureka! THE BLAH CLUB!"

And that, boys and girls, was the true answer to Dizzy Izzy's Problem. Never again was he serious.

"What became of the young lady?"

Well, that is another story. But you have all heard of the great BLAH Club of WOAW. There are 35,000 registered members and a waiting list of 25,000 more, and it is so exclusive that anyone who doesn't care to will not be admitted to membership.

It has been three months, now, since Dizzy Izzy officiated at the first initiation ceremonies. Males and females over sixteen years old are called "Boobs" and "Boobesses," respectively. All members under sixteen are called "Boobies." Every candidate must ride Brindle Betsy thrice around the red barn to the tintinnabulation of the bovine lavalliere. When it comes to dismounting the candidate is royally knighted by a barrel stave saber in the hands of Dizzy Izzy and his Court which consists of Cy Perkins, Gus, Ole, Fred Jensen, Bill Goodrich, Eddie Stuart and Mac Ohman.

The Blah Club takes the air from Podunk Center, remote control over barb wire. The club rooms are in Cy Perkins' general store and undertaking parlors. The Blah Club has included such entertainers as Jack Little and Lew Farris, the Eiffel Tower of Radio. The slogan is, "A little nonsense now and then is relished by the wisest men." There are many features. One is the matrimonial bureau which hunts mates for spinsters and bachelors. A "Lost and Found" department is maintained for stray animals.

There is a Razz Bureau for the knockers. Many interesting letters are received from prospective members. Some excerpts follow:

"Dear Izzie," writes an applicant for membership, "I want to be inducted into the mighty Blah Club. I feel that if I were a member I would have more fun. You will need to kick the cow good and hard when you take me in. I am a Church, not a School House. I have got a rather high standing and there isn't much in my belfry. I have a good many members and more than one organ. Yes, you can knock the cow, bell and all over if you want to. Your old Radio fan, Dwight Church."

Another offering his pedigree for membership says:

"I am an evolutionist, old enough to grandfather in two places. Eat all I can get but can't sleep on account of listening in. Work when I have to. Walk on my hind feet and I am a little lame in the head. Otherwise my better half says I am all right. Don't forget friend wife, give her all the cow bells and head the critter north by east.

"Recommend that the Blah Club mem-

bers appropriate sum to rebuild the Kansas depot that the woodpeckers knocked down. Respectfully, O. J. Pruitt."

Political Blah is provided by Senator Snag of Podunk Center. This is the mysterious, secret pass-word that gets you by the ether waves—"Blah."

"MOUNTIES" GREET SUN

(Continued from page 4)

slowly down the column. "It says here that they are goin' to wireless some messages to the boys clean around the rim of the Circle from Greenland to Alaska—to all them as lives north of Fifty-Five. And to think that the second mail which left Edmonton on the first of February, will not reach Alavik on the McKenzie river until the last of March and, good time at that with 2,000 miles of slippery, shelving shores and shaggy hummock ice for the sledges on the river ways—while by the wireless 'tis all done in the same breath without so much as to hitch your chair or stir beyond the shadow of your roof beams at the far end. Here is what it says in the paper:

"The centuries-old rite of the SunDance will be performed by the Eskimos on February 20, for it is on that date that the sun will make its brief appearance above the horizon after an absence of 135 days, during which period the land above the Arctic has been shrouded in perpetual darkness.

"The white men at the posts of the Royal Canadian Mounted Police, as well as the men at the Posts of the big fur companies make it a point to join with the Eskimos in this ancient and primitive dance which takes place in some open flat space, usually on the level ice along the coast.

"This year the event will be doubly memorable in the annals of the Arctic for the weird chant and the accordion music will be supplemented by the Radio, supplied by the four big Westinghouse Radio stations. Special arrangements were made last summer so that this broadcast would coincide exactly with the first appearance of the sun over the horizon.

"Robert M. Foster, the Radio operator of the C. G. S. "Arctic" installed the sets in Ellesmereland within 11 degrees of the Pole. Other sets were installed in North Devon Island, and still others in Baffinland, at points down to and including the Arctic Circle.

"Exactly at 10 p. m. E. S. T., on the night of February 20, Westinghouse Radio Stations KDKA at East Pittsburgh; WBZ at Springfield, Mass.; KYW at Chicago, and KFKX at Hastings, Nebr., will put on this special broadcast for points at and above the Arctic Circle.

"A special fivehour program designed for reception above the Arctic Circle will be broadcast by Westinghouse Station KFKX at Hastings, Nebr., which will be the fourth and last program on this pre-arranged schedule for reception at and above the Arctic Circle. This program will include the broadcasting of personal messages from relatives to the men in the far North, official messages from departments of the Canadian government; specially arranged late news bulletins, by courtesy of the United Press, and the Hastings Daily Tribune; an hour of vocal and instrumental classical music; a short sacred devotional period; special and unique musical features, and popular music by several orchestras. It will be late next summer before the men north of

(Continued on page 26)

Photogravures of Your Favorite Artists
GALLERY of RADIO STARS

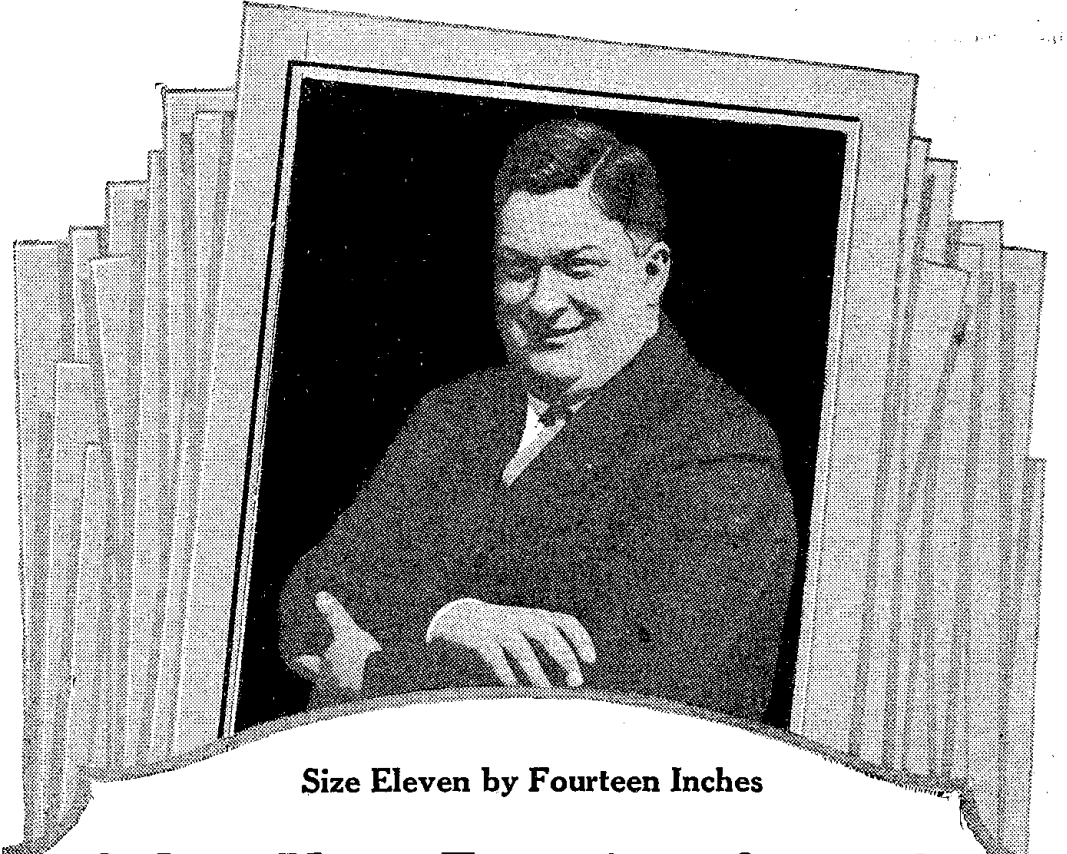
Suitable for Framing or Placing in Your Album

BY SPECIAL arrangement, Radio Digest is able to offer its readers a great 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 week 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 consecutively 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



Size Eleven by Fourteen Inches

Select Your Favorites from the Gallery of Radio Stars

- | | |
|--|--|
| 1 Wendell Hall, king of ukulele ditties | 26 Correll and Gosden of "Kinky Kids Parade" fame, at WEBH and other stations. |
| 2 Graham McNamee, 1925 Gold Cup announcer | 27 Norman Brokenshire, popular at WRC, WJZ |
| 3 Jack Little, popular wandering balladist | 28 Indiana Male Quartet, popular at WEBH |
| 4 Paul Small, who won fame through Radio | 29 Jane Novak, Blues Singer of Twin Cities, WCCO |
| 5 Coon-Sanders' "Nighthawks" at KYW | 30 Jean Sargent, the original, now at WHT |
| 6 George Hay, 1924 Gold Cup announcer | 31 Ralph Emerson, popular organist at WLS |
| 7 Harmony Girls, Edith Carpenter, Grace Ingram | 32 Edna Adams, "Sweetheart of the Air" at KPRC |
| 8 Ford and Glenn, Lullaby Boys of WLS | 33 Pat Barnes, vaudeville announcer at WHT |
| 9 "Roxy" Rothafel of WEAJ chain fame | 34 R. V. Haller of KGW Hoot Owls fame |
| 10 The Hired Hand, famous "Substitute Announcer" of WBAP | 35 Henry L. Dixon, ukulele wizard of KYW |
| 11 Britt and Finch, popular songsters | 36 Quin Ryan, WGN's Uncle Walt and sports announcer |
| 12 Bob Emery, Big Brother of WEEI | 37 "Willie the Weeper," Ernest Rogers, WSB |
| 13 "Bill" W. G. Hay, ex-KFKX, now of WLIB | 38 Walter Wilson, "Uncle Bob" of KYW |
| 14 Happiness Boys, jovial singers of WEAJ | 39 Jack Chapman of Drake hotel repute |
| 15 Lambdin Kay, "Little Colonel" of WSB | 40 Ray-O-Vac Twins, known country-wide |
| 16 Leo Fitzpatrick, "Merry Old Chief," WJR | 41 Art Linick, KYW's Mrs. Schlagenhauer |
| 17 Henry Field, 1925 Gold Cup runner-up | 42 Fred Hamm of WTAS, now WLIB, fame |
| 18 Al Carney, organ favorite at WHT | 43 Meyer Davis' Le Paradis orchestra of WRC |
| 19 Aunt Jane, ladies' adviser at WOC | 44 "Senator Schultz, WLW's illiterate comic |
| 20 Vincent Lopez, No. 1 Pennsylvania orchestra | 45 "Uncle John" Daggett of KHJ |
| 21 E. L. Tyson, pleasing voice at WWJ | 46 D. R. P. Coats, 1925 Silver Cup announcer |
| 22 S. W. Barnett, ex-WOC, now WBAL | 47 Gene Rouse, WOAW's popular announcer |
| 23 Art Gillham, "The Whispering Pianist" | 48 Freda Sanker, WKRC jazz orchestra director |
| 24 Paul Greene, announcer at WSAJ, "bridge voice" | 49 Iris Ruth Pavey, KOA's invisible stage beauty |
| 25 Harry Ehrhart, "Dream Daddy" of WLIT | 50 Queen Titania, star of KHJ Fairyland |
| | 51 Ipana Troubadours, on the WEAJ Chain. |

If your favorites are not in this list, send in a request to have them included in the Gallery of Radio Stars.

COUPON NO. 10

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 N. Dearborn St., Chicago

How to Stop Blooming and Man-Made Static

Part III—Correct Receiver Operation

By the Technical Staff

FOR the benefit of those who have not been following this series it might be well to briefly run over the first two articles. In the first, it was pointed out that, while it is the Radio public that is making all the complaint about blooming and squealing, resulting in investigations into the situation by many agencies, it has invariably been proven that the Radio public is itself at fault. There being no local ordinances or articles to the constitution which will stop this evil, the only remedy seems to be driving the fact home that all must cooperate and that education in Radio set operation must be given.

Then in the second article, the various popular types of receivers were presented, and how and why they bloom was explained, with some suggestions as to the remedying of each type's faults. Single and three circuit sets, four and five tube layouts and super-heterodyne input arrangements were discussed. This brings us to the educational stage of this series and, since there are probably more regenerative one and three tube installations still in use than other types, they will be taken up first.

Need Proper Control

From the discussion presented so far in Radio Digest, and that published in other periodicals, the Radio fan may have gotten the impression that regeneration is a criminally devilish characteristic of Radio that should be totally abolished, sentenced to die immediately and mangled until forced to forever leave this U. S. A. Now this is not the case by any means—regeneration is a phenomenon arranged for man's use and which waited only to be discovered, just as was electricity, X-rays or motion pictures. True, a patent was granted on it, but it remains a phenomenon that can be made use of by innumerable circuit arrangements and there are many leading minds in the Radio art that feel a mistake was made by the patent department. Like many other things presented to a rapidly moving civilization, misuse has been made by set owners of the greatest aid to distant reception available at this time to

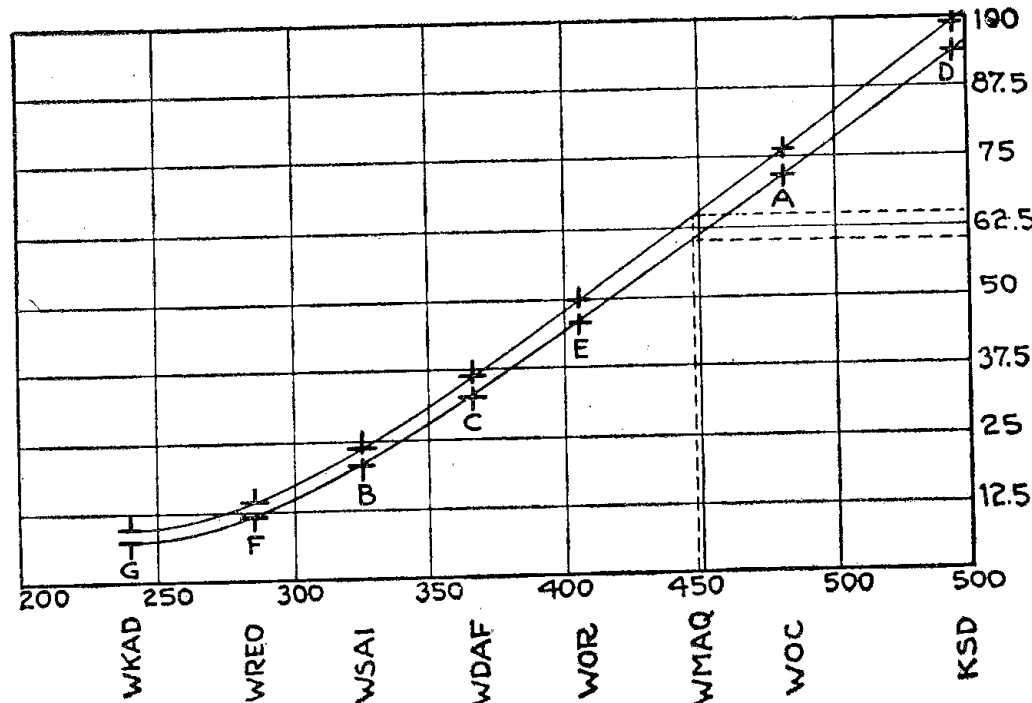


Figure 5

the Radio field. Both law making and education should be along the lines of proper control of regeneration.

Getting back to our regenerative receivers, not preceded by one or more stages of radio frequency amplification, on the sets available in the Radio market, regeneration is not always described by this name. The dial which controls this feature of the equipment may be designated by any of the following terms: Regeneration, amplification, reaction, varind, tickler, sensitivity, feed-back and even volume. These controls are not, as a rule, effective in adjusting the receiver to be in tune with a station but are useful only in increasing the sensitivity. Some excellent suggestions are set forth by the Radio branch of the department of marine and fisheries of Canada for the proper use of this feature.

Some Simple Rules

"If you will take the trouble to observe the rules which follow, you will obtain greater satisfaction and enjoyment from your Radio receiving set, and at the same time cause minimum annoyance to your neighbors.

- (1) Practice on tuning powerful stations first and do not try to pick up weak distant stations until you become more expert.
- (2) Use both hands; one hand for control of regeneration and the other hand on the tuning control.
- (3) Keep the regeneration control always just below the point of oscillation; your set is then in the most sensitive condition. This is the reason for using both hands for tuning.
- (4) If your set then accidentally breaks

into oscillation, turn back the regeneration control at once.

(5) Do not try to find a station by the "whistle." If your set is tuned just below the whistling point the signals will come in clear and your regeneration control can then be tuned a little further toward increase to help the volume.

(6) Do not force regeneration in an attempt to obtain loud speaker volume from a set not designed with sufficient audio frequency amplification for that purpose.

(7) Do not force regeneration in an attempt to hear stations beyond the range of your set; be content with those you can really hear enjoyably.

Don't Expect Too Much

The fact that you once heard a distant station on your receiving set is no indication that you can hear this station regularly, for occasionally a Radio broadcast from a distant station is received with extra strength due to some freak condition. When you have tried to tune in a station in the correct manner for a minute or two and are not able to hear it, do not unduly increase your regeneration and persistently wiggle your dials, for in so doing you may be causing annoyance (probably are) to some other broadcast listeners who would otherwise be able to enjoyably receive this distant station on a multi-tube receiver.

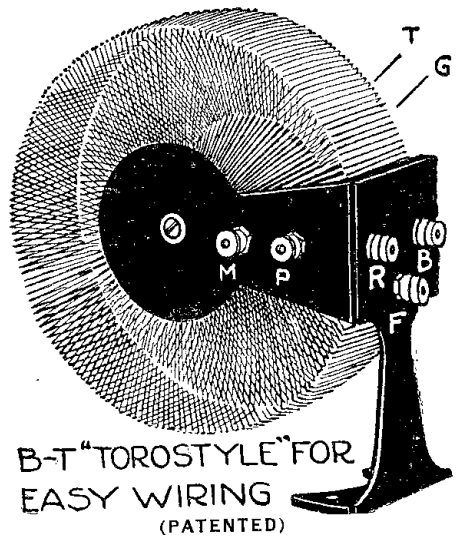
You can, accordingly, assist in eliminating blooming by: (a) Learning to operate correctly yourself and; (b) Not allowing children who are not old enough to understand the correct method of operation to cause interference from your set."

Keep Batteries Well Charged

The two rules so concisely set forth by the department as numbers 2 and 3 may be of more value with a little explanation. You may well ask, "How am I going to know when my set is just below the point of oscillation?" There are two easily learned ways of watching this. First of all, if you observed suggestion number 1, you should have learned that there is a certain definite relationship between the tuning dial and the regeneration control

(Continued on page 26)

COUNTERPHASE SIX--



B-T "TOROSTYLE" FOR EASY WIRING (PATENTED)

The B-T Torostyle is used in the patented Counterphase circuit. 1 TA and 3 TC Torostyles are furnished in the No. 6 Kit.

IN the short time that the Counterphase has been offered to the Radio Public, its fame has spread to all parts of the U. S. and Canada, to say nothing of foreign countries. Unsolicited letters from all parts of the country attest its unparalleled popularity and success. Mr. M. E. K. of Indiana Harbor, Ind., writes: "— had KFI (Los Angeles) too loud on six tubes and WCAP (Washington) was broadcasting on nearly the same wave length at the same time—" EMW's letter from Minneapolis, contains an interesting fact: "—got WKAQ, San Juan, Porto Rico, using 25-foot indoor aerial picked up on loud speaker—" And so the letters come in every day in an ever-increasing number.

The set is easy to assemble. The essential parts are contained in the B-T kits for sale at all good dealers.

- No. 5—Kit for 5-tube sets \$28.50
- No. 6—Kit for 6-tube sets 38.00

For real tone quality in your Counterphase or any other set, use B-T Euphonic Audio Transformers. They reproduce high and low notes with equal clarity and the price is not distorted.

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

Socket Insurance is not expensive, use B-T Universal Sockets. They take the old and new tubes. Price 75 cents each.

The Silent Socket Stops Microphonic Noises. Try one on your detector. Price \$1.25 each.

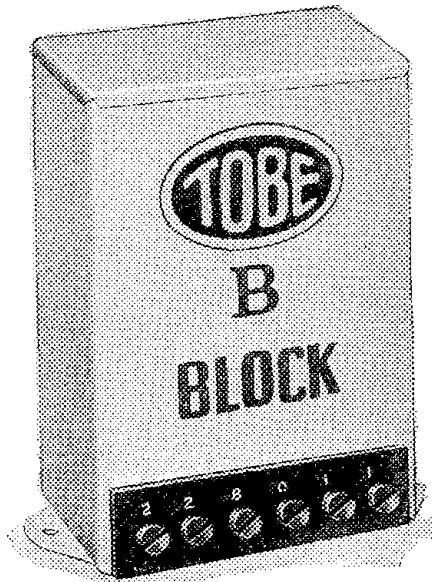
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Write us for circuit diagrams of all types of "B" battery eliminators. Ask your Dealer for TOBE Condensers

Tobe Deutschmann Co.
CORNHILL BOSTON, MASS.

HELP STOP BLOPING

(Continued from page 25)

at all times. At the lower end of the tuning dial scale, the dial controlling regeneration must be retarded and at the upper end it can be further advanced. Unfortunately, this dial cannot well be logged, as can the tuning dial, since varying conditions of the plate or B batteries, and the storage or dry cell A battery, alter the settings of the regeneration control for different wave lengths settings of the tuning dial.

If storage B batteries are used and kept fully charged, and a trickle charger is used on the A battery to keep its voltage constant, this tickler or regeneration dial can be successfully logged and charted. A little study of this tickler dial and its use will soon show that when, for example, the tuning dial is at 20, the tickler is at about 10—when the tuning dial is at 40, the tickler must go up to 22—when station dial is at 60, the tickler setting has climbed to 48—with the station tuning dial at 90, the regeneration or "tickler" dial is to be set at 87. This relationship will, as mentioned before, vary a little unless the battery equipment outlined is included but will be approximately the same at all times, even with dry A and B batteries.

Learn Your Set

The second method of keeping track of regeneration is by listening to the static crackle always present to some extent. With the tuning dial set at, let us say, 40, for a certain station once heard, the regeneration control is increased very gradually until at about 20 when the static crackle will greatly increase in volume and the "live" sound of the set will increase. One soon learns just how strong these sounds get before breaking over into oscillation and, when that point is reached, do not try to force regeneration any more, either with the tickler dial or increase of filament brilliancy.

Suggestion 5 might also stand a little explanation. Too many users of these sets tune by deliberately throwing the set into oscillation and turning the wave length dial until the siren whistle, starting high and coming down in pitch, is heard. This denotes coming into a station's wave and, when one is squarely on the station, either no whistle is heard or but a slight grumbling sound. When a receiver, in a state of oscillation, is tuned in this way, exactly to a broadcasting station, it is said to be in a state of Zero Beat. This is a very poor method of tuning for the following reasons: (1) It causes whistles in receivers of all types, which are tuned to the same station, over a radius of several miles; (2) It distorts the quality of your own music; (3) It uses more B battery power and therefore the life of the B battery is considerably reduced; (4) It tends to materially reduce the life of the tube.

Test Set for Bloping

If you are in doubt as to whether your set can and does cause interference you can check the same by making the following test, but be careful to do so at a time when only a few people are apt to be listening. This is another department of marine and fisheries suggestion. Call a neighbor on the telephone and ask him to listen in on a particular station at a pre-arranged time and then tune your own set to the same station. Turn up your detector tube filament to normal brilliancy and put the regeneration control to its maximum; move your tuning dial five times slowly across the point corresponding to the tuning of that station, then telephone your neighbor and ask him if he heard the interference corresponding to these movements. If he did, you're a potential blooper and care should be used in learning that dial relationship.

This same test might well be tried by the four and five tube set owners, whether

they have "neuts," "flexes" or "supers." An improperly adjusted neutrodyne, and most of them come under this heading, can and does radiate beautifully at one end of the tuning range. The flexes usually have a potentiometer control of oscillation that bears the same relationship to the tuning dials that the tickler does on a regenerative set, so named. They're all regenerative to some extent. The owner of a super-het should try this test with neighbors at a distance of two blocks, one-half mile and two miles to get the range and quantity of his interference. This interference can be cut down a great deal by decreasing the B battery voltage on the oscillator tube, and, in addition to helping his neighbors, the owner of such a set will be doing himself some good since he will eliminate the harmonics of powerful stations. Instead of finding such a station on about 8 points on the oscillator dial, he will find it on but 2 points, which is as it should be.

Keep Neutrodynes Neutralized

The neutrodyne owner, if this test shows interference on either a high wave station or a low one, should have his set re-neutralized by someone who knows how. If an experimenter of some experience, he can do it himself. The rules for neutralizing have been printed so many times in all the Radio periodicals that they need not be set down here. Sufficient to say, here, that it should be done on both a high wave station and a low one and an in-between setting of the neutrodynes used.

Users of four and five tube outfits which have some means of oscillation control of the radio frequency tubes such as the radio frequency tubes' rheostat, a variable grid circuit resistance or a variable plate circuit resistor, will find the use of a chart of much value. From it, one can quickly set his dials at the points where a desired station would be heard, bring up the oscillation control until static crackle is at the known maximum before oscillation and, if the station is not heard, it either is not on the air or cannot be heard that evening because of adverse weather conditions. Wiggling of dials and fussing with the regeneration control will not help a bit. It just isn't going to come in and one might just as well switch his efforts to some other station within reach.

Plotting Condenser Curves

More advanced Radio men have a system which is called "plotting (or charting) the condenser curves" that enables them to quickly determine dial settings for any station they may wish to hear and, if the dials are set at the points indicated, the receiver is sufficiently sensitive, and the station desired is on the air, the program will be heard. Any owner of a Radio set can easily make up the necessary charts and the only material necessary is a sheet of "graph" paper divided into small squares so that there are 10 squares per inch each way. This paper can be had at any store carrying high school drafting materials, or supplies for engineers, draftsmen or architects.

Figure 5 shows one of these curves made up for a tuned radio frequency or neutrodyne receiver, considerably reduced in size, and, for the sake of clearness, with the smaller lines omitted. The owner of the set for which this chart was made first tuned in station WOC broadcasting on 483.6 meters. Wave lengths between 200 and 550 meters are indicated across the bottom line, so 483.6 is found on the bottom line and followed vertically to the point where it crosses the correct dial setting line, which is horizontal. Dial settings are shown vertically to the right. The dial settings for this station were 75 1/2 for the first dial and 69 for each of the other two. The two small crosses at point A are therefore marked on the chart and another station tuned in.

How to Find New Stations

The second station, in this case, was WSAI with a wave length of 325.9 and the dial settings were 21 for the second and third dials and 24 for the first. The two crosses at point B were put in and, as the third station was WDAF on 365.6, the two crosses at point C were put in. Other stations were tuned in as points D, E, F, G which provided, altogether, seven points on which to make a curve. The points were then connected together as shown by the two long curving lines.

Now to use this chart for the finding of new stations, without straining the oscillation point or increasing filament brilliancy, and bloping all over the neighborhood, is as follows: The owner of this set wishes to tune in station WMAQ and finds by the program that the wave length is 447.5. On the bottom line he therefore finds the point 447.5 and follows that point vertically to the two points at which it crosses the curves drawn. In this case it strikes the curves for the first dial at 64 and the curve for the other two dials at 60. Station WMAQ will, therefore, be found at these dial settings if it is on the air and within the range of this receiver.

(Next week the discussion of bloping goes into the actual detailed construction of a device to be connected in between the antenna and the receiver that will stop bloping.—Editor's Note.)

"MOUNTIES" GREET SUN

(Continued from page 24)

the Arctic circle can advise the broadcasters of their reception of this program."

The sturdy old guardsman rested the paper on his knees and glanced sideways at the tower of savory cakes trembling near the smoking griddle.

"I say," he said, "do you really believe it could be possible that a lone man up there in a log hut under the very shadow of the North Pole could actually hear with the same breath, a man talking from here and the south of here, with never so much as a wire between the two of them?"

An hour later Sergeant James Campbell had finished his eleventh pancake and hurriedly excused himself from the table. In two minutes his sinewy form, erect and stalwart in a bearskin coat was silhouetted in the doorway. He went out without a word.

Scattered across the country four men bent over little desks on which were heaps of letters and telegrams. They sat reading the letters into queer receptacles that looked like the woodsmen's water-flask.

Into the far twilight of the frigid north at Craig Harbor, Ellesmereland, within twelve degrees of the Pole, Sergeant Joy sat in a dingy room with a pair of headphones over his ears. Around him were gathered Constables Bain and Dirsch of the Canadian Royal Mounted Service and four Eskimos from Etah, Greenland. A smile spread over the sergeant's face as his ears heard his name called through the air. There were messages for him from Mr. and Mrs. J. Rodolphe O'Malley, 428 Lyon St., Ottawa, Ont., and from others. There were messages also for his constable associates.

At Pangnirtung, virtually astride the Arctic Circle, Sergeant White sat in the log station with only half a dozen Eskimos for human society. On the rough hewn table in the dull glow of a hanging oil lamp rested a keenly sensitive loud speaker. It was known to be reliable and at the hour of ten, there was a breathless hush in the room. From the mouth of the horn came a voice:

"Greetings and cheers to you, Sergeant White, and to all those who serve with the Royal Canadian Mounted Police, from an

old comrade. Sergeant James Campbell, stationed at Minneapolis by Captain Time."

Sergeant White swallowed something big and hard and yet quite intangible as this message among several others came distinctly out of the magic vessel that so mysteriously unfolded sounds from the world that knocked at his door but once a year.

An old man leaned forward in a comfortable chair in a steam heated flat in Minneapolis. He too heard the message that came through the air from KYW, Chicago.

"Wonderful!" he gasped. "Man alive do you suppose he heard that the same way I did. I hope—I—I wish I was with him."

A STEP ON THE STAIRS

(Continued from page 7)

There was a shrill laugh from the rabbit-faced Cousin William and a frightened cry from Aunt Helen.

"At any rate," broke in the calm voice of the attorney, "at any rate we shall carry out my late client's wishes. We shall set the Radio receiver as he has suggested. We shall then extinguish the lights and sit quietly to see what midnight will bring."

Despite the murmur of protest he stepped to the receiver at the end of the fireplace and set the dials. Then he motioned to Hari Singh, who snuffed the candles one after another. There was no sound, save the smothered weeping of a woman as the last flame died, and then presently a whimpering protest...

"Light the lights... Light the lights... Oh God! I can't stand it..."

There was a sound as of breathing in the unseen speaker.

In the dark Henry Graves clasped Mary Williams' hand only to find himself repulsed with a nervous gesture.

"Don't try to pet me... I'm not an infant," the girl said with quivering petulance.

"You're frightened," suggested Henry. "I'm not... N-n-not any more than you are."

"Hush... there's a whisper in the loud speaker."

EVEN the breathing of the unseen audience seemed to have stopped. The ticking of the clock on the mantel was the only sound to be heard save the whispering of the Radio. And then came a voice, muffled but distinguishable. "This—this..."

A woman screamed. Something crashed in the dark.

"She's fainted," came the voice of Cousin William, suddenly firm and self-assured. "Get her out of here."

"Ladies and gentlemen," broke in the voice of the lawyer Ardwyn. "Whether you faint or not you shall stay here in this room until the clock strikes. That is what Peleg Turner told me to say to you and that is what you will have to do. Just by the way of precaution I have had the doors locked. Only one opens from the inside... That is the front door through which none but Turners have ever passed and then only in death."

He halted and as if it had been awaiting the opportunity the Radio voice spoke again.

"This is Station FYX."

A sigh, as if from all twelve guests in concert, smothered the announcement.

"You have tuned in to this station tonight," the voice of the Radio went on, "to hear..." A weird scream—a vagrant radiation familiar enough to all of those assembled in the house of Peleg Turner under ordinary circumstances—

(Continued on page 28)



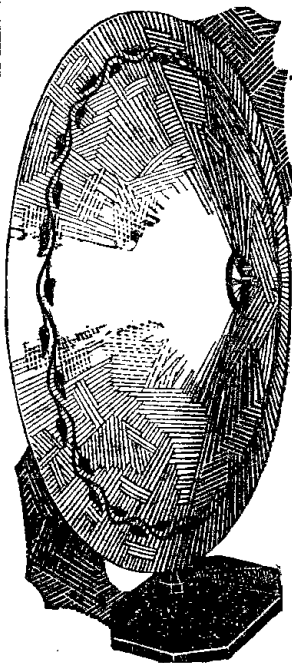
The Crosley 5-tube RFL's, with their new and patented circuit, are specially recommended for inexperienced operators because they are non-radiating, non-oscillating, and cannot be made to howl even if mishandled. Two models—\$60 and \$75 without accessories.

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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.

WMAC, Cazenovia, N. Y. 275.1m-1090kc. 100 watts. C. B. Meredith. No definite schedule.

WMAF, South Hills Radio Corp. 440.9m-680kc. 1,000 watts. Round Hill Radio Corp.

WNAK, Lockport, N. Y. 265.3m-1130kc. 500 watts. Norton Laboratories. Announcer, DeWitt C. Gerritsen. Daily ex Sun, 7:15 pm, news. Tues, Thurs, Sat, 6:15-7:15 pm, dinner music. Mon, 8:30-10 pm. Sat, 7:30-11 pm. Sun, 10:25 am, church; 7:30 pm, church service. Eastern.

WMAL, Washington, D. C. 212.6m-1410kc. 150 watts. M. A. Leese Optical Co.

WMAN, Columbus, Ohio. 277.6m-1080kc. 500 watts. First Baptist church. Announcer, John Bohannon. Sun, 10:30-12 noon, 7:30-9 pm, church services. Eastern.

WMAQ, Chicago, Ill. 447.5m-670kc. 1,000 watts. The Chicago Daily News. Announcer, Robert Whitney. Daily ex Sun, Mon, 12-3 pm, 4-7. Daily ex Sun, Mon, 8-10 pm. Central.

WMAY, St. Louis, Mo. 247.8m-1210kc. 100 watts. Kingshighway Presbyterian church. Slogan, "May Kingshighway Hear Kingshighway." Sun, 11 am, Every By-Way Hear Kingshighway." Sun, 11 am, 8 pm. Central.

WMAZ, Macon, Ga. 260.7m-1150kc. 500 watts. Mercer University. Announcer, Carey O. Pickard. Mon, Thurs, Fri, 10-11 pm. Fri, 9-10 pm. Tues, Fri, 8-9 pm. Wed, 11-12. Eastern.

WMBB, Chicago, Ill. 249.9m-1200kc. 500 watts. American Bond & Mortgage Co.-Trianon. Announcer, Colleen House. Slogan, "World's Most Beautiful Ballroom." Daily ex Sun, Mon, 7-8 pm, 9-11. Sun, 3-5 pm. Daily ex Sun, Mon, 7-8 pm, 9-11. Sun, 3-5 pm. 7:45-11. Central.

WMBC, Detroit, Mich. 256.3m-1170kc. 100 watts. Michigan Broadcasting Co. Mon, Wed, 6:45 pm, 10. Tues, 10 pm, 11. Thurs, Fri, 8 pm. Eastern.

WMBF, Miami Beach, Fla. 384.4m-780kc. 500 watts. Fleetwood Hotel. Announcer, Ed Kampf. Daily, 7-8 pm, dinner concert; 8-9, 10-1 am. Eastern.

WMC, Memphis, Tenn. 499.7m-600kc. 500 watts. Commercial Appeal. Announcer, Francis S. Chamberlain. Slogan, "Station WMC, Memphis." "Down in Dixie." Club, "Midnight Frolic." Daily ex Sun, 9:45 am, 11:30, 2:30 pm, weather, markets, music. Daily ex Sun, Wed, 8:30 pm, program; Tues, Fri, 11 pm, Midnight Frolic. Sun, 11 am, church service. Central.

WMCA, New York, N. Y. 340.7m-880kc. 500 watts. Radio Hotel McAlpin. Announcer, Snedden. Weir. Slogan, "Where the White Way Begins." Daily, 6-12 mid-Night. Tues, 11-1 pm. Sun, 11-12:15 pm, 5-11. Eastern.

WNAB, Boston, Mass. 249.9m-1200kc. 100 watts. The Shepard Stores. Announcer, John J. Fanning. Daily ex Sun, 3-4 pm. Eastern.

WNAC, Boston, Mass. 280.2m-1070kc. 500 watts. The Shepard Stores. Announcer, John J. Fanning. Daily ex Sun, 10:30-11:30 am, 12:15-2 pm, 4-5, 6-7:35, 8-10. Sun, 11 am, 1:30-2:30 pm, 3-4, 6:45-8:30. Eastern.

WNAD, Norman, Okla. 254.8m-1220kc. 500 watts. University of Oklahoma. Announcer, C. E. Batho. Slogans, "Oklahoma"; "Voice of Sooner Land." Daily, 9:15-10:30 am, weather, news. Wed, 8:30-9:30 pm, music. Central.

WNAL, Omaha, Nebr. 258.5m-1160kc. 50 watts. Central High School. Announcer, Ronald J. Rockwell. Slogan, "Pioneer Broadcast of Omaha." Fri, Sat, 7:30-9 pm. Central.

WNAT, Philadelphia, Pa. 249.9m-1200kc. 100 watts. Leung Bros. Co. Announcer, Jess Brinton Young. Slogan, "We Never Are Tired." Wed, 6:50 pm. Eastern.

WNAX, Yankton, S. D. 243.8m-1230kc. 100 watts. Dakota Radio Apparatus Co. Daily ex Sun, 11:30-11:45 am, markets, weather; 3-4 pm, music. Central.

WNBH, New Bedford, Mass. 247.8m-1210kc. 100 watts. New Bedford Hotel. Announcer, A. J. Lopez. Mon, 6-10 pm. Wed, Fri, 6-7 pm, 8-10. Sun, 1-12:15 pm, 4:30-5:30, 7-8:30. Eastern.

WNJ, Newark, N. J. 252m-1190kc. 150 watts. Radio Shop of Newark, Inc. Announcer, W. A. Bingenheimer. Slogan, "The Voice of Newark." Tues, Wed, Fri, Sat, Sun, 6-30 pm, 8:30-12 midnight, dance music. Eastern.

WNOX, Knoxville, Tenn. 267.7m-1120kc. 500 watts. Peoples Telephone & Telegraph Co.

WNYC, New York, N. Y. 526m-570kc. 1000 watts. New York Municipal Radio station. Announcer Tom Cowan. Slogan, "Municipal Broadcasting Station of the City of New York." Daily 7 pm, markets; 7:30 pm, 10:30, police; 7:35, entertainment; 10:30, weather. Eastern.

WOAI, San Antonio, Tex. 394.5m-760kc. 2000 watts. Southern Equip. Co. (Evening News-Express), Announcer, J. G. Cummings. Slogan, "The Winter Play-ground of America, Where the Sunshine Spends the Winter." Daily ex Sun, 10 am, weather reports, news; 12:15 pm, 3, 6:15. Tues, Wed, Fri, 8:30-9:30 pm. Sun, 11 am, service; 7:30. Central.

WOAN, Lawrenceburg, Tenn. 282.8m-1060kc. 500 watts. James D. Vaughan. Announcer, James D. Vaughan. Daily ex Sat, 9-10 pm, concert. Central.

WOAW, Omaha, Neb. 528m-570kc. 1000 watts. Woodmen of the World. Announcer, Lester Palmer. Slogan, "The City Surrounded by the United States." Daily ex Sun, 8:15 am, 8:55, 10:30, 12:30 pm, 1:45, 4, markets. Daily ex Sun, Sat, 12:45 pm. Daily ex Sun, 9-10:45 am, 1:30 pm, 2:30-4 pm, 6, 9. Central.

WOAX, Trenton, N. J. 299.9m-1250kc. 500 watts. F. J. Wolff. Slogan, "Trenton Makes; the World Takes." Daily ex Sun, 12:05-12:45 pm, music, weather. Tues, Fri, 5-6 pm, 8:30-10:30. Sun, 10:15-12:15 am. Eastern.

WOC, Davenport, Iowa. 483.6m-620kc. 5,000 watts. The Palmer School of Chiropractic. Slogan, "Where the West Begins and in the State Where the Tall Corn Grows." Daily ex Sat, Sun, 12:15 pm, weather, Radio Farm school; 1:55 pm, time; 2, closing markets; 3, Farm school; 5:45, chimes, 6, bulletins, Tues, 6:30-7 home hour; 5:45, chimes, 9-10. Wed, 4-4:45 pm, 7:30-9; New York program, 9-10. Wed, 4-4:45 pm; 9-11, Thurs, 7-10 pm, 11-12. Fri, 4-5 pm. Cres-cent orchestra; 6:30, 8-9. Sat, 12:55 pm, 1, 5:45, 6, 6:30, 9-10 am; 11-12. Sun, 1-2 pm, 6:30-7 pm, church; 8:15-9:15, WEAAP program; 9:45-11:45. Central.

WOCL, Jamestown, N. Y. 275.1m-1090kc. 15 watts. Hotel Jamestown, Inc. Announcer, William A. McCutcheon. Slogan, "We're on Chautauqua Lake." Mon, 9 pm. First Mon each month 9-3 am, Sun, 10:30 am, 7:30-9. Eastern.

WODA, Patterson, N. J. 223.7m-1340kc. 500 watts. O'Dea Temple of Music. Slogan, "A Voice from the Silk City." Daily ex Sun, 12-1 pm; 5-7, 8:30-11. Eastern.

WOI, Ames, Iowa. 270 meters. 750 watts. Iowa State College. Announcer, H. B. Deal. Daily ex Sun, 9:30 am, weather reports; 12:30 pm, chimes, market, weather, educational talks; 9:30, weather. Central.

WOK, Homewood, Ill. 217.3m-1380kc. 5,000 watts. Newtown Road Mfg. Co. Announcer, George W. Allen. Daily ex Sun, Mon, 5-7 pm; 10-1:30, Sun, 1-2 pm, 6-1. Central.

WOKO, New York, N. Y. 232.4m-1290kc. 50 watts. The Dyckman Radio Shop. Announcer, Oscar H. Sher-rone. Mon, Thurs, Sat, 8-12 pm. Eastern.

WOP, Philadelphia, Pa. 568.2m-590kc. 500 watts. John Wanamaker. Announcer, Jos. N. Nassau. Daily ex Sun, 11 am, organ recital; 11:55, time; 12-1 pm, concert; 4:30, weather; 4:45, organ recital; 7:30, police reports; 9:55, time; 10:02, weather. Mon, Wed, Fri, 7:30-11 pm, music, concert. Sun, 2:30 pm, Sunday school; 6, organ recital; alternate am and pm services, 9:15, alternate Sundays. Eastern.

WOOD, Grand Rapids, Mich. 241.8m-1240kc. 1,000 watts. Hotel Rowe. Announcer, Maurice Wetzel. Slogan, "The Furniture Capital of America." Daily ex Sun, Wed, Sat, 8-9 pm, 7-8. Fri, 8-10 pm. Eastern.

WOJ, Philadelphia, Pa. 277.6m-1080kc. 1,000 watts. Unity School of Christianity. Tues, 8-9 pm. Thurs, 7:45 pm, 7:45-9, Sat, 8-9 pm, 10-11 pm. Sun, 11 am, 7:15-9. Central.

WOR, Newark, N. J. 405.2m-740kc. 500 watts. L. Bamberger & Co. Announcer, J. M. Barrett. Daily ex Sun, 6:45, 2:30-4 pm. Mon, Wed, Sat, 6:15-12 midnight. Tues, Thurs, Fri, 6:15-7:30 pm. Eastern.

WORD, Batavia, Ill. 275.1m-1090kc. 5,000 watts. Peoples Pulpit association. Announcer, B. M. Rice. Slogan, "Watchtower Station WORD." Tues, Wed, Fri, 7-8 pm; 9-10, 11-12. Thurs, 8-10, 10-11. Sun, 9-10. Sun, 2:30-4 pm, 7-8, 9-10:30. Central.

WOS, Jefferson City, Mo. 440.9m-680kc. 500 watts. Missouri State Marketing Bureau. Slogan, "Watch Our State." Daily ex Sun, first 15 min. of every hour from 9 am-2 pm, markets; 7, N. Y. stock and bond markets. Daily ex Sat, Sun, 5 pm, markets. Mon, Wed, Fri, 8-10 pm, concert. Sun, 9:30-10:30 am, services; 5 pm, vesper; 7:30-9, church service. Central.

WOUL, New Orleans, La. 270.1m-1110kc. 10 watts. Owl Battery company.

WOWO, Fort Wayne, Ind. 227m-1320kc. 500 watts. Main Auto Supply Co.

WPAK, Fargo, N. D. 275.1m-1090kc. 100 watts. N. D. Agricultural College. Announcer, Gordon Laign. Mon, Wed, Fri, 7:30 pm. Central.

WPCO, Chicago, Ill. 258.5m-1160kc. 500 watts. North Shore Congregational church. Announcer, Rev. J. C. O'Hair. Wed, 7-8 pm. Fri, 7:30-9 pm. Sun, 11-12. Thurs, 8:30-5, 8, service. Central.

WPG, Atlantic City, N. J. 299.8m-1000kc. 500 watts. Municipality of Atlantic City. Slogan, "World's Play-grounds." Mon, Tues, Fri, 7 pm. Tues, Thurs, Fri, Sat, 9 pm; 10, classics. Mon, 8 pm, Thurs, 11 pm, Sat, 6:30 pm, concert; 10, Sun, 3:15 pm, organ; 4:15, service; 10, service. Eastern.

WPRC, Harrisburg, Pa. 215.7m-1390kc. 100 watts. Wilson Printing & Radio Co.

WPSC, State College, Pa. 260.7m-1150kc. 500 watts. State College. Slogan: "The Voice of the Nittany Lion."

WQAA, Parkersburg, Pa. 220.4m-1360kc. 500 watts. Horace A. Beale, Jr. Temporarily discontinued.

WQAC, Amarillo, Tex. 234.2m-1280kc. 100 watts. Gish Radio Service. Daily ex Sun, 10 am, 12 n, 7 pm. Sun, 11 am. Central.

WQAE, Springfield, Vt. 245.8m-1220kc. 50 watts. Moore Radio News Station. Announcer, Ernest S. Newell. Slogan, "The Pioneer Broadcasting Station of Ver-mont." Sat, 11-1 am. Sun, 10:30 am, church service; 7 pm, service. Eastern.

WQAM, Miami, Fla. 265m-1140kc. 100 watts. Electrical Equip. Co. Announcer, Frederick W. Mizer. Slogan, "The Most Southern Radiocasting Station in the World." Wed, 8 pm, church service. Sun, 11:30 am, 7:30 pm, church services. Eastern.

WQJ, Chicago, Ill. 447.5m-670kc. 500 watts. Calumet Baking Powder company-Rainbo Gardens. Announcer, Jerry Sullivan. Daily ex Sun, 11-12 n. women's hour. Daily ex Sun, 3-4 pm. Daily ex Sun, 10:30, Mon, 7-8 pm, 10-2 am. Sat, 11-12 n. 3-4 pm, 7-8, 10-3, Mon, 11-12 m, 3-4. Sun, 9:30 am, service. 3-4 pm, 8-10. Central.

WRAF, La Porte, Ind. 223.7m-1340kc. 100 watts. Radio Club, Inc. Announcer, Charles Middleton. Slogan, "The Voice of the Maple City." Mon, Thurs, Sun, 8:30 pm. Central.

WRAC, Escanaba, Mich. 256.3m-1170kc. 100 watts. Economy Light Company. Announcer, H. E. Flaig. Slogan, "The Gateway to Cloverland." Mon, Fri, 8:30 pm. Eastern.

WRAM, Galesburg, Ill. 243.8m-1230kc. 100 watts. Lombard College. Mon, 7-11 pm. Central.

WRAY, Yellow Springs, Ohio. 263m-1140kc. 100 watts. Antioch College. Announcer, Charles Hoffman. Wed, 8 pm, music; 9, educational. Sun, 7 pm. Central.

WRAY, Reading, Pa. 238m-1260kc. 10 watts. Avenue Radio & Elec. Shop. Slogan, "The Schuylkill Valley Echo." Announcer, C. M. Chafey. Thurs, 10-11:30 pm. Eastern.

WRAX, Gloucester City, N. J. 267.7m-1120kc. 500 watts. Flexon's Garage. Announcer, A. D. Flexon. 500 watts.

WRBC, Valparaiso, Ind. 277.6m-1080kc. 500 watts. Immanuel Lutheran church. Announcer, Forrest Jones. Slogan, "World Redeemed by Christ." Mon, 7:30 pm. Sun, 7:30 pm, church service. Central.

WRC, Washington, D. C. 468.5m-640kc. 1000 watts. Radio Corp'n of America. Announcer, Norman Brok-enshire. Slogan, "The Voice of the Capitol." Mon, Wed, Fri, 10 am-6:30 pm. Tues, Thurs, Sat, 10 am-12, midnight. Eastern.

WRCO, Raleigh, N. C. 252m-1190kc. 100 watts. Wyrne Radio Co. Mon, Fri, 7-8 pm. Wed, 9-10 pm. Sun, 11 am, church. Eastern.

WREC, Coldwater, Miss. 254.1m-1180kc. 10 watts. Wooten's Radio & Elec. Co. Announcer, S. D. Woot-en. Slogan, "The Most Powerful 10-Watt Station in the World." Sat, 9:30-10:30 pm; Sun, 4-5 pm. Central.

WREO, Lansing, Mich. 285.5m-1050kc. 500 watts. Reo Motor Car Co. Announcer, Roy E. Davis. Slogan, "Watch Reo." Daily ex Sun, 6-7 pm, dinner concert. Tues, Thurs, 8:15-10 pm. Sat, 10-12 midnight. Sun, 10 am, chimes; 10:30 am, 7:30 pm, church. Eastern.

WRHM, Minneapolis, Minn. 252m-1190kc. 50 watts.

Rosedale Hospital, Inc. Announcer, Troy S. Miller. Thurs, 9-11 pm, music. Sun, 1:30-2:30 pm, children's hour; 2:30-4:30, music, lectures. 9:15-10:30 pm. Central.

WRK, Hamilton, Ohio. 270.1m-1110kc. 200 watts. Doron Bros. Elec. Co. Slogan, "The Oldest Station in Existence." Sun, 10:15 am, church services. Central.

WRM, Urbana, Ill. 272.6m-1100kc. 500 watts. Univ. of Ill. Tues, 7-8 pm, musical. Sun, 4 pm, organ. Central.

WRMU, New York, N. Y. 236 meters. 100 watts. A. H. Grebe & Co., Inc. Motor Yacht "MU-1." Daily ex Sun, 12:15 pm, 10-11:30. Eastern.

WRNY, New York, N. Y. 258.5m-1050kc. 500 watts. Experimenter Pub. Co. Daily ex Sat, Sun, 9:44 am, 12:29 pm, 4:14, 6:59. Sat, 9:44 am, 2:29 pm, 6:59, 12-1. Sun, 3-5 pm. Eastern.

WRR, Dallas, Texas. 245.8m-1220kc. 500 watts. City of Dallas. Announcer, John Thorwald. Slogan, "City of Achievements." Daily ex Sun, Wed, 12-1 pm; 5-5:30, 6-7, Mon, 11-12 midnight. Wed, 5-5:30 pm. Sat, 12-1 am. Central.

WRST, New York, N. Y. 215.7m-1390kc. 250 watts. Radio Mfg. Co., Inc. Announcer Louis A. Witten-berg. Slogan, "Radiotel on the Sunrise Trail." Daily ex Sun, 12-1 pm; 8-10:30, Sun, 10-12 m, 4-6. Eastern.

WRVA, Richmond, Va. 256.3m-1170kc. 1,000 watts. Larus & Bro. Co., Inc. Announcer, Elmer G. Hoelzle. Slogan, "Carry Me Back to Ole Virginia." Mon, Thurs, 9-12 midnight. Eastern.

WRW, Tarrytown, N. Y. 272.6m-1100kc. 500 watts. Tarrytown Radio Research Laboratory. Announcer, Frederick Koening. Slogan, "Everything in Radio." Daily ex Sun, Wed, 9-11:30 pm. Mon, 7-8 pm. Wed, 10-11:30 pm. Sun, 8-9 pm, 10-30-11:30. Eastern.

WSAI, Cincinnati, Ohio. 225.9m-920kc. 5,000 watts. United States Laying Card Co. Announcer, P. A. Greene. Mon, 10-12 n. Tues, 5:30-10; 12-1. Wed, 7:30-12 midnight. Thurs, 6:30-10 pm. Sat, 7-10 pm, 12-1:30. Sun, 3-4 pm; 7:45-10:15, 8-10 pm. Central.

WSAJ, Grove City, Pa. 228.9m-1310kc. 250 watts. Grove City College. Horace Montgomery, activities. Wed, 7:30-9 pm, music, irregular programs. Eastern.

WSAN, Allentown, Pa. 228.9m-1310kc. 100 watts. Allentown Call Pub. Co. Announcer, C. Fred Ritter. Tues, Thurs, 8:15 pm. Sat, 8:15 pm, 11:30. Eastern.

WSAR, Fall River, Mass. 254.1m-1180kc. 100 watts. Doughty & Welch Elec. Co., Inc. Announcer, Wm. A. McGrath. Daily ex Sun, 12-1 pm. Mon, Wed, Fri, 5-6 pm. Sun, 10:30-12 m. Eastern.

WSAX, Chicago, Ill. 267.7m-1120kc. 100 watts. Zenith Radio Corp. (Portable).

WSAZ, Pomeroy, Ohio. 243.8m-1230kc. 50 watts. Chase Elec. Shop. Announcer, Glenn E. Chase. Sat, 2 pm. Sun, 10:30 am, 2:30 pm. Eastern.

WSB, Atlanta, Ga. 428.3m-700kc. 1,000 watts. Atlanta Journal. Announcer, Lamin Kay. Slogan, "The Voice of the South." Daily ex Sun, 12-1 pm, music, weather; 2:30, reports; 3, orchestra, time story; 8-9, concert (ex Wed) 10:45-12 concert. Sun, 5-6, 7:30-9:15, church services. Central.

WSBC, Chicago, Ill. 209.7m-1430kc. 1000 watts. World Battery Co.

WSBT, St. Louis, Mo. 272.6m-1100kc. 250 watts. Steiner & Fuller Dry Goods Co. Announcer, Helen G. Hatfield. Daily, 12-12:30 pm, 3-3:30. Mon, Wed, Fri, 7:30-9 pm. Wed, 11-1 am. Thurs, 10-12 mid-night. Sun, 9-10 pm; 11-1 am. Central.

WSBY, South Bend, Ind. 275.1m-1090kc. 250 watts. South Bend Tribune. Announcer, C. G. Livengood. Mon, Wed, Fri, 7:15-9:30 pm, concert. Central.

WSDA, New York, N. Y. 263m-1140kc. 250 watts. City Temple. Thurs, 7:45-9:30 pm. Sat, 10:45-11 pm. Sun, 7:30-9:30 pm. Eastern.

WSDC, Bar City, Mich. 260.7m-1150kc. 100 watts. World's Star Knitting Co. Announcer, L. M. Nims. Slogan, "Where the Summer Trails Begin." Mon, Wed, 9-11 pm. Sat, 11-2 am. Eastern.

WSM, Nashville, Tenn. 282.8m-1060kc. 1,000 watts. National Life and Accident Insurance Company. An-nouncer, George Hay. Theaters, Inc. Mon, Wed, 6:30-12 6:30-9 pm; 10-11. Tues, 15-12 mid. Sat, 6:30-12 6:30-9 pm. Thurs, 7:30-9 pm. Central.

WSNB, New Orleans, La. 245.8m-1220kc. 500 watts. Saenger Theaters, Inc. and The Maison Blanche Co. Daily ex Sun, 12:30-1:30 pm, 6:30-7:30. Mon, Wed, Thurs, Sat, 8:30-10:30 pm. Central.

WSNH, Oswego, Mich. 239.9m-1250kc. 20 watts. Shat-tuck Music House. Announcer, Don Shattuck. Wed, 8 pm. Sat, 10 pm. Sun, 10 am. Eastern.

WSMK, Dayton, Ohio. 275.1m-1090kc. 500 watts. S. M. Krohn, Jr. Slogan, "The Home of Aviation." Daily ex Sun, 12-1 pm; 4-4:30. Daily ex Sun, Tues, 6-7 pm. Sun, 8-12 mid. Central.

WSOE, Milwaukee, Wis. 245.8m-1220kc. 500 watts. School of Engineering of Milwaukee. Announcer, O. W. Meissner. Slogan, "In the Land of the Sky-blue Waters." Daily ex Sat, Sun, 5:25 pm, 5:30, 5:45, 6:05. Daily ex Sun, 9-10 pm. Tues, 7:30 pm; 8:45, Wed, 8:30 pm. Thurs, 8:30 pm; 8:45. Fri, 8:45 pm. Sat, 2 pm, reports; 2:05, 8:30, 9. Mon, 2 pm, cook-ing chat. Sun, 9:30 am; 11. Central.

WSSH, Boston, Mass. 260.7m-1150kc. 100 watts. Tremont Temple Baptist church. Announcer, Raymond B. Meader. Fri, 7:30-8:30 pm. Sun, 10:30 am; 6:30 pm, church service. Eastern.

WSRO, Hamilton, Ohio. 252m-1190kc. 100 watts. Radio Co. Announcer, Harry W. Fahrlander. Slogan, "We Sell Radio Only." Tues, Fri, 8-10 pm. Sun, 9-9:45 pm. Central.

WSU, Iowa City, Iowa. 483.6m-620kc. 500 watts. Univ. of Iowa. Announcer, Carl Menzer. Mon, Tues, Wed, Thurs, Fri, 12:30-1 pm. Mon, 7:30 pm. Wed, 9-9:50 am; 7:30 pm. Alternate Mon, 4 pm. Sun, 9:15-9:45 pm. Central.

WSWS, Chicago, Ill. 275.1m-1090kc. 1,000 watts. S. W. Straus & Co. Announcer, George Junkin. Mon, 6-7 pm. Tues, Wed, Fri, 6-7 pm, 8-9, 10-11. 12-1. Thurs, Sat, 6-8 pm, 10-11 am. Central.

WTAB, Fall River, Mass. 254.1m-1180kc. 100 watts. Fall River Daily Herald. Daily, 6 pm, organ. Tues, Thurs, 7:30 pm. Mon, Thurs, 10:45 am. Eastern.

WTAD, Carthage, Ill. 236.1m-1270kc. 50 watts. Robert E. Compton.

WTA, Worcester, Mass. 267.7m-1120kc. 500 watts. Worcester Telegram. Announcer, Chester Gaylor. Slogan, "The Voice from the Heart of the Common-wealth." Daily ex Sun, 10:30-2 pm, music, reports; 4-5, music, stocks. Mon, Wed, Fri, 7:15 pm. Tues, Thurs, Sat, 5:15 pm. "The Twinkle-Twinkle Story Teller." Daily ex Sat, 8 pm. Eastern.

WTAL, Toledo, Ohio. 252m-1190kc. 10 watts. Toledo Radio & Elec. Co. Announcer, Reginald Baxter. Slogan, "The Gateway to the Sea." Daily ex Sun, 7:30 pm. Eastern.

WTAM, Cleveland, Ohio. 389.4m-770kc. 3,500 watts. Willard Storage Battery Co. Announcer, A. R. Herske. Slogan, "The Voice from the Storage Battery." Daily ex Sun, 12:15-1:30 pm, 6-7 pm, dinner program. Mon, 8-12 pm, concert. Wed, 8-1 am. Sat, 8-12 midnight, dance. Eastern.

WTAP, Cambridge, Ill. 241.8m-1240kc. 100 watts. Cambridge Radio & Elec. Co. Announcer, B. Talbot. Slogan, "The Voice of the Wilderness." Daily ex Sun, 10:30 am. Announcer, Mrs. C. S. Van Gor-den. Slogan, "The Voice of the Wilderness." Daily ex Sun, 10:30 am, 12:15 pm, 6:15, weather, markets; 6:30, code. Tues, 8 pm. Fri, Sun, 7:30 pm. Central.

WTAR, Norfolk, Va. 260.7m-1150kc. 100 watts. Ro-liance Electric Co. Announcer, J. K. Bohannon. Slogan, "Down in Old Virginia." Daily ex Sun, 6:15 pm, weather, markets, news. Fri, 8-9 pm, music. Eastern.

WTAW, College Station, Tex. 270.1m-1110kc. 500 watts. Agricultural and Mechanical College of Texas. Wed, Fri, 8 pm. Sun, 11 am. Central.

WTAX, Stretator, Ill. 230.6m-1300kc. 50 watts. Hams Hardware Co., Radio Division. Announcer, N. B. Williams. Slogan, "Tappa Kappa Nails." Tues, 7-8 pm. Thurs, 8-12 mid. Sat, 8:30-10 pm. Central.

WTAZ, Lamberville, N. J. 260.7m-1150kc. 15 watts. Thomas J. McGuire. Mon, 8-10 pm, music. Eastern.

WTIC, Hartford, Conn. 475.9m-630kc. 500 watts. The Travelers Insurance Company. Slogan, "The Insurance City." Mon, Fri, 11 am, 11:30, 12:05 pm, music. Mon, 11:15 am, travel talk. Mon, 11 am, 1 pm, 6:30-12. Wed, 6:30-10 pm. Thurs, 6:30-7:30 pm. Sat, 6:30-11:30 pm. Sun, 9-10:15 pm. Eastern.

WWAD, Philadelphia, Pa. 249.9m-1200kc. 250 watts. Wright & Wright, Inc. Announcer, H. W. Feyhl. Slogan, "Penn City Station." Mon, 7:45 pm. Thurs, 7 pm. Every other Sun, 9:30 pm. Eastern.

WWAE, Plainfield, Ill. 241.8m-1240kc. 5,000 watts. Electric Park. Announcer, Harry B. Ohlhafer. Daily ex Sun, 12:30-1:30 pm; 9-12, midnight, orchestra. Sun, 10:50-12:15 pm, Methodist church; 3:30-4:30, popular program. Central.

WWAO, Houghton, Mich. 263m-1140kc. 250 watts. Michigan College of Mines.

WWGL, Richmond Hill, N. Y. 212.6m-1410kc. 500 watts. Radio Engineering Corp.

WWI, Dearborn, Mich. 265.3m-1130kc. 500 watts. Ford Motor Co. Wed, 8-10 pm, music, lectures. Eastern.

WWJ, Detroit, Mich. 352.7m-850kc. 1,000 watts. Detroit News. Announcer, E. L. Tyson. Mon, Wed, Fri, 7:30-8 am, 8-8:30 am, setting-up exercises; 9:30-9:45, household hints; 10:25-10:30, weather; 11:55-12, time; 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.

WLL, New Orleans, La. 275.1m-1090kc. 100 watts. Loyola Univ. Announcer, O. L. Abell. Sat, 7:30-8:30 pm. 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, 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 pm, weather, news, stocks; 5:30-6 pm, news, stocks, weather, bedtime story. Wed, 8-10 pm, music, 12 mid. CNRT. Sun, 11 am, 7 pm, church services. Eastern.

CFCF, Montreal, P. Q., Can. 410.7m-730kc. 1,650 watts. Canadian Marconi Co. Announcer, C. Walter Darling. Daily ex Sun, 12:45-1:40 pm, stocks, music, Mon, Fri, 7-7:30 pm, bedtime stories; 7:30-8:30, music; 9-10, 10:30-11:30, orchestra. Wed, 7-8 pm, orchestra. Eastern.

CFCH, Ingersoll, Ont., Can. 499.7m-600kc. 250 watts. Abitibi Power & Paper Co., Ltd. Slogan, "The Call of the North." Experimental station for forest protection.

CFCK, Edmonton, Alta. Can. 516.9m-580kc. 100 watts. Radio Supply Co., Ltd. Daily ex Sun, 4-5 pm. Wed, 9-10:30 pm. Sun, 4:5-5:30 pm. Mountain.

CFCN, Calgary, Alta. Can. 434.5m-690kc. 1,800 watts. W. V. Grant, Ltd. Slogan, "Voice of the Prairies." Tues, 11:30 pm, Bronco Busters; Wed, 9 pm, Fri, Sat, 10 pm. Sun, (alternate) 11 am, 7:30 pm, spruce. Mountain.

CFCO, Vancouver, B. C. Can. 410.7m-730kc. 5 watts. Sprot-Shaw Radio Co.

CFCT, Victoria, B. C. Can. 329.5m-910kc. 500 watts. The Deaville Station. Slogan, "The Mecca of Tour-ists." Wed, Fri, 8-9:30 pm. Every second Thurs, 10:30 pm, 12 mid. Night Birds, Sat, 10-11 pm. Sun, 11 am, 7:30 pm, 9:30, organ. Pacific.

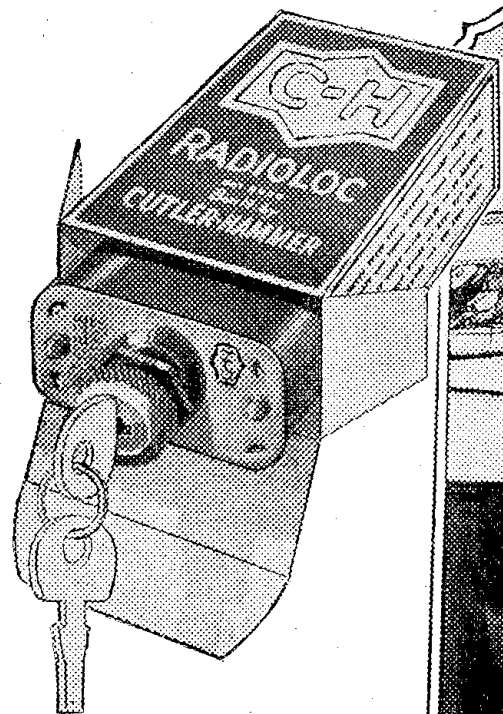
CFCU, Hamilton, Ont., Can. 340.7m-880kc. 500 watts. Jack V. Elliot, Ltd.

CFCV, Charlottetown, P. E. I. 312.3m-960kc. 50 watts. Island Radio Co.

CFDC, Vancouver, B. C., Can. 410.7m-730kc. 10 watts. Western Auto Elec. Co.

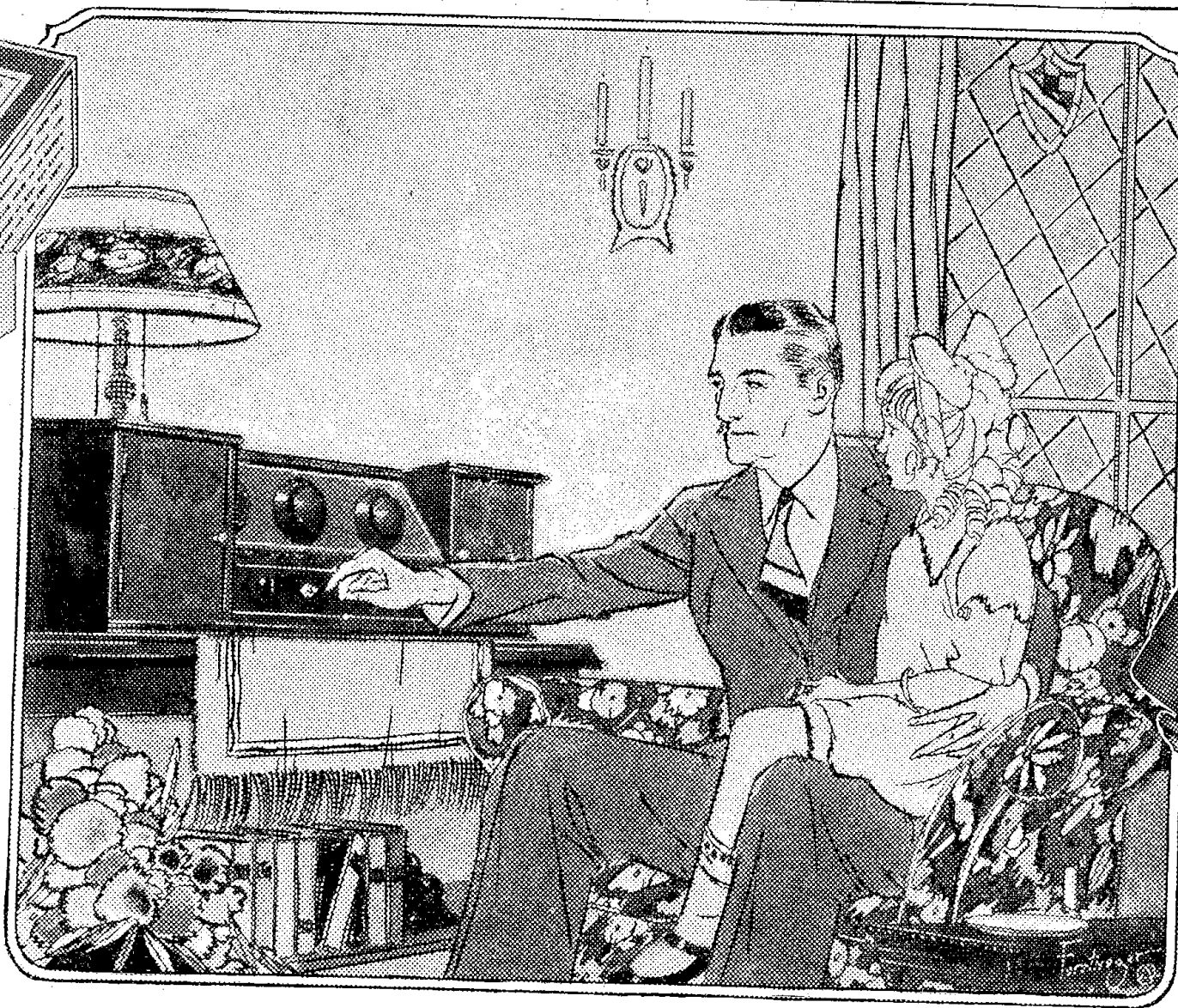
CFDK, Thorold, Ont. Can. 247.8m-1210kc. 75 watts. D. J. Fendell. Daily ex Sun, 12-12:30 pm; 5-6. Tues, Thurs, Sat, 8:30-10:30 pm. Sun, 11 am, church service; 2-4 pm, 8 pm, sacred concert, music.

CFDM, Kingston, Ont., Can. 26



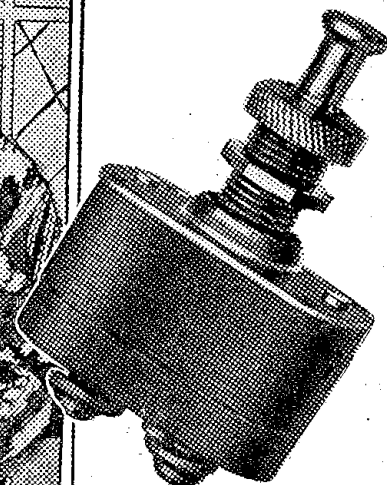
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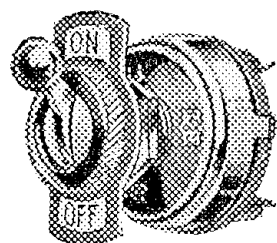
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— Radio Parts for Performance —

Two-Tube Short Wave 15-130 Meter Receiver

Part III—The Wiring Made Easy

By John G. Ryan

THE more or less experienced set builder has long since found that the correct way to wire any receiver is to begin with the filament wiring, follow it with the R.F. or detector connections and finish with the audio amplifier. The reason for the filament leads coming first is not hard to understand since many connections from the plate and grid circuits must go to various points in the filament circuits and the wiring of those plate and grid parts could not be completed were the filament leads not in place. On the other hand, the filament wiring can all be put in and the tubes lighted without ever touching a high potential point. This procedure will, therefore, be followed here.

First connect the binding post at the left end of the row of four to the bottom terminal of the open circuit filament control jack which has been mounted with frame upwards. Now put in a wire from the next to bottom terminal, forward beside the jack to front edge of the sub base, then to right to the right terminal of the Bradleystat, mounted with terminals upwards. From the left terminal of the Bradleystat run a wire back and to the left, up through the sub base to the rear left terminal of the detector socket. From the right end of the Amperite, drop wire through sub base and straight back to the wire connecting jack and Bradleystat. From this last named wire another goes straight forward and up through sub base to the soldering lug placed on the mounting screw at right front corner of the audio transformer. Now connect the left end of the Amperite to the left front terminal of the audio frequency amplifier socket. This completes the negative filament wiring.

Positive Filament Wiring

Going now to the positive wiring, we first drop a wire through sub base from the rear left terminal of the audio frequency amplifier socket, bend it across to the right until opposite the left front terminal of the detector socket and then forward and up through to that terminal.

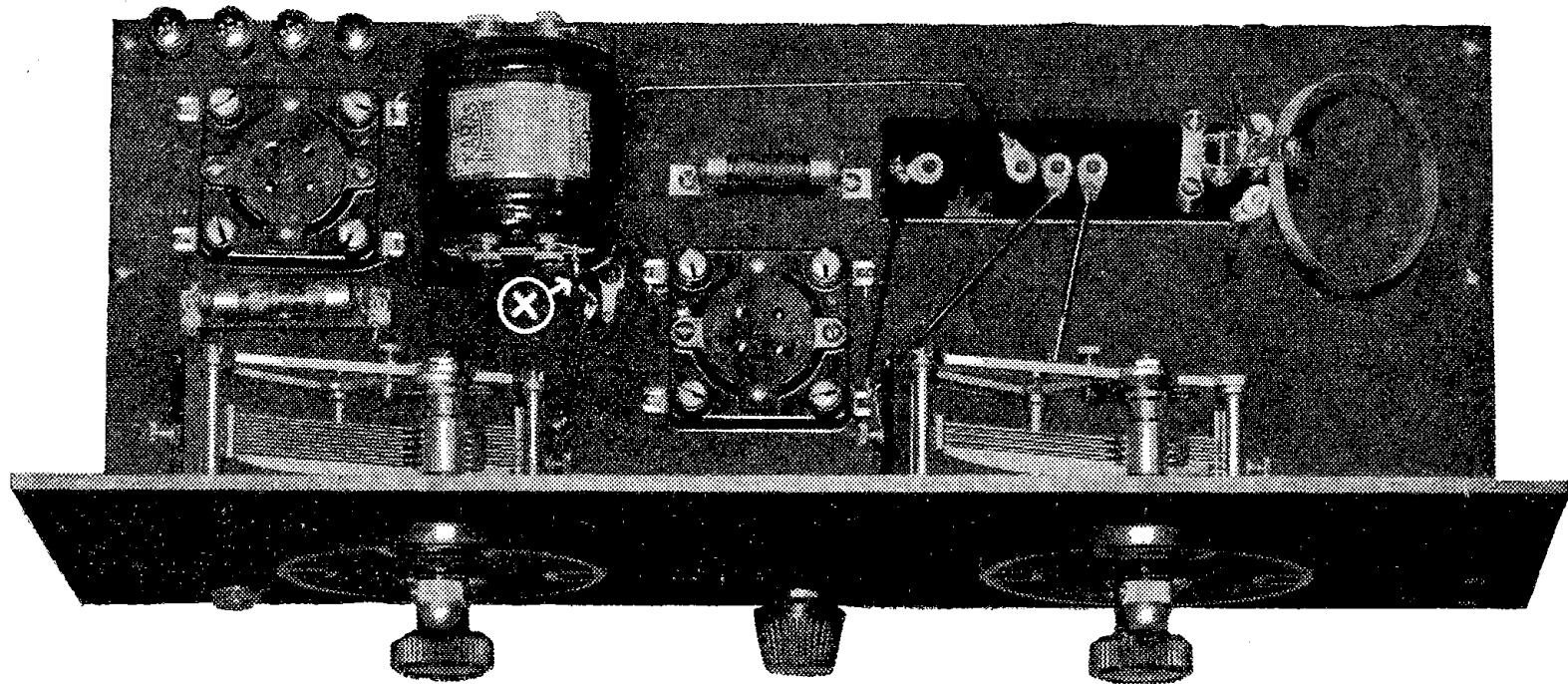


Figure 7

This peculiar bend is made to leave room for the C battery added later. Where it passes the underside of the second binding post from left, connect it to that post by a short length of wire. By these operations we have completed the positive circuit and can begin on the detector circuits.

From the rotor of the left condenser drop a wire through the sub base and bend to right, then up through sub base to the rotor of the right condenser. Where this crosses the plus filament wire, solder to it. Now, on the upperside of set, run a wire from the F terminal on the coil mounting block, forward to the wire just put in where it joins the right condenser rotor. From the G terminal on that block, run another wire forward and up to the stator terminal at upper left side of the right condenser (.00014 mfd.). On the

underside of sub base again, run a wire across to right from the left terminal of the Leakandenser up through sub base to the rear right terminal of the detector tube socket. Thus we have completed the detector grid tuning circuits.

In figure 2 presented with Part I of this series, the feedback coil is placed below the grid coil, G and F, and its upper end marked with the letter B. The lower end is identified with the letter P which should have been the letter P to correspond with the markings on the coil mounting block. From P on the coil mounting block, run a wire forward to the front right terminal on the detector tube socket. From the stator terminal of the left condenser at its lower right side, run a wire back between detector socket and transformer, then to right well behind Leakandenser to the B terminal on the coil mounting.

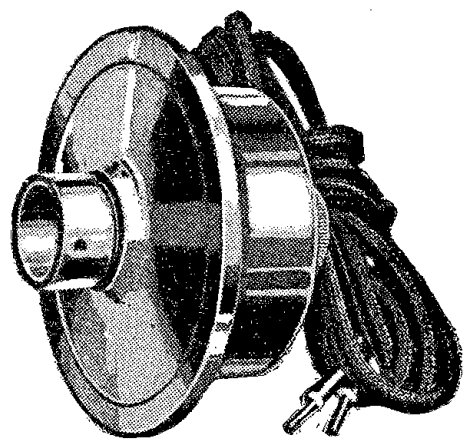
Where this wire passes almost under the P terminal of the audio frequency transformer, run a short wire up to that terminal. It is this wire (X) which will have to be removed if you decide to put in a radio frequency choke, but it would be well to try the set first without it. The detector circuits will be completed if you now drop a wire down through sub base from the B terminal of the Karas transformer, back and to the left to the third binding post.

To complete the set we now proceed to the audio frequency amplifier part. The G post on the Karas transformer is at the rear right corner. From it, run a wire down almost to the sub base, then to the left to the G terminal of the audio amplifier socket which is also at the rear right corner. From F post of the transformer, drop a piece of bus bar down

(Continued on page 28)

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wire are protected from injury by a heavy nickel-plated case through the back of which adjustment is made by means of a special key. The pole pieces are not made from a solid piece of iron but are assembled from 15 laminations of carefully chosen steel.

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\$3.00

The unit will be shipped on a satisfaction or money back basis on receipt of price in money order or currency.

This unit is the secret behind the unparalleled success of Fultone Speaker. Its large diaphragm and bobbins of fine

Tear Off, Fill in, Mail Now

HALL & WELLS, Inc., 4600 Lincoln Avenue, CHICAGO, ILL.

Enclosed is \$..... for which ship me..... () Fultone Unit at once, my money to be refunded if I am not satisfied and return this merchandise within 5 days.

NAME

ADDRESS

CITY AND STATE

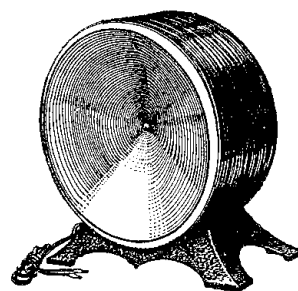
Use on Your Phonograph

- Edison Adapter.....25c
- Columbia or Pathe.....20c
- Brunswick30c

HALL & WELLS, Inc.
4600 Lincoln Ave. Chicago, Ill.

A new loud speaker principle

gives you all the thrill of the first row orchestra



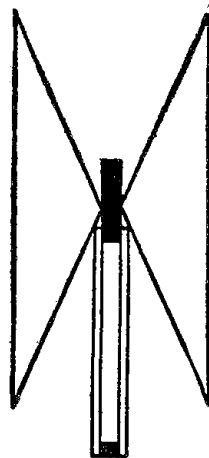
The Acme "double free-edge cone" loud speaker. Round Model (shown), \$25. Cabinet Model, \$35.

NOW you can get the full joy of radio. Those thin, tinny piano notes, those muffled, nose-holding singers' voices—mere shadows of the living, thrilling originals—are gone forever. Now by a new principle, that of the "double free-edge cone," the new Acme loud speaker gives you volume reproduction of the human voice and all musical instruments with faithful exactness. It fills and rounds out, puts life, fire, reality, into the shadowy phantom voices you have been so accustomed to hearing.

No tense straining to make out muffled voices—no disappointment. You hear the natural voice speaking—not a megaphone.

After 5 years' effort and the testing of 256 different experimental models, the new Acme "double free-edge cone" loud speaker gives you front row seats at any broadcast entertainment.

The whole story of distortion and how the Acme Loud Speaker and other Acme apparatus overcome it is told in "Amplification without Distortion." 300,000 radio fans have found it helpful. Use coupon to get your copy. Acme Apparatus Company, pioneer radio and transformer engineers and manufacturers, Cambridge, Mass., U. S. A.



Above is section of loud speaker, showing two free-edge cones.

ACME
~for amplification

ACME APPARATUS CO.
DEPT. N13, CAMBRIDGE, MASS.

Gentlemen: Enclosed find 10c (stamps) (coin) for my copy of "Amplification without Distortion."

Name

Street

CityState.....

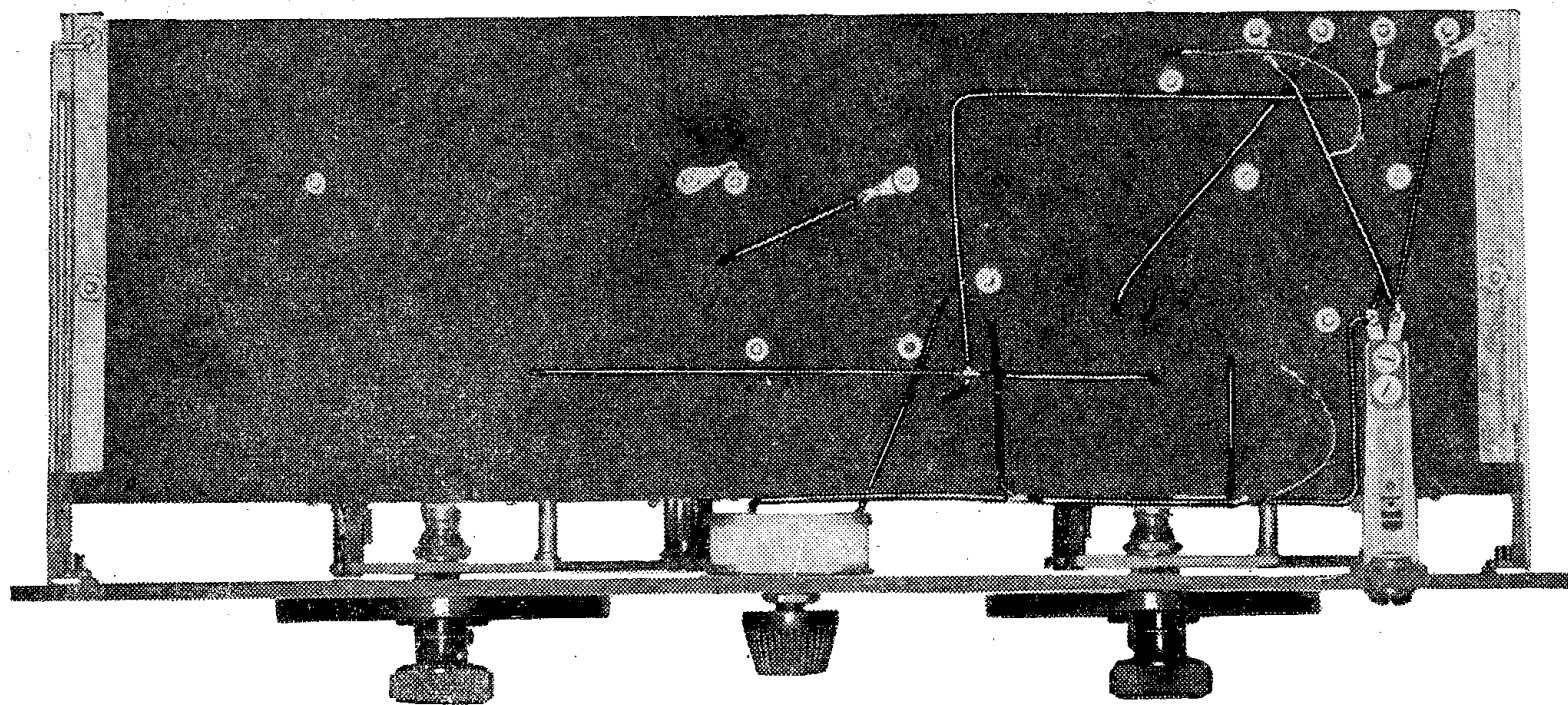


Figure 8

SHORT WAVE RECEIVER

(Continued from page 27)

through sub base and, on the underside, solder on a short piece of flexible wire for connection to the C battery. From the P terminal of the audio amplifier socket, front right corner, drop a wire through sub base to the top terminal of the jack and connect the next to top terminal to the fourth binding post. Then connect a short piece of flexible wire to the bus bar connecting the jack and the Bradleystat at the point where the wire leads off to the Amperite.

To hold the C battery in place we use the brass strip shown in Part II, the machine screw holding the front right corner of the transformer and that which holds the Amperite. It will be found that the C battery can be placed in the space provided in the brass strip when bent correctly, and that the holes in the strip will then fall right on the lower ends of the machine screws mentioned. You can either loosen the hex nuts you now have on those screws and slip the ends of the strip under them or you can put another hex nut on each to hold the strip. The battery should be set in with its ter-

minals to the left and the negative 4 1/2 clip to the rear. The flexible wire coming through from the Karas transformer's F post is now connected to the negative 4 1/2 post on the battery and the flexible wire on the negative bus wire in the set goes to the plus post of the battery.

(The set is now completed and ready for operation. Next week, the concluding article shows how to connect the set to its accessories and goes into detail on the adjustments for satisfactory operation.—Editor's Note).

A STEP ON THE STAIRS

(Continued from page 26)

cut off the voice and a murmur of sobbing and hoarse breathing arose from all corners of the room.

"Do not be alarmed," suggested Ardwyn quietly. "We can expect interference here . . . And it is not yet midnight."

"I wish I was out of this," breathed Henry Graves fervently.

"Listen," commanded Mary Williams only half audibly. "I hear something."

IN THE black silence beyond the unseen doors something was moving. Three short taps, then, three more taps widely spaced, three short taps—the pad-pad of stealthy footsteps fading away into the muffling darkness.

"What's that?" cried Mary. "SOS," came a whisper from across the room.

"A step on the stairs," suggested Henry . . . "The Indian probably or the caretaker." His tone gave evidence that he did not believe his own explanation.

There was a whirring sound from the mantelpiece.

"The clock is going to strike," whispered Mary.

"Midnight," boomed an unidentifiable voice. And then the chimes tolled the hours slowly with brazen, echoing challenge . . . one . . . two . . . three . . . up to twelve. Nothing happened. The echoes of the clock died into silence more complete, more ghastly than before.

"I feel a draft," came the low, agonized baritone of Aunt Helen. "What is it?"

God help us . . . Somebody has opened the front door."

"This," boomed the voice of the Radio with sudden clarity and volume. "This is Station FYX. We are about to broadcast . . ."

The groaning of Aunt Helen . . . the wild sobbing of men and women, speechless in the panic of the dark, were suddenly silenced by a crash from the Radio.

"Something's gone wrong at FYX," declared the lawyer Ardwyn, shaken out of his complacency for the first time.

A smashing of glass followed the first reports. Muffled cries filtered through the speaker.

"Help!" shouted a choking voice. "Don't let him get me . . . don't."

An echoing report, terribly real and convincing despite the distortion of the curving horn, ended the appeal.

"A pistol shot," murmured someone in the hunt-room. And then once more the voice of the announcer almost unrecognizable in its terror:

"There has been a murder at FYX," it repeated over and over again. "For the love of God send the police."

Who killed Jeremiah Turner? What is this curse that haunts the House of Turner? Where did the mysterious stranger go? Who made the sound of the step on the stairs? And, finally, what happened at the studio of Station FYX? Perhaps the next installment of Mr. Casey's thrilling mystery story, which will appear in next week's Radio Digest, will give a hint in answer to one of these questions.

Hear English Station Rugby In Far Lands by High Power

LONDON, Eng.—Preliminary trials of the great high-power Radio station near Rugby have shown that the station will fill its object. The power applied to the aerial has been increased step by step. Quarter-power was reached about a month ago, and reports came from Java and Hong Kong that the signals were very strong there.

More recently half-power was reached, and the station was heard well in Australia, and very strongly in America.

Continue Program Through Darkness

Lights Going Off in Studio Do Not Cause Even a Break in Entertainment at WSOE

MILWAUKEE.—If there is one thing that Radio engineers and announcers do not like to do, that is to be compelled to sign off before a program is completed because of equipment or wire trouble or because of the many other reasons which may compel a station to temporarily shut down.

During the broadcasting of a musical program from the Milwaukee automobile show by WSOE, the School of Engineering station, all lights in the studio went out but the station continued in operation because of the use of storage batteries.

Use Matches for Lights

Katherine Kies Hardtke was at the piano while several of the staff artists were singing a duet. Oscar Meissner, the announcer, stepped over to the artists, whispering, and asked them if they could finish the song. They replied they could.

The song was completed but the studio was still dark. Several artists, waiting their turn to broadcast, struck matches and held them near the piano and the next selection was broadcast.

Program Not Interrupted

By this time, O. W. Werwath and F. A. Vaughn, president and vice-president of the School of Engineering, had connected up flood lights from a different electrical circuit and the program continued.

It was a half hour later when the regular studio lights went on and not a single number was missed on the program. WSOE had kept on the air for its scheduled program and the operator, Morris Thomas, and announcer, Mr. Meissner, were satisfied.

Daily Worship at KFNF

SHENANDOAH, Iowa.—An impressive feature of KFNF, Henry Field Seed company station here, is the old-fashioned family worship broadcast each weekday morning at 7:30 Central time. The ceremony is simple but effective. It consists of a few songs by the seedhouse employees, Scripture reading by Mr. Field, and a short prayer.

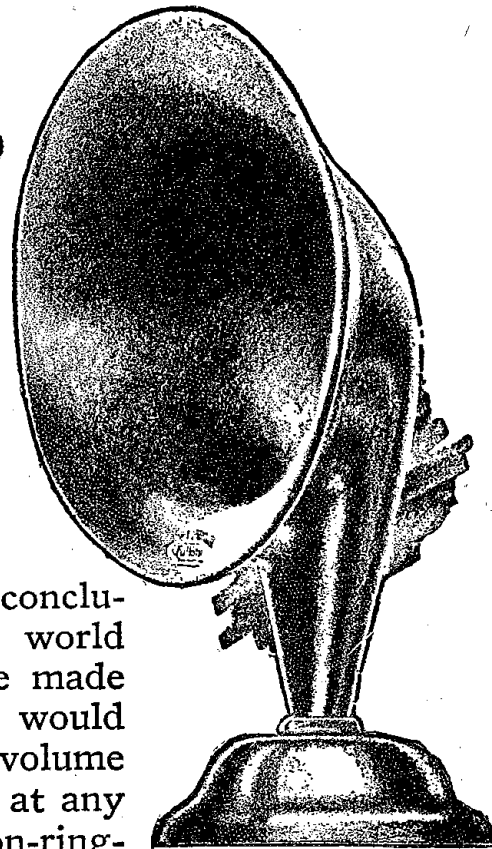
BIG PRICE REDUCTION

Fultone

Trade Mark

THE FORD of LOUD SPEAKERS

\$6.50



Fultone Loud Speaker has conclusively proven to the radio world that a reproducer could be made and sold at \$6.50 which would handle music or speech in volume as perfectly as any speaker at any price. The horn is solid, non-ringing and wide-throated enough to handle the powerful reproduction from super-heterodyne or reflex. The adjustable diaphragm permits matching Fultone to any receiver and "B" battery voltage.

Tear Off, Fill in, Mail Now

HALL & WELLS, Inc., 4600 Lincoln Avenue, CHICAGO, ILL.
 Enclosed is \$.....for which ship me ()
 Fultone Speaker.....() Fultone Unit at once, my money to be refunded if I am not satisfied and return this merchandise within 5 days.
 NAME
 ADDRESS
 CITY AND STATE.....

The Fultone speaker will be shipped on a satisfaction or money back basis on receipt of price in money order or currency. The coupon is provided for your convenience in ordering if your dealer cannot supply you.

HALL & WELLS, Inc.
 4600 Lincoln Ave. Chicago, ILL.

Gets Everything But Noise!

Read this convincing letter from a man who has "listened and marvelled":

"Utica, N. Y.
 Jan. 16, 1926.

Kane Antennae Co.,
 Gentlemen:

We have found your Kane Antennae the greatest thing we have come across in the way of eliminating interference. It is a real life saver to us, as since we have installed it we get wonderful reception, where before we got only noise.

Very truly yours,
 Utica Radio Supply Co.
 By M. Swire."

KANE ANTENNAE

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. 823-B. E. 3343 W. Monroe St. Chicago, ILL.
 Dealers—Send at Once for Attractive Proposition

30 Days FREE TRIAL
New and Better Radio Set

JUST OUT! New Wonder Radio! At Lowest Factory Prices.

Why be satisfied with any but the NEWEST radio set? Why pay high prices? Why take chances, when you can put this NEWEST 5-Tube Westingale Model in your home for 30 Days Trial on the absolute guarantee that if you don't find it the most beautiful in appearance—the most reasonable in price and the best radio set you have ever seen or heard—You Don't Have To Keep It! Built in the new style brown walnut cabinet with sloping front panel, gold embossed in Renaissance design.

Will receive concerts from coast to coast. Buy a Westingale set direct from manufacturer and save money.

5-TUBE RADIO Retail Price \$45.00
3-TUBE RADIO Retail Price \$26.00

Don't buy any radio until you get our FREE Folder, which describes this newest of all radio sets and gives our

Special Introductory Discount
 Also our 30 Day Trial Offer. Write today.
 AGENTS AND DEALERS WANTED
WESTINGALE ELECTRIC CO.
 Dept. 181 1751 Belmont Ave., Chicago.

The Reader's View

For Silent Night

Knowing that the Radio Digest has quite an influence in the Radio world, I would like to repeat a suggestion that many listeners have made and advocated. That is that every Radio station in the United States have one silent night per week, regardless if there are one or many stations in any particular city, this to apply to large stations as well as small. If there should be more than one station in a city they should choose among themselves which is to be their silent night. Many programs do not go over on account of the congestion. A silent night is a benefit to the broadcasters instead of a detriment.—H. F., Springfield, Ill.

"Thank You"

Realizing the time, expense and other incidentals to a broadcasting station, let us encourage WSMB. Surely one can "tune her out" if one so desires. If it gives any pleasure to anyone for WSMB to read her telegrams received, here's one who won't complain. My humble contribution is "Thank you." When I don't like her program, my set is selective enough to tune out.—A. J. J., Wilmington, N. C.

Suggest It to Your Radio Dealers

Why don't you get up a petition to Washington to have congress pass the appropriation for Radio inspectors in all larger cities. Conditions here are terrible on account of Power Peaks, local stations out of allocated wave bands and other causes that could be remedied.—M. S. M., Kansas City, Mo.

Keeping with Daughters

A mother with one girl in college, another graduating from high school in the spring and another a sophomore in high school, hears "school" day in and day out, with a little fear creeping into her mind that her girls are going beyond her educationally.

What joy when she learns of the Radio extension course offered by the University of Nebraska. The mother enrolls and after the first lesson, the family listen to her outline and the comments are so pleasing and favorable that the fear is abolished. She is indeed grateful to the Radio broadcasting stations, the professors and the university with a broad vision.—Mrs. H. C. T., Marysville, Mo.

Classical Is Brain of Music

In the issue of the Radio Digest of January 2, I noticed "Less Classical Music" under the Reader's Views by L. F. W. of Conway Springs, Kans., wherein the writer states that broadcasting would be improved 75 per cent if popular music and old-time music and music that is good took the place of classical music. I would like to ask the writer a question: Do you not think classical music good music?

To exclude classical music from programs would be like removing the human brain and then awaiting results, which of course we know the victim would be dead. It would be the same result with the Radio program if the classical music was excluded. It would be dead. We need a variety to satisfy.

The time has come when we must accept the psychology of broadcasting programs and also accept what has been supervised by the studio director with an

open mind and not leave the subject of classical music to one person to say that 75 per cent of the broadcasting would be improved if classical music was excluded from programs. It takes far more technique to sing or play classical music than it does the so-called jazz.

If you cannot understand classical music study a little French or Spanish and than listen to its beauty. Take a little broader view on life and you will soon realize the beauty of classical music.—E. F. W., Rockford, Ill.

"Hot-Mush-in-the-Mouth"

I have been a regular reader of your paper since I received a set for Christmas, on December 23. I have been wondering whether it would be possible for you, through your paper, to conduct a campaign against what I call "Hot-Mush-in-the-Mouth" announcers. For instance, I tried for three or four different evenings, during a week or more, to locate one station. I get it regularly now. When the announcer gave the name of the next selection I could understand him. But when he announced the station he took up a handful of hot mush and put it in his mouth so that his call sounded exactly like another station 500 miles from his, the first two letters being the same. I have twenty or more dial listings on my log book for stations which I can not identify because of faulty announcing. If I preached like those fellows announce my job as pastor of a church would not last two weeks. A patient sufferer, who thanks you for help.—F. T. K., Littleton, Colo.

Stick to Announcing

In general, and of course there are exceptions, announcers or station managers confuse the function of announcers and entertainers. If the announcer would be brief and to the point, and confine himself to the essentials of announcing and let others do the entertaining, conditions would be better. Let them refer to the stations letters instead of saying, "We," "Our," "Us," etc. By all means the station should be announced after every number as well as the offering and the performer. Let the public decide as to the beauty of the numbers—it is not necessary to be told by the announcer. The recent fad of a running discourse during musical numbers is a nuisance. Neither the talk or the music can be enjoyed.—V. A. M., Chicago.

A Few Complaints

To my estimation, American broadcasting has reached a stage where drastic measures must be taken to remedy the many faults.

For example, tuning in on any set of reasonable price, the zone from 246 meters to 297 meters is one of the most terrible messes on the air and there seems to be no remedy. I have tried antennae of all shapes, sizes and directions and it is the same.

Another thing that impresses me strongly is the program arrangements. Starting with the dinner-hour concerts, every station tries this classical, then vocal, then jazz and old-time tunes. Why not have them mixed a little?

Still another thing is the method of signing off. I tuned in on Porto Rico several times and it was quite a thrill and made one feel proud of the island when it signed off with the national anthem, "The Star Spangled Banner." This "Home Sweet Home" stuff is getting old and is far from being characteristic of the word America.—C. H., Sterling, Nebr.

AND YE MINSTREL STILL WANDERS

THE Radio minstrel is here. He does not always play a guitar and sing, as did traveling minstrels in olden days. But he moves from broadcasting station to broadcasting station, playing upon odd instruments, for the pure love of it, and for the joy he gives listeners.

Within thirty days at KGO five Radio minstrels reported to the studio manager ready to do their bit entertaining silent audience of the day and night. One minstrel brought his "mouth organ" or harmonica; another played a Tyrolian zither; another carried a set of "sweet potatoes" or ocharinas, small terra-cotta instruments toned like flageolets; another drove

to the station in a flivver and unloaded his "kitchen piano" or dulcimer, stringed and played with flexible hammers; and a fifth appeared with a sack containing a one stringed fiddle and bow of his own make. All instruments, unusual as they are, were peculiarly adapted to broadcasting, and music poured from the hearts of the players as it did from their brothers of old.

"We are only observing Bible teaching," said one of the minstrels. "We cast our music upon the ether—and, brother, it sure works! When I travel up and down this coast I come across friends everywhere—and chicken dinners, too."

Not Perfect Radio World.

Coming out from under the landslide of R. McB. M. from up Mansfield, Ohio, way, I'd like to shake a little of the mud off and feed this bird a little Radio seed which might, if he'll plant 'em in an investigation bed, grow into a few pointers which might serve to soothe his vicious breast.

It is evident from R. McB. M.'s line of chatter that he knows less of Radio than of common politeness, so it would be lying down on the job not to rise on my hind legs and tell him that a non-radiating Radio receiver has not been built yet—nor will one ever be built which will step out and get anything over the range of a crystal detector.

The so-called single circuit, carelessly handled, is a disturber, but it has nothing on neutralized circuits in the hands of inexperienced manipulators. An idiotic impression is widespread that a super-heterodyne is the real sweet papa golden rule perambulator, when operated from a loop collector system—but ask anybody who knows what constitutes Radio energy as it is handled from loop or antenna into detector, and he'll tell you that the loop merely reduces the radiation, the range depending on the handling of the potentiometer or other potential variation control. I have used a six, a seven and eight tube super on loops, and they all disturb my neighbor fifty feet away—I haven't asked the more distant ones. This bird seems to think that interference is non-existent unless it's audible in the form of a squeal. I have many times been listening with various types of sets when some neutrodyne minus the "neut" would come absorbing in to the same frequency and walk away with the signal—the supers do it—the regenerators do it also. The only circuit which would not radiate damagingly when tuned up to or close to oscillation would be one properly neutralized well below the point of oscillation and such a set would be useless except on very powerful stations.

It isn't a perfect Radio world yet, but nothing is to be gained by condemning the pioneer regenerator when the pioneer is no more to blame than sweet papa multituber, nor is cussing the government going to help a bit.—C. O., Slaton, Texas.

Whad'yamean Just?

Under the head of "Telegram Programs," I sustain the objections of complaint. I arise to interpose others. Any moron ought to be able to recognize a piece of music after it has been broadcast 100 or 150 times. Then why take the time either before or after to announce, "You have just heard, 'Let Me Call You Sweetheart,'" etc.

Also, why the just? The dictionary I consulted gives the definition of just as right; acting rightly; rendering or disposed to render to each one his due; upright; impartial; righteous; proper; adv. exactly; barely; nicely; almost. Not one of the definitions fit the word as it is used by announcers.—T. H., Okemah, Okla.

Paging Mr. Hoover

I have been reading the Radio Digest and have noticed several letters from people telling of the interference between stations. Here is some of the trouble I am having. The stations from 280 meters on down are so thick that I can not get much out of any of their programs. I heard KFJK and KWKH broadcasting at the same time and they are both on the same wave length, also WENR, KMOX, KFOB and KPNF are so near the same wave that their programs are not much good. Something ought to be done.—H. R. Cope, Lamesa, Texas.

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

ZENITH
KENNEDY
w/ **Radiodyne**
Planstiehl
Howard
Thermodyne
OZARKA
Deresnadyne
ADLER-ROYAL
MURDOCK
MU-RAD
Valley
LEICH
Silver-Marshall
GLOBE
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Newport
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ALSO—
Choice of
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Do as they do—use **THORDARSON** Super TRANSFORMERS STANDARD ON THE FINEST
THORDARSON ELECTRIC MFG. CO., CHICAGO

TUBE SERVICE

Your set is no better than your poorest tube. They must be uniform

A good tube must have:

1. Good Tone Quality.
2. Impedance not too high
3. Low filament consumption.
4. Long life.



Pingree Tube Characteristics
Plate impedance 8500—10,000 ohms.
Amplification factor 8-9.
Filament consumption .25 amp.
Filament voltage 5.0 volts.
Plate voltage 16v-90v.

A-TYPE \$2.00

PROTECTION

Each tube is tested rigidly on a Super-radio Dynamometer before shipment.

TRIAL OFFER

Try these tubes 10 days at our expense. If they are not what we claim, we will gladly refund your money.

PINGREE RADIO SERVICE, Inc.
170 Summer Street Boston, Mass.

DEALER INQUIRIES SOLICITED



Fred W. Stein.

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

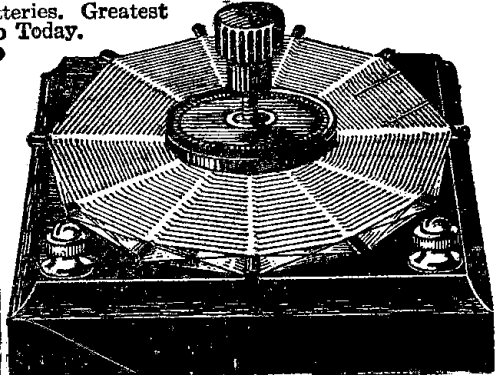
Improved Results With Tube or Crystal

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



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

TRIP TO NIAGARA FOR BEST CRITIC

WHT Asks Criticisms on U. S. L. Program—Couple Winning to See Falls

CHICAGO.—As an inducement to Radio listeners to state their desires in the matter of broadcasting programs, a trip to Niagara Falls has been offered to the couple submitting the best constructive criticism of Station WHT, located in the Wrigley building here.

The offer was made after it became evident that mail from listeners consisted of either the purely complimentary type or request letters. Listeners who dislike a program rarely take the trouble to write the station about it, station officials say.

The offer closes March 1 at which time the winner will be selected. It applies particularly to the "U. S. L." programs which are presented Tuesday and Thursday evenings. In case of a tie a duplicate award will be made.

Col. Edwin House Is New Announcer at WMBB Mike

CHICAGO.—Clyde Hager, chief announcer of Station WMBB of the Trianon, "The World's Most Beautiful Ballroom," has resigned his post and has been succeeded by Col. Edwin House, it was announced by N. R. Weaver, director of the station.

Colonel House was formally connected with Stations WLS and WGN and is widely known as a baritone soloist and community song leader and instructor. During the war he conducted community singing for the Y. M. C. A. and later toured two seasons with his Colorado Cowboy band.

A set does not have to be in a polished cabinet to give good results.

A single circuit set is not as selective as a two-circuit one.

SOLVE RADIO MYSTERY?

(Continued from page 3)

representative districts throughout the country who will place these episodes on the air concurrently with the story as it is published in Radio Digest.

Following are the first stations enrolled to broadcast "A Step on the Stairs," from the lips of the characters in the story:

WCCO, Gold Medal Station, Minneapolis-St. Paul; WOAW, Woodman of the World, Omaha; WGY, General Electric company, Schenectady; WMAQ, Chicago Daily News, Chicago; KOA, General Electric company, Denver; WOC, Palmer School of Chiropractic, Davenport; WNAC, Shepard Stores, Boston; KGO, General Electric company, Oakland, Calif.; WRC, Radio Corporation of America, Washington, D. C.; WHO, Bankers Life company, Des Moines, and WSAI, United States Playing Card company, Cincinnati.

One large station in New York City had announced at the time of going to press, that it desired to present the serial Radio play, but arrangements had not been concluded. WBAP, Star-Telegram, Fort Worth, Texas, will also present the feature beginning in April.

Rules Are Announced

The days and the hours on which the play may be heard from the various points are listed on page thirteen, together with the cast of characters who will be heard over the microphone. The story, as

written by Robert Casey, begins on page six of this issue.

Keen-witted listeners and readers have an equal opportunity of winning part of the \$500 prize money to be awarded for the best or nearest solutions of the mystery. The prizes are divided into: First, \$250; second, \$100; third to seventeenth, inclusive, ten dollars each.

All rules and announcements having a bearing on the contest will be found on page six, this issue, with the beginning of the serial mystery novelette.

Butte Radio Club Is Leader

BUTTE, Mont.—The Butte Radio club, which has the largest membership of any listeners' organization in the United States, is rapidly forging to the front as the leader in organizations of this kind. Other cities throughout the nation are asking advice from the Montana club, the latest communities wishing information on building Radio clubs being Salt Lake City and Beaumont, Texas.

DON'T TRY TO TUNE BY GUESS

KNOW where to place your dials for each station in America. KNOW what station you receive without waiting announcement.

You can do both with RADEX Send 25c Coin or Stamps RADEX, Box 143-L, CLEVELAND

Resigning Pastor Preaches Over Schenectady Station

SCHENECTADY, N. Y.—Dr. Bernard C. Clausen, the pastor who tries to resign his job every year, preached the morning and evening sermons for the audience of WGY, Sunday, recently, when the services of the First Baptist church of Syracuse were put on the air. With his annual resignation to his flock, Dr. Clausen submits a plan of procedure and definite objectives for the coming year. Up to the present he has resigned five times and his congregation, growing steadily, has refused to let him go.

PATENT ATTORNEYS

PATENT ATTORNEYS

PATENTS. Booklet free. Highest references. Best results. WATSON E. COLEMAN, Patent Lawyer, 644 G Street, Washington, D. C.

Big Money in Radio

Demand for high pay radio men is so great that a big Kansas City wholesale concern is now fitting men free to get into the radio business for themselves and make \$60 to \$200 a week without any capital invested. Select territory open. Send today for free catalog and amazing offer. Write direct to Mr. H. J. Saizow, Standard Radio Co., 1440 Walnut St., Kansas City, Mo.

\$1.50 for Your Old Radio Tubes

regardless make or condition, toward purchase of each new standard \$2.50 tube. (WD11 or WD12 tubes not accepted). Positively guaranteed. We do not sell re-built or bootleg tubes. Agents wanted.

Super-Service Laboratories, Dept. 56 Room 58, 39 West Adams, Chicago, Ill.

GET THIS BIG RADIO CATALOG FREE

Simply send name TODAY for big 64-page book explaining liberal proposition paying agents \$60 to \$100 a week, and how to make money from latest radio goods. Live dealers and agents wanted.

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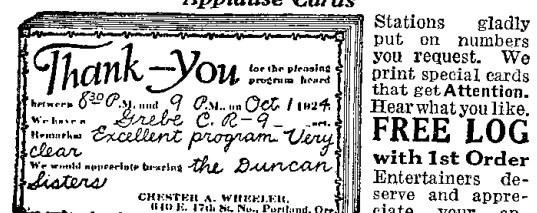
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