

# RADIO LORE FOR NOVICE AND EXPERIENCED FAN

## Dramatist Tells How Audience Can Be Made to See Over Radio

Henry Fiske Carlton Says It Is Different Problem from Presenting Drama in Theatre or on Screen.—Each Actor Must Subtly Describe His Surroundings

By HENRY FISKE CARLTON.  
(Henry Fiske Carlton is a member of the English department of New York University and a graduate of Prof. Baker's Dramatic Workshop at Harvard. He wrote the play, "Up the Line," which was awarded the Harvard prize in 1925 and was produced on Broadway in November, 1926.)

How can you make an audience see over the radio?  
No, I am not talking about television. I am talking about radio drama. You can't. Well, if you want to be a radio dramatist and you can't make your listeners see as well as hear your play, you can't hold them and believe me, no audience in the world can walk out of a room as easily as the radio audience—a turn of the dial and you're O-U-T!

Radio listeners have not paid \$3.00 or \$4.00, or even \$3.00 for their seats and they don't stay on, hoping to get their money's worth. They haven't had to fight subway jams and traffic tangles to reach crowded theatres; neither are they hesitant to leave for fear they might trample their neighbors' feet, nor is it necessary for them to go out with a half-spent evening on their hands.

No, sir! Your radio audience is comfortably seated at home—in mansions on Fifth avenue, Euclid or Michigan avenues, apartments on Fulton, Boylston and Genesee streets; houses on up-State, Hoosier or Hawk-eye farms—with any of a dozen or more programs theirs for the turn of a dial. In radio you must compel attention, and you have only one sense—the ear—through which to do it. It is quite a different problem from presenting drama in a theatre or on the screen. How can you do it? You've got to make your audience see!

When Columbus stands on the deck of the Santa Maria and sees the moving light far away on the dark horizon—your listener must see it, too! If the Indians set fire to the stockade at Booneborough and Daniel Boone rallies his small band of defenders to quench the flames, every member of your audience must see the fire, and see Boone and his men as they stand fighting it. But how? The ear alone can't make your audience see the special secrets of the radio dramatist.

To mention a few of his problems, I will point out that his characters must be clear and definite. Your listening audience must always know who is talking; you must distinguish each of your actors by a sharp contrast in their language and dialect, although you must use as little dialect as possible. For it is, as a rule, hard to follow. To make your listeners see vividly the characters who are talking, you must repeat their names often. Take, for example, an excerpt from "Paul Revere's Ride," which he has recently written.

Hancock: "Hello, what's the matter outside there? What's the matter?"  
Revere: "That you, John Hancock?"  
Hancock: "Yes, Paul Revere, what's the matter?"  
Revere: "Matter enough, Hancock. The Red Coats are coming. Is Sam Adams in the house with you?"  
Hancock: "He is right here with me. Oh, Sam—Sam Adams!"

Adams: "Yes, yes, I'm coming."  
No character in the radio drama must be allowed to speak more than one line or express more than a thought without identifying himself, or being identified by the other characters. Actors' voices are a boon to the radio dramatist, but it is not easy to find voices that are strikingly different and still natural and pleasant to listen to. The microphone—that autocat which unbends to no one—has a tendency to iron out the differences in voices and make them sound too much alike.

To make your audience see, it is necessary to make your characters describe what they see. In order to explain, I will quote just a line or two from "The Battle of New Orleans." Livingston, Aide to Gen. Jackson, is talking.

Livingston: "The centre column is giving away—they are falling back!"  
Jackson: "Good! Ah, Livingston, that's fine!"  
Livingston: "But the left column is coming on—oh, Sir, look at that! The right column is joining the centre—look at them! General Jackson, they are reforming—they are coming on!"  
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Jackson: "Bring up the reserves to the left—come!"

Now you must make them see by noises which are used to illustrate the action, but here is another problem. For noises over the microphone are misleading. When we first began our "Great Moments in History" series, a year ago, we had no idea how to use the noise and less of an idea how to create them. The noise that comes out of the loud speaker is seldom a natural sound. Take a pistol shot or gun fire—do you recall the Lindbergh celebration at Washington? You heard the big guns in salute and you know the gun sounded like nothing so much as the click of a door latch. Likewise a pistol fired in the studio merely blasts the "mike" and sounds not a bit like a pistol. All of these problems, together with the

sound illusion of marching soldiers, running horses, the breaking down of doors, slapping, kissing (yes, even kissing) have to be worked out by the director, but even that is not enough. For your radio dramatist must let his audience know what noise he is hearing, or has heard, or is about to hear. Of course, he should not do it too badly. He cannot have his characters say, for example, in a love scene—  
He: "I am now going to kiss you."  
She: "Yes, dear, I am ready for the kiss."  
(Sound of a kiss.)  
He: "There, I have kissed you."  
She: "Yes, dear, you have kissed me."

You needn't go that far. If the love scene has been properly written, there comes a point at which the kiss is the next logical step (if love, or love scenes are ever logical).

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(Sound of a kiss.)  
He: "There, I have kissed you."  
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Sanderson: "Hands up—hands up. I say, Don't move or I'll shoot. Halt! Halt!"  
Two quick shots.

Obviously the scene is shot. Sanderson has said he would shoot if the person he is covering moves. Then he calls "Halt" sharply. Evidently, the person has moved—another "Halt!"—there he stops. That is clear. You have told your listeners what noise to expect—they hear it—and, what is more, they see it.

This is action on the radio—and action heard and seen, compels attention. And speaking of action, strange as it may seem, it is even more necessary in radio drama than it is on the stage. A theatre audience may listen to people talking if they can see them. Watch their little gestures and movements and they will see a play. But on the radio, there must be a clash, or the promise of a clash coming.

Now, you may ask what kind of physical action can be put on in a radio performance.

Any kind. The more the better. Acting from a script is the key to a battle, and by that I mean a real battle. The Minute Men making their stand on Lexington Green against the oncoming Red Coats, Roosevelt and his Rough Riders charging up San Juan Hill. By preparing your audience, giving your orders, building up the situation of soldiers waiting to go, you can bring on a battle by letting Roosevelt cry—

"Charge, come on, boys, follow me!"—and the valley up the hill comes on! The mob rolls, the director times it, heavy rifle fire (ah, but that is his secret. I'm not going to tell you how he does that) and your listener sees Teddy go up San Juan Hill.

The whole problem is fascinating. Far more truly than in any other medium, the radio dramatist has the whole world for his stage. He is not held down by what the scene painter can do. He can move his characters without changing a couple of lines of scenery. He can play in the dark, in fact, anywhere, so long as he is clear, so long as he is interesting and so long as he makes his audience see what is going on.

Sponge Is Really a Skeleton.  
The sponge as you see it is really the skeleton of a live animal. When a sponge is brought up alive out of the sea it bears no resemblance to the sponge of the bath. It is then covered with an outer skin, or membrane, in which the pores appear or disappear at the animal's will. The canals and cavities beneath the outer skin—these, of course, are the holes in your sponge as bought—are lined throughout with a gray-brown, sticky, glutinous substance of the consistency of treacle. This is "sarcoderm"—the fishermen call it the "milk of the sponge"—and is live matter.

Insist On—  
GENUINE  
**EVEREADY**  
Radio Batteries  
—they last longer—

Accept No Substitute  
Sold by Better Dealers  
Distributed to the Trade by  
**UNION ELECTRIC  
SUPPLY CO.**  
60 PINE STREET  
Providence  
Tel. Gaspee 6628-6593

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Jackson: "Good! Ah, Livingston, that's fine!"  
Livingston: "But the left column is coming on—oh, Sir, look at that! The right column is joining the centre—look at them! General Jackson, they are reforming—they are coming on!"  
Jackson: "That is really magnificent. Livingston, in the face of our fire—but they can't make it!"

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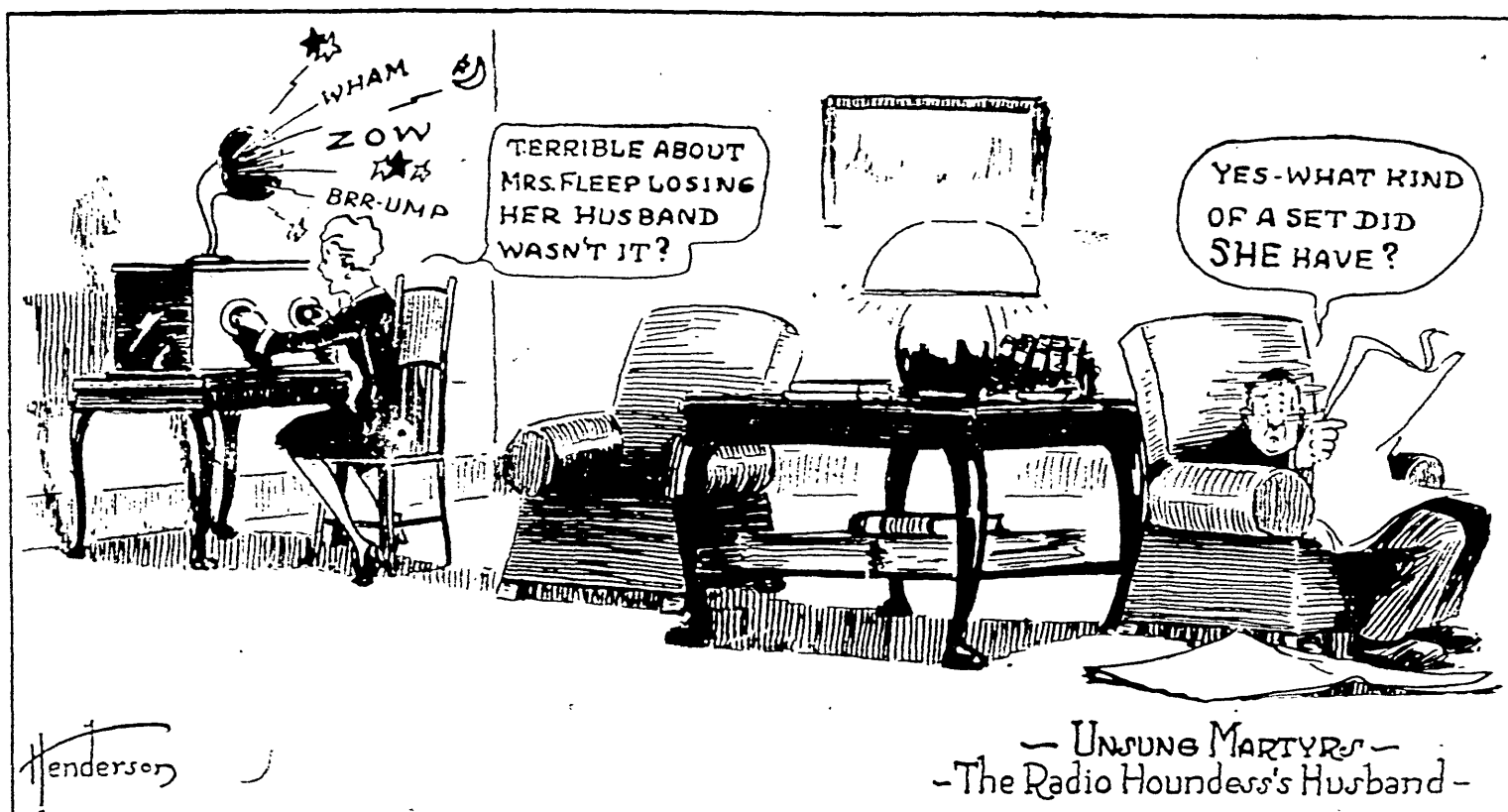
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## SHORT CIRCUITS



—UNSUB MARTYR—  
—The Radio Houndess's Husband—

## With Providence Radio Hams

Amateur operators of Providence are rejoicing at the victory won by their fellows in a test case in Kentucky. The case involved the taxation by a municipality of amateur transmitting stations.

An amateur at Wilmore, Ky., backed by the American Radio Relay League, sought an injunction to set aside a local ordinance regulating stations and imposing a yearly license fee of \$100.

District Judge A. M. J. Cochran, in granting the injunction, pointed out that radio communication was interstate commerce and therefore, subject only to Federal regulation. Judge Cochran asserted that inasmuch as the ordinance imposed the tax on the "business of broadcasting" and not on the property of the radio operator, the ordinance was void, as radio communication was under Federal jurisdiction.

"Judge Cochran's ruling was absolutely right," said Judge Eugene O. Sykes, lawyer member of the Federal Radio Commission. "Congress has provided adequate legislation covering the field and the State or municipality has no jurisdiction in the field of broadcasting."

Congress has exclusive regulation of radio communication as it is of such a nature as to permit uniform control throughout the United States.

The American Radio Relay League expects the Kentucky decision to set a precedent in the handling of similar situations throughout the country.

The following are extracts from letters recently received by the British Broadcasting Company from listeners: "We know we are not the cause of interference as we have a private earth."

"Please send me a copy of the Wireless Act as I have a wireless installed and should like all information." "Oppras is all right for eyebrows."

"Please come and take away a Frenchman's two-valve set what has been upsetting all near the Five Bells Public House for four months."

The 1927-28 season has gone into "high," as far as Providence amateurs are concerned. The summer months, to get help in disaster to another ship, to give help, for ship's business, for navigation, for the receipt of general news, for the receipt and dispatch of private messages.

Here's one definition of wireless: "Wireless telegraphy is used at sea as follows: In disaster to one's own ship, to get help. In disaster to another ship, to give help. For ship's business, for navigation, for the receipt of general news, for the receipt and dispatch of private messages."

London of the Future.  
If London continues to grow at the rate it has maintained during the past century, it is computed that there will be a population of 20,000,000 by the year 2000.

## Weekly Radio Test

1. What is meant by "harm-nated reception?"
2. Does a horn amplify?
3. What is a "free floating" speaker?
4. What does the flying broadcaster use for a ground?
5. Why does a long antenna bring in more radio energy?

(Answers to these questions will be found elsewhere in the Radio Section.)

(Copyright, 1927)

## HASHIMURA TOGO!

Melbourne Station Gets Rise Out of Quaint Character.  
A listener living in Hananomachi, Japan, not long ago sent the following letter to Station 3LO in Melbourne, Australia:

"I take liberty to announcing to you that I have ever picked up your broadcasting with my 5 tube Regenerative Neutridyne Circuit (which I built) Receiver or one with Loud Speaker. Since 24th September, 1926, and sufficiently made sure of the call sign, but to know it more exactly I require you kindly tell me about the following matters: 1. your wave length, 2. power, 3. day and time (by your broadcasting), 4. sort of broadcasting, 5. name of your transmitter. Besides to be bestowed your photograph or receipt I will esteem it a great honor. Allow me to subscribe myself. Your obliged and obt. servant."

London of the Future.  
If London continues to grow at the rate it has maintained during the past century, it is computed that there will be a population of 20,000,000 by the year 2000.

WJLB starts its week of broadcasts at 10 a. m. with the service from the First Church of Christ Scientist. The International Bible Students will be on the air at 6:30 p. m. and at 8 p. m. the service from the Church of the Nazarenes. Hotel ballroom at 9:45 p. m. The Hotel Dreyfus Orchestra will be on the air at 7 p. m. tomorrow. A Thanksgiving service will be broadcast at 8 p. m. Tuesday. Rev. G. Shultz, speaker, and S. D. A. mixed quartet. Wednesday the usual program will be given. At 11 a. m. on Thursday will be broadcast the Brown College football game direct from the Brown Stadium. WJLB studio program will be broadcast at 8:15 p. m. on Friday. Saturday the usual program will be heard.

WOOT starts broadcasting at 1:30 p. m. with a patriotic program. Col. Frank L. Barrows, department commander of the Sons of Union Veterans of the Civil War, and Christopher Carpenter, department commander of the Grand Army, will speak. Music will be furnished by the Epsworth Methodist Episcopal Church choir. Walter Traders' Revelers will be on the air at 8 p. m. tomorrow. Tuesday and Wednesday the usual programs will be heard.

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# RADIO LORE FOR NOVICE AND EXPERIENCED FAN

## Dramatist Tells How Audience Can Be Made to See Over Radio

Henry Fiske Carlton Says It Is Different Problem from Presenting Drama in Theatre or on Screen.—Each Actor Must Subtly Describe His Surroundings

By HENRY FISKE CARLTON.  
(Henry Fiske Carlton is a member of the English department of New York University and a graduate of Prof. Baker's Dramatic Workshop at Harvard. He wrote the play, "Up the Line," which was awarded the Harvard prize in 1925 and was produced on Broadway in November, 1926.)

How can you make an audience see over the radio?  
No, I am not talking about television. I am talking about radio drama. You can't? Well, if you want to be a radio dramatist and you can't make your listeners see as well as hear your play, you must stay on the radio and let the audience in the world can walk out of you as easily as the radio audience—a turn of the dial and you're O-U-T!

Radio listeners have not paid \$3.30 or \$4.40, or even \$5.55 for their seats and they won't stay on the radio to get their money's worth. They haven't had to fight subway jams and traffic tangles to reach crowded theatres; neither are they hesitant to leave for fear they might trample their neighbors' feet, nor is it necessary for them to go out with a half-spent evening on their hands.  
No, sir! Your radio audience is comfortably seated at home—in mansions on Fifth avenue; Euclid or Michigan avenues; apartments on Fulton, Boylston and Genesee streets; houses on up-State, Hoosier or Hawk-eye farms—with any of a dozen or more programs theirs for the turn of a dial. In radio you must compel attention, and you have only one sense—the ear—through which to do it. It is quite a different problem from presenting drama in a theatre or on the screen. How can you do it? You've got to make your audience see!

When Columbus stands on the deck of the Santa Maria and sees the moving light far away on the dark horizon—your listener must see it, too! If the Indians set fire to the stockade at Booneborough and Daniel Boone rallies his small band of defenders to quench the flames, every member of your audience must see the fire, and see Boone and his men as they stand fighting it. But how? The tricks that make your audience see are the special secrets of the radio dramatist.

To mention a few of his problems, I will point out that his characters must be clear and definite. Your listening audience must always know who is talking; you must distinguish each of your actors by a sharp contrast in their language and dialect, although you must use as little dialect as possible, for it is, as a rule, hard to follow. To make your listeners see vividly the characters who are talking, you must repeat their names often. Take, for example, an excerpt from "Paul Revere's Ride," which was heard recently:  
"Hancock: 'Hello, what's the matter out there? What's the matter?'  
Revere: 'That you, John Hancock?'  
Hancock: 'Yes, Paul Revere, what's the matter?'  
Revere: 'Matter enough, Hancock. The Red Coats are coming. Is Sam Adams in the house with you?'  
Hancock: 'He is right here with me. Oh, Sam—Sam Adams!'  
Adams: 'Yes, yes, I'm coming.'

No character in the radio drama must be allowed to speak more than one line or express more than a thought without identifying himself, or being identified by the other characters. Actors' voices are a boon to the radio dramatist, but it is not easy to find voices that are strikingly different and still natural and pleasant to listen to. The microphone—that autocat which unbends to no one—has a tendency to iron out the differences in voices and make them sound too much alike.

To make your audience see, it is necessary to make your characters describe what they see. In order to explain, I will quote just a line or two from "The Battle of New Orleans." Livingston, Aide to Gen. Jackson, is talking:  
Livingston: "The centre column is giving away—they are falling back!"  
Jackson: "Good! Ah, Livingston, that's fine."

Livingston: "But the left column is coming on—oh, sir, look at that! The right column is joining the centre—look at them! General Jackson, they are reforming—they are coming on!"  
Jackson: "That is really magnificent, Livingston. In the face of our fire—but they can't make it!"  
Livingston: "The left column is reaching our centre breastworks, sir."

Jackson: "Bring up the reserves to the left—come—"

Now you must make them see by noises which are used to illustrate the action, but here is another problem, for noises over the microphone are misleading. When we first began our "Great Moments in History," now one year old, we had no idea how to use the noises and less of an idea how to create them. The noise that comes out of the loud speaker is seldom a natural sound. Take a pistol shot or gun fire—do you recall the Lindbergh celebration at Washington? You heard the big guns in salute and, you know, the gun sounded like nothing so much as the click of a door latch. Likewise a pistol fired in the studio merely blasts the "mike" and sounds not a bit like a pistol. All of these problems, together with the

sound illusion of marching soldiers, running horses, the breaking down of doors, slapping, kissing (yes, even kissing) have to be worked out by the director, but even that is not enough, for your radio dramatist must let his audience know what noise he is hearing, or has heard, or is about to hear. Of course, he should not do it too badly. He cannot have his characters say, for example, in a love scene:  
He: "I am now going to kiss you."  
She: "Yes, dear, I am ready for the kiss."  
He: "There, I have kissed you."  
She: "Yes, dear, you have kissed me."

You needn't go that far. If the love scene has been properly written, there comes a point at which the kiss is the next logical step (if love, or love scenes are ever logical).

Better to illustrate my meaning, I will give you a short speech from the "Caballero's Way" heard recently in "Re-Told Tales":

Sanderson: "Hands up—hands up, I say. Don't move or I'll shoot. Halt! Halt!"

Obviously the noises are shots. Sanderson has said he would shoot if the person he is covering moves. Then he calls "Halt" sharply. Evidently, the person has moved—another "Halt!"—then he shoots. That is clear. You have told your listeners what noise to expect—they hear it—and, what is more, they see it.

This is action on the radio—and action, heard and seen, compels attention. And speaking of action, strange as it may seem, it is even more necessary in radio drama than it is on the stage. A theatre audience may listen to people talking if they can see them, watch their little gestures and movements and the expressions on their faces but, over the radio, mere talk soon pall. Something must happen; it doesn't always have to be external. Two persons in a verbal fight may compel interest—a clash of wits may create action—but there must be a clash, or the promise of one, or a climax.

Now, you may ask what kind of physical action can be put on in a radio performance.

Any kind. The more the better. Acting find a slap in the face to a battle, and by that I mean a real battle. The Minute Men making their stand on Lexington Green against the oncoming Red Coats. Roosevelt and his Rough Riders charging up San Juan Hill. By preparing your audience, giving your order to building up the situation of soldiers waiting to go, you can bring on a battle by letting Roosevelt cry—"Charge, come on, boys, follow me—into the valley—up the hill. Come on!" The movie director's "Charge!" is heavy life fire (ah, but that is his secret. I'm not going to tell you how he does that) and your listener sees Teddy go up San Juan Hill.

The whole problem is fascinating. Far more than in any other medium, the radio dramatist has the whole world for his stage. He is not held down by what the scene painter can do. He can move his characters without changing a couple of tons of scenery. He can play in the dark, in fact, anywhere, so long as he is clear, so long as he is interesting and so long as he makes his audience see what is going on.

Sponge Is Really a Skeleton.  
The sponge as you see it is really the skeleton of a real animal. When a sponge is brought up out of the sea it bears no resemblance to the sponge of the bath. It is then covered with an outer skin, or membrane, in which the pores appear or disappear at the animal's will. The canals and cavities beneath the outer skin—these, of course, are the holes in your sponge as bought—are lined throughout with a gray-brown, sticky, glutinous substance of the consistency of treacle. This is "sarcode"—the fishermen call it the "milk of the sponge"—and is live matter.

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## "Old Fogey's" VOOZE ON BOOZE

Brought both praise and censure aplenty. He has partly promised to sing.

NEXT WEDNESDAY EVENING  
AT 8 O'CLOCK OVER WLSI  
275 METERS

Will he lose his nerve? Well, we shall see! Will you be with us? We hope so!

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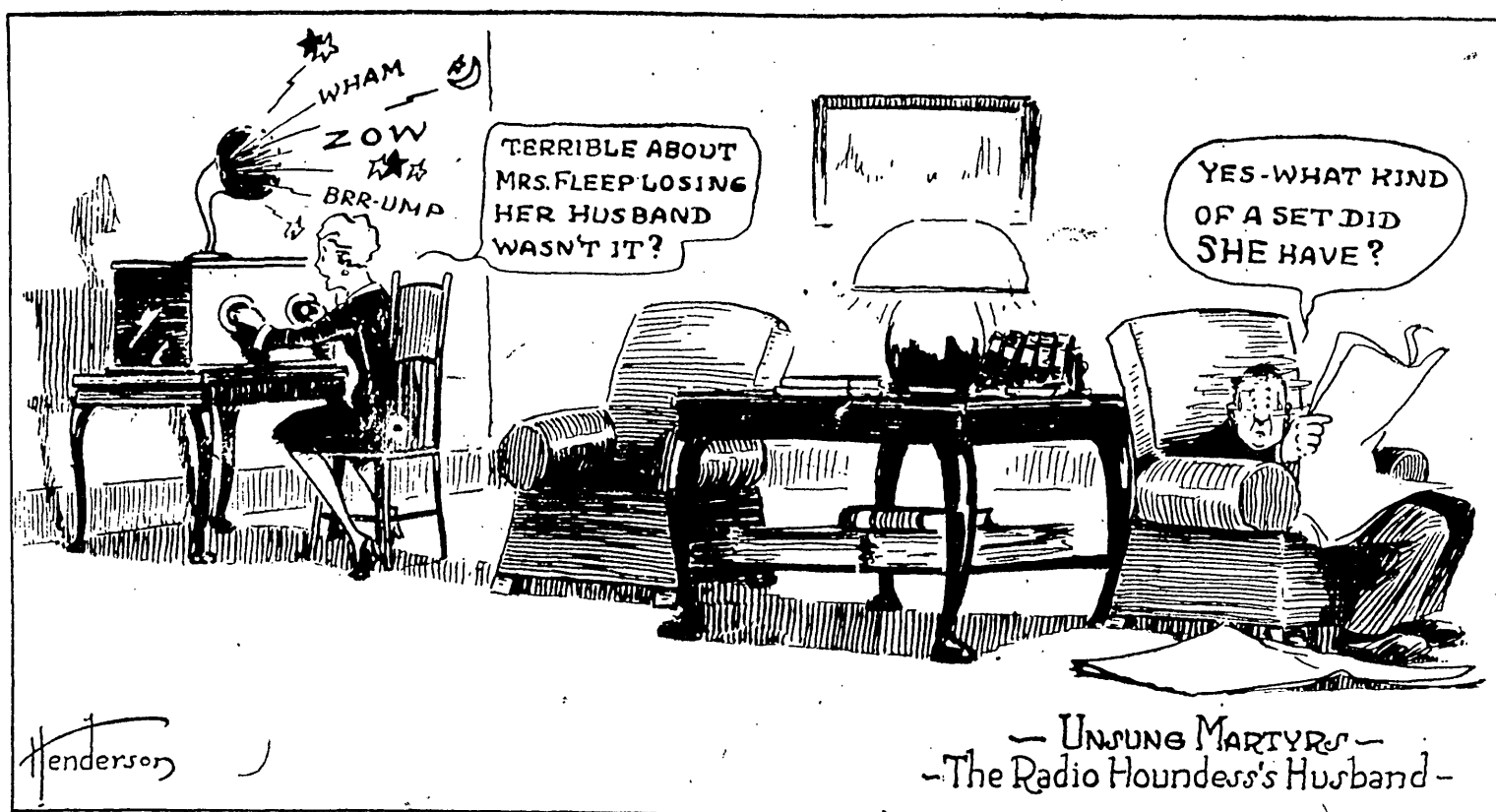
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"Old Fogey"

## SHORT CIRCUITS



—UNJUNG MARTYR—  
—The Radio Hound's Husband—

## With Providence Radio Hams

Amateur operators of Providence are rejoicing at the victory won by their fellows in a test case in Kentucky. The case involved the taxation by a municipality of amateur transmitting stations.

An amateur at Wilmore, Ky., backed by the American Radio Relay League, sought an injunction to set aside a local ordinance regulating stations and imposing a yearly license fee of \$100.

District Judge A. M. J. Cochran, in granting the injunction, pointed out that radio communication was interstate commerce and therefore, subject only to Federal regulation. Judge Cochran asserted that inasmuch as the ordinance imposed the tax on the "business of broadcasting," and not on the property of the radio operator, the ordinance was void, as radio communication was under Federal jurisdiction.

"Judge Cochran's ruling was absolutely right," said Judge Eugene O. Sykes, lawyer member of the Federal Radio Commission. "Congress has provided adequate legislation covering the field and the State or municipality has no jurisdiction in the field of broadcasting."

vided adequate legislation covering the field and the State or municipality has no jurisdiction in the field of broadcasting."

Congress has exclusive regulation of radio communication as it is of such a nature as to permit uniform control throughout the United States. The American Radio Relay League expects the Kentucky decision to set a precedent in the handling of similar situations throughout the country.

The following are extracts from letters recently received by the British Broadcasting Company from listeners:

"We know we are not the cause of interference as we have a private earth."  
"Please send me a copy of the Wireless Act as I have a wireless installed and should like all inflammation."  
"Oppras is all right for eyebrows."  
"Please come and take away a Frenchman's two-valve set what has been upsetting all near the Five Bells Public House for four months."

The 1927-28 season has gone into "high," as far as Providence amateurs are concerned. The summer months have been spent overhauling transmitters and receivers and now they are functioning more efficiently than ever before. Indications are, say Providence

## Weekly Radio Test

1. What is meant by "harm-nated reception?"
2. Does a horn amplify?
3. What is a "free floating" speaker?
4. What does the flying broadcast use for a ground?
5. Why does a long antenna bring in more radio energy? (Answers to these questions will be found elsewhere in the Radio Section.)

(Copyright, 1927)

amateurs, that this will be the most interesting season on record, with new transmission and reception achievements hung up and many new devices put into play.

Here's one definition of wireless: "Wireless telegraphy is used at sea as follows: In disaster to one's own ship to get help, in disaster to another ship to give help, for ship's business, for navigation, for the receipt of general news, for the receipt and dispatch of private messages."

## HASHIMURA TOGO?

Melbourne Station Gets Rise Out of Quaint Character.  
A listener living in Hananomachi, Japan, not long ago sent the following letter to Station 3LO in Melbourne, Australia:

"I take liberty to announcing to you that I have ever picked up your broadcasting with my 5 tube Regenerative Neutridyne Circuit (which I built) Receiver or one with Loud Speaker. Since 24th September, 1926, and sufficiently made sure of the call sign, but to know it more exactly I require would you kindly tell me about the following matters: 1 your wave length, 2 powers, 3 day and time (by your broadcasting), 4 sort of broadcasting, 5 name of your transmitter. Besides to be bestowed your photograph or receipt I will esteem it a great honor. Allowed me to subscribe myself. Your obliged and obt. servant."

London of the Future.  
If London continues to grow at the rate it has maintained during the past century, it is computed that there will be a population of 20,000,000 by the year 2000.

## RADIO PROGRAMS

WJAR begins its week of programs at 11:55 a. m. with the Capitol Theatre symphony concert featuring Mary Lewis, soprano. At 6:30 p. m. the American Legion Band, Weymouth Post, 79, will be broadcast, at 7:20 p. m. the Capitol Theatre program, and at 9 p. m. a talk by David Lawrence on "Our Government."

The Robert W. Powers's Orchestra will be broadcast at 9:15 p. m. The A. & P. Gypsies will be on the air at 8:30 p. m. tomorrow. At 8:30 p. m. Tuesday will be heard a safety talk sponsored by the Providence Safety Council. At 8 p. m. on Wednesday National Musicalities will be broadcast. The station will broadcast a special Thanksgiving program at 8 p. m. Thursday. Samuel Holstead, Scotch tenor, will be on the air at 8:30 p. m. on Friday. "RBCA Hour" presenting Walter Damrosch conducting the New York Symphony Orchestra, will be broadcast at 8 p. m. on Saturday.

WEAN starts broadcasting at 11 a. m. with the service from Mathewson Street. Madeline Students will be on the air at 3 p. m., 4 p. m., 9 p. m., 9:30 p. m. and 10 p. m. An organ recital will be broadcast at 6:30 and the Asia Serenaders at 7:30 p. m. At 8 p. m. there will be broadcast of the Grand Orchestra of the Women's Musicians' Association, tomorrow. The usual programs will be heard on Tuesday and Wednesday. Thursday at 10:30 a. m. will be broadcast from the Cathedral Church of St. Paul a Thanksgiving service and at 5 p. m. a Thanksgiving concert. The German Male Chorus will be on the air at 8 p. m. on Friday. Boston College vs. Holy Cross football game will be broadcast at 1:45 p. m. Saturday from the Braves Field.

WLSI starts its week of broadcasts at 10 a. m. with the service from the First Church of Christ Scientist. The International Bible Students will be on the air at 6:30 p. m. and at 8 p. m. the service from the Church of the Seventh Day Adventist. The testimonial banquet for former Congressman O'Connell will be broadcast direct from the Narragansett Hotel ballroom at 9:45 p. m. The Hotel Dreyfus Orchestra will be on the air at 7 p. m. tomorrow. A Thanksgiving service will be broadcast at 8 p. m. Tuesday. Rev. G. Shultz, speaker, and S. D. Ayer, organist, will be on the air at 8 p. m. on Thursday. Wednesday the usual program will be given. At 11 a. m. on Thursday will be broadcast the Brown-Colgate football game direct from the Brown Stadium. WLSI studio program will be broadcast at 8:15 p. m. on Friday. Saturday the usual program will be heard.

WCOT starts broadcasting at 1:30 p. m. with a patriotic program. Col. Frank L. Barrows, department commander of the Sons of Union Veterans of the Civil War, and Christopher Carpenter, department commander of the Grand Army, will speak. Music will be furnished by the Epworth Methodist Episcopal Church choir. Walter Tradar's Revellers will be on the air at 8 p. m. tomorrow. Tuesday and Wednesday the usual programs will be heard.

heard. Thursday at 2:30 p. m. will be broadcast a studio program and specialties. The usual programs will be observed the remaining days of the week.

WJAR-OUTLET COMPANY—375  
374.8 Meters—800 Kilocycles—500 Watts.  
11:55 a. m.—Capitol Theatre symphony concert, featuring Mary Lewis, soprano.  
6:30 p. m.—Weather report.  
6:30 p. m.—Weymouth Post, No. 79, American Legion Band.  
9:00 p. m.—Capitol Theatre program.  
9:00 p. m.—"Our Government" by David Lawrence, editor of the United States Daily.

9:15 p. m.—Correct time.  
9:15 p. m.—Robert W. Powers's orchestra.  
1:05 p. m.—Studio program.  
1:30 p. m.—Weather report.  
1:35 p. m.—Continuation of studio program.

6:45 p. m.—Earl Shean and his orchestra.  
7:30 p. m.—Joint recital by Clara Sabini Foster, soprano, and George Gulski, pianist.  
8:00 p. m.—Hawaiian Island Four.  
8:30 p. m.—The Rhode Island Historian.

9:30 p. m.—A & P Gypsies.  
9:30 p. m.—Continuation of family party.  
10:00 a. m.—Housewives' Radio Exchange, a department conducted by Mrs. Wood on matters of household interest. Questions submitted will be answered by radio.

11:00 a. m.—Radio household institute.  
1:05 p. m.—Studio program.  
1:30 p. m.—Weather report.  
1:35 p. m.—Continuation of studio program.

7:30 p. m.—Honolulu Quintet, under the direction of Artie McKenzie.  
8:00 p. m.—National musicalities.  
8:05 p. m.—Recital by John Sidney Dexter King, baritone; George R. Noble, pianist.  
8:30 p. m.—Edward Keenan, tenor soloist.  
8:30 p. m.—Safety talk, sponsored by the Providence Safety Council.

8:35 p. m.—Neal Knapp and Helen Gallagher.  
9:00 p. m.—Correct time.  
9:00 p. m.—Eveready Hour.  
10:00 p. m.—Auction bridge game.  
10:30 p. m.—Vaudeville artists.

10:00 a. m.—Housewives' Radio Exchange, a department conducted by Mrs. Wood on matters of household interest. Questions submitted will be answered by radio.  
11:00 a. m.—Betty Crocker, Home Service talk.  
1:05 p. m.—Studio program.  
1:30 p. m.—Weather report.  
1:35 p. m.—Continuation of studio program.

7:25 p. m.—Weather report.  
7:30 p. m.—"The Soncynans," featuring Van and Schenck.  
8:30 p. m.—Franklin Smith and Clarence Carson, violinists; Hazel White, soprano soloist.  
9:00 p. m.—Correct time.  
9:00 p. m.—Charles Morrison and John Madigan.  
9:30 p. m.—Goodrich Orchestra and quartet.

10:05 p. m.—Thanksgiving program.  
10:30 p. m.—Pollyanna's Thanksgiving message.  
7:25 p. m.—Weather report.  
7:30 p. m.—Howard Comfort Hour.  
8:30 p. m.—National musicalities.  
9:00 p. m.—Correct time.  
9:00 p. m.—Cliffcut Club Eskimos.

10:00 a. m.—Housewives' Radio Exchange, a department conducted by Mrs. Wood on matters of household interest. Questions submitted will be answered by radio.  
11:00 a. m.—Betty Crocker, home service talk.

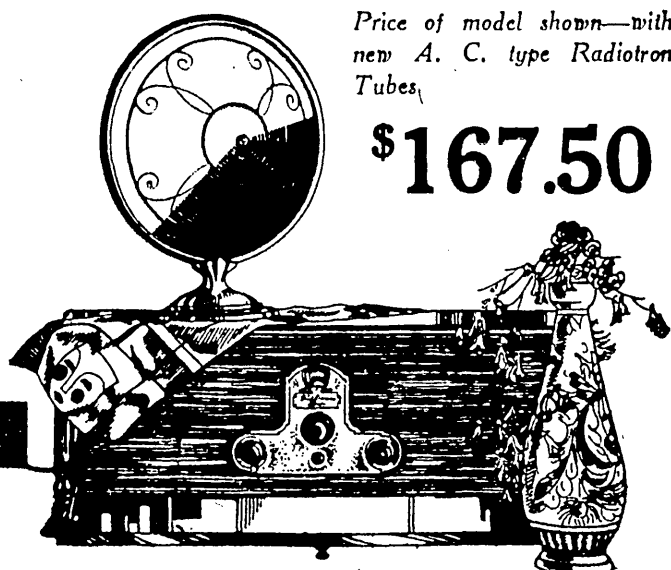
Continued on Page Eight.

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This Radio uses no batteries—no liquids—no charging devices—operates direct from your electric-light socket through new A. C. Tubes 226 and 227

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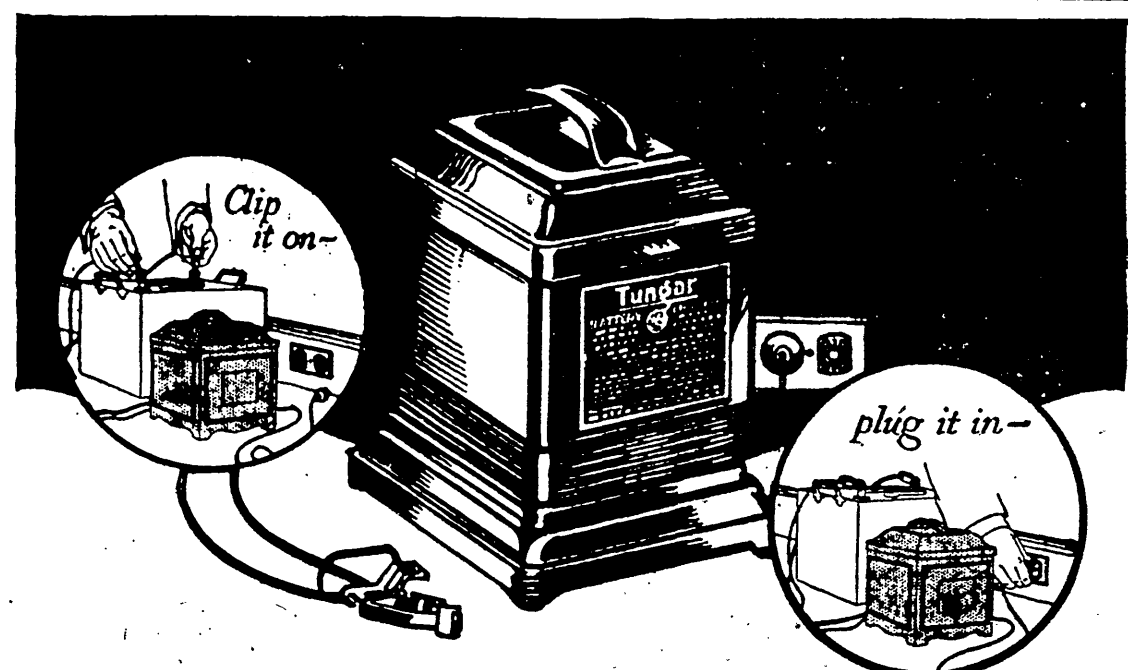
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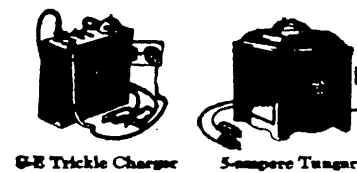
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Tungar charges no radio interference. It cannot blow out tubes.  
An overnight charge costs about a dime.  
It is a G-E product developed in the Research Laboratories of General Electric.

The 1- or 5-ampere Tungars charge 2-, 4- and 6-volt "A" batteries in series; and auto batteries, too. No extra attachments needed.

G-E Tungars (the General Electric Battery Chargers) are giving dependable, trouble-free, economical service to more than a million radio owners.

As these Tungar owners switch off their sets at night, they just turn on the Tungar.... in the morning their radio batteries are pepped up and ready for active duty.

Tungar is waiting to give you the same convenience—to give longer life to your batteries. It is a product made and guaranteed by General Electric.

Your dealer can help you. Ask him to show you the popular 2-ampere Tungar that gives both trickle and boost charging rates. It charges both "A" and "B" radio batteries, and auto batteries, too.



Tungar is a registered trademark—its found only on the foreman. Look for it on the name plate.

# GENERAL ELECTRIC

G-E Merchandise Distributor for this territory

The Union Electric Supply Co.

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"Rejuvenating" Compound  
Found to Contain Mostly Salts

Despite Advertised Claims, It Has  
Absolutely No Effect Upon  
Cells, Better Business Bureau  
Learns.—Some Battery Mixtures  
Said to Be Positively Ruinous

By D. J. MacDONALD,  
(Merchandise Manager, Better Business  
Bureau of Providence.)

Do you remember the "Doctor" with  
long hair, 10-gallon Stetson and flow-  
ing coat tails that visited your town  
periodically, standing at the street cor-  
ner under the dancing light of the  
kerosene torch that was always part of  
his equipment?

Do you remember how you listened  
in wonder to the eloquence and seem-  
ing knowledge of this gentleman as he  
offered his famous elixir which you  
were privileged to try "at his risk,"  
and which he would guarantee to cure  
anything from fallen arches to watery  
eyes? And then you suddenly found  
yourself walking home with your won-  
derful purchase, perhaps to find later  
that you had paid dearly for a bottle of  
colored water.

A recent incident in battery mer-  
chandising seems to indicate that the  
old "Doctor" has shorn his locks, dis-  
carded his Stetson and frock coat, but  
not his habits, to play a small part in  
the history of storage batteries.

Since 1887, the storage battery field

has experienced periodic epidemics of  
curative explorations and it has re-  
cently undergone of these. A so-called  
battery life-saver, for which remark-  
able results are promised, has recently  
come to attention of this Bureau. It  
is claimed that the introduction of  
this compound into a lead-plate stor-  
age battery, will correct the majority  
of its ills and troubles to which it may  
be heir. It is even claimed that its  
use will allow a discharged battery to  
be fully charged in from 10 to 20 min-  
utes, and that it will double the life  
of the battery.

An interested reader of advertising  
purchased a case of this compound and  
received with it a quantity of sales lit-  
erature. From this literature was  
learned that this product would pre-  
vent about every known ailment that  
a storage battery is subject to, such as  
sulphation, corrosion and shedding of  
plates and soft positives.

Besides these wonderful characteris-  
tics of this product, it was also claimed  
that the life of the battery would be  
doubled. It would not overcharge a  
battery and would always keep it fully  
charged. These are but a few of the  
many claims made.

To quote the findings submitted by  
the engineer who conducted tests on  
this product, would take too much  
time and space. Briefly, the report  
contradicted every claim made for it  
and stated further that "additions of  
salt mixtures to the lead cell electro-  
lyte accomplished no useful effect  
whatsoever." Quite a contrast.

"Dope" solutions are by no means  
new, and from time to time are im-  
posed upon the public by those who  
offer a remedy for all battery troubles,  
with pastes, fillers, solutions and other  
compounds. It has been proven that  
several of these "dope" solutions indi-  
cate that while they give the battery  
an apparently momentary "kick," their  
effectiveness contains ingredients which  
are absolutely ruinous.

The tendency of the present age is  
to look for "short cuts," but there are  
no "short cuts" to battery health and  
battery efficiency—any more than there  
are short cuts to human health and  
long life. Just as many chronic in-  
valids are exploited by vendors of  
worthless medical panaceas, so battery

owners are periodically exploited by  
vendors of "cure alls" for battery ills.  
Just as these medical panaceas fail as  
an effective substitute for rational hab-  
its of living so do "secret" compounds  
fail in the same relation with storage  
batteries.

Let your service station diagnose and  
prescribe for your battery ills. Give  
your battery a chance to give you real  
service. Don't dose it. You can pro-  
long the life of your battery by giving  
it intelligent, systematic care. There  
is no substitute!

### STILL GOOD BUYER

Canada Purchases \$80,428 in Receivers  
During Month

That Canada is still a good customer  
of the United States radio manufac-  
turers is shown by the latest report of  
exports of radio apparatus issued by  
the Department of Commerce. During  
the month of September she purchased  
\$80,428 worth of receiving sets, with  
Australia second with \$34,355 and Ar-  
gentina third with \$25,417. Argentina  
received shipments of tubes amounting  
to \$22,610 and Australia \$20,611.

The largest quantity of receiving set  
components was sent to Canada, the  
total being \$63,824. Argentina and  
Australia were second and third in this  
classification with \$40,978 and \$30,132,  
respectively. The value of receiving set  
accessories shipped to Canada ex-  
ceeded the amount paid for receiving  
sets, the total being \$107,282. Aus-  
tralia purchased \$44,381 worth.

The total value of receiving sets  
shipped was \$183,402; tubes, \$79,467;  
receiving set components, \$202,010 and  
receiving set accessories, \$219,387.

### ANSWERS TO RADIO TEST

1. Reception obtained when the  
speaker unit matches the set.  
2. No. It merely enables the re-  
ceiving unit to get a better "grip"  
on the air.  
3. One with a periphery, or edge,  
that is free to adjust itself to condi-  
tions.  
4. A counterpoise. This also is used  
in broadcasting from moving trains.  
5. Because it has a better grip on  
the electro-magnetic waves.

## RADIO PROGRAMS

Continued from Page 7

1:05 p. m.—Studio program.  
1:30 p. m.—Weather report.  
1:55 p. m.—Continuation of studio pro-  
gram.  
2:00 p. m.—Weather report.  
2:05 p. m.—Carl A. Brown and his Manor  
Orchestra.  
2:30 p. m.—Samuel Holstead, Scotch tenor.  
2:35 p. m.—Historical talk, sponsored by  
the Rhode Island Society, Sons of  
the American Revolution. Subject,  
"Silas Talbot."  
2:40 p. m.—Correct time.  
2:45 p. m.—Whitall's Anglo-Persians.  
2:50 p. m.—Automobile Club of Rhode Is-  
land talk.

Today.  
1:05 p. m.—Al Williams and his orchestra.  
1:30 p. m.—Weather report.  
1:55 p. m.—Continuation of studio pro-  
gram.  
2:00 p. m.—Weather report.  
2:05 p. m.—Carl A. Brown and his Manor  
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2:40 p. m.—Correct time.  
2:45 p. m.—Whitall's Anglo-Persians.  
2:50 p. m.—Automobile Club of Rhode Is-  
land talk.

10:00 p. m.—Columbia chain program.

10:00 a. m.—Home service radio chat.  
11:55 a. m.—Time signals.  
12:00 p. m.—Asia Serenaders.  
12:30 p. m.—Weather report.  
12:35 p. m.—Continuation of musical pro-  
gram.  
1:45 p. m.—Broadcast from Braves Field,  
Boston College vs. Holy Cross foot-  
ball game.  
6:30 p. m.—Boston dinner dance.  
7:00 p. m.—Jacques Renard and his Coco-  
nut Grove Orchestra.  
7:30 p. m.—Correct time.  
8:00 p. m.—Program arranged by Willis  
Amusement agency.  
8:30 p. m.—Musical program.  
9:00 p. m.—WLSI-LINCOLN STUDIOS, INC., 275.  
Today.

10:00 a. m.—Service from First Church of  
Christ, Scientist.  
10:30 p. m.—International Bible students'  
program.  
8:00 p. m.—Service from Church of the  
Seventh Day Adventists.  
9:45 p. m.—Testimonial banquet for former  
Congressman O'Connell, broadcast di-  
rect from the Narragansett Hotel ball-  
room.

Monday.  
7:00 p. m.—Hotel Dreyfus Orchestra.  
8:30 p. m.—Guernsey Plaza Orchestra.  
8:30 p. m.—Thanksgiving services, Rev. G.  
Shultz, speaker, and S. D. A. mixed  
quartet.  
10:00 p. m.—Hotel Baltimore Orchestra.  
Tuesday.  
8:00 p. m.—Musical program.  
9:00 p. m.—Biltmore Market hour.  
11:00 a. m.—Brown vs. Colgate football  
game, broadcast direct from Brown  
Stadium.

Friday.  
10:00 a. m.—Studio program.  
6:30 p. m.—Mother Hubbard.  
7:00 p. m.—International Bible students'  
program.  
8:00 p. m.—Mrs. Marian Tetreau, astrolo-  
gist.  
9:15 p. m.—Arcadia Dance Orchestra.  
9:30 p. m.—WLSI studio program.

Saturday.  
7:00 p. m.—Hotel Dreyfus Orchestra.  
7:00 p. m.—Hotel Dreyfus Dance Orches-  
tra.  
10:00 p. m.—Hotel Baltimore Orchestra.

10:00 a. m.—Studio program.  
6:30 p. m.—Mother Hubbard.  
7:00 p. m.—International Bible students'  
program.  
8:00 p. m.—Mrs. Marian Tetreau, astrolo-  
gist.  
9:15 p. m.—Arcadia Dance Orchestra.  
9:30 p. m.—WLSI studio program.

6:00 p. m.—Jimmy Walsh and his orches-  
tra.  
7:05 p. m.—"Uncle Red" auspices Provi-  
dence Safety Council.  
7:30 p. m.—Correct time.  
7:31 p. m.—Feature talk.  
8:00 p. m.—The German Male Chorus.  
8:30 p. m.—Musical program.  
9:00 p. m.—Columbia chain program.  
10:00 p. m.—Columbia chain program.

Saturday.  
11:55 a. m.—Time signals.  
12:00 p. m.—Asia Serenaders.  
12:30 p. m.—Weather report.  
12:35 p. m.—Continuation of musical pro-  
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10:00 p. m.—Hotel Baltimore Orchestra.  
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11:00 a. m.—Brown vs. Colgate football  
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6:30 p. m.—Mother Hubbard.  
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8:00 p. m.—Mrs. Marian Tetreau, astrolo-  
gist.  
9:15 p. m.—Arcadia Dance Orchestra.  
9:30 p. m.—WLSI studio program.

Saturday.  
7:00 p. m.—Hotel Dreyfus Orchestra.  
7:00 p. m.—Hotel Dreyfus Dance Orches-  
tra.  
10:00 p. m.—Hotel Baltimore Orchestra.

WCOT-CONN'S OLYMPIA-225  
Today.  
1:30 p. m.—Col. Frank L. Barrows, De-  
partment Commander, S. U. V. C. W.  
Christopher Carpenter, Department  
Commander, Brig. Gen.  
William F. Flannigan; Rev. Alton G.  
Verrill, department patriotic instruc-  
tor. Musical program, Mrs. Mattie  
Carnegie, pianist, and the Epworth  
Methodist Episcopal Church choir.  
Chorus, "America." Lincoln's Getys-  
burg Address. Rev. Alfred Wood;  
chorus, "Columbia the Gem of the  
Ocean." A. R. R. "The Trumpet-  
er." Mr. Making; chorus, "Camping on  
the Old Camp Ground;" violin solo,  
by May Gumpatrick, "Face to Face";  
chorus, "Tramp, Tramp the Boys Are  
Marching" solo and chorus, "Just Re-  
fore the Battle Mother;" solo, "He  
Sleeps Beneath the Old Oak Tree."  
Mr. Clement; chorus, "Star Spangled  
Banner" and taps.

Monday.  
2:30 p. m.—Studio program.  
7:30 p. m.—Roland Jamison and George  
Peterson, songs and stories.  
8:00 p. m.—Walter Trudair's revelers.  
8:30 p. m.—Ernest Roddy, soloist; Miss  
Gladys Buck, pianist.  
Tuesday.  
2:30 p. m.—Studio program.  
7:30 p. m.—Musical program.  
8:00 p. m.—Joe Hogan's melody boys.  
Wednesday.  
2:30 p. m.—Studio program.  
7:30 p. m.—Musical program.  
8:00 p. m.—Peter Pavali, soloist.  
Thursday.  
2:30 p. m.—Studio program and special-  
ties.  
Friday.  
2:30 p. m.—Studio program.  
7:30 p. m.—Musical program.  
8:15 p. m.—Sterling dance orchestra,  
Conn's Olympia ballroom.

Saturday.  
2:30 p. m.—Studio program.  
7:30 p. m.—Musical program.

OUT OF TOWN STATIONS  
To-Day

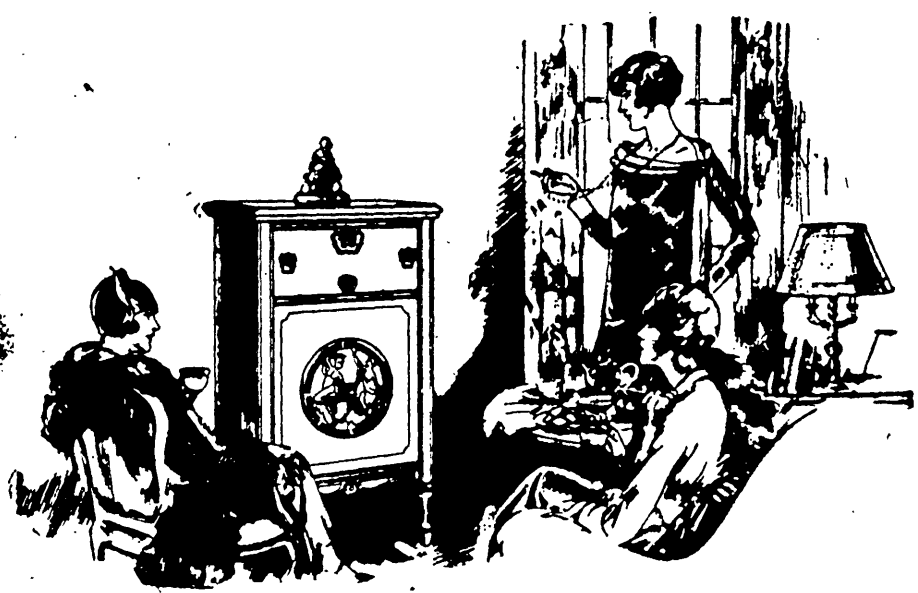
KDKA-PITTSBURGH-318  
10:45 a. m.—Correct time.  
11:00 a. m.—Church service.  
2:00 p. m.—Roxey and his gang.  
4:00 p. m.—Organ recital.  
4:45 p. m.—Correct time.

4:45 p. m.—Service from the Shady-  
side Presbyterian Church.  
6:00 p. m.—Symphony orchestra.  
7:00 p. m.—Service from Calvary Episcopal  
Church.  
8:15 p. m.—Miller's radio hour.  
9:15 p. m.—Concert.  
10:15 p. m.—Musical program.  
WABC-NEW YORK-528  
10:50 a. m.—Service from West End Pres-  
byterian Church.  
7:00 p. m.—Syncope hour.  
8:00 p. m.—Service from Fifth Avenue  
Presbyterian Church.  
WBAL-BALTIMORE-286  
7:30 p. m.—Concert orchestra.  
8:30 p. m.—Musical exposition.  
WBSO-BARSON PARK-284  
12:00 p. m.—Midnight ministry.

WBZ-SPRINGFIELD-333  
11:00 a. m.—Service from Trinity Church.  
2:00 p. m.—Roxey and his gang.  
3:00 p. m.—"Ten Years After," by Henry  
C. Ryan.  
5:30 p. m.—Radio vespers.  
6:30 p. m.—Musical program.  
7:00 p. m.—Blue and gold hour.  
7:45 p. m.—News flashes.  
7:50 p. m.—Sterling ensemble.  
8:15 p. m.—Miller's radio hour.  
8:15 p. m.—Musical program.  
10:00 p. m.—Correct time.  
10:05 p. m.—News flashes.  
10:05 p. m.—Musical program.

WBRC-NEW HAVEN-283  
11:00 a. m.—Service from the Church of  
the Redeemer.  
3:30 p. m.—Chinatown mission program.  
7:00 p. m.—Sterling ensemble.  
WEAF-NEW YORK-482  
11:55 a. m.—Capitol Theatre symphony con-  
cert.  
2:00 p. m.—Interdenominational church  
service under the direction of the  
Continued on Page Nine.

Marshall & Co.  
Authorized Radiola Service  
Where The KVOZ The Neutrodyne  
R-A-D-I-O Exclusively  
94 OPP NORRANSSETT HOTEL



## STEWART-WARNER Matched-Unit Radio

HAPPY is the hostess, when  
STEWART-WARNER Radio  
entertains. No matter where the clock  
hands point, by the turn of a single dial  
she can present some wonderful broad-  
cast feature for the enjoyment of her guests.

As stay-at-homes, women especially  
realize that every hour of the day...  
morning, noon and night... a good, modern  
radio brings an endless suc-  
cession of features, unequalled in  
variety of appeal.

It's the most interesting and  
inexpensive form of entertain-  
ment you can buy. Why be-  
without it longer? When  
marvelous reception can be  
obtained so simply... so magi-  
cally... with STEWART-

Model 520 (Illustrated). Console  
of beautiful walnut and walnut  
veneer. Six tubes. Single dial con-  
trol. Built-in Reproducer. Priced  
without accessories.



\$125.00

WARNER Matched-Unit Radio you  
need not delay.

Here's a radio that you can be certain  
is selective, has excellent tone, range and  
volume. STEWART-WARNER is a  
big, reliable institution, for 20 years a  
leader. Today, more than 17 million  
users of its products recognize the name  
"STEWART-WARNER" as a trade-  
mark of satisfaction... the  
"Brand to Demand."

See, hear, test our won-  
derful, new models at your  
STEWART-WARNER  
Blue Ribbon Dealer's. Their  
performance, tone, beauty and  
moderate price will give you  
a new conception of radio  
values!

Stewart-Warner table cabinets and  
console sets range from \$30.00  
to \$255.00. Reproducers, \$17.50 to \$25.00. There is a model  
to suit your taste and your purse.

Stewart-Warner Radio Distributor

110 Broadway

Providence, R. I.

Gaspée 0843

the  
House of  
Dependable  
Values

House of  
Meiklejohn

297 Weybosset St., Providence  
300 Main St., Woonsocket

Authorized  
Stewart-Warner  
Blue Ribbon  
Dealer

BUY YOUR STEWART-WARNER  
MATCHED-UNIT-RADIO AT THE

Scattergood CO.

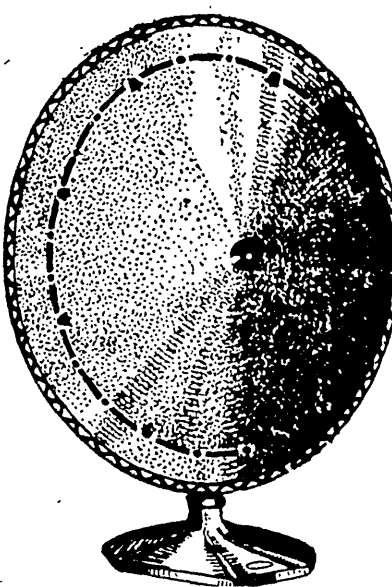
For 40 years the leading Credit Furniture House in Providence

210 WEYBOSSET STREET  
CONVENIENT TERMS ARRANGED

Charge Patrons  
May Buy Now  
and  
Pay in January

## The Outlet Company

Join the Crowds Who Are Taking Advantage of This  
Radio Value and Have One in Your Home for Thanksgiving  
The New 7 TUBE—Shielded—Single Dial



"FLEETWOOD"  
NEUTRODYNE

\$79.50  
Nothing  
Else  
to Buy

COMPLETE

The Year's Sensation

Licensed under patents of Radio Corpo-  
ration of America—Hazelton Neutro-  
dyne Corporation—Latour—General  
Electric—Westinghouse Co.'s.

\$2 Weekly

After 1st Payment

What The Name "FLEETWOOD" Stands  
For In The Radio World!

—The name Fleetwood stands for precision and  
performance.

—It stands for finest radio products. It is a prom-  
ise of many joys and no worries.

—This set is made in a factory that occupies 90,000  
feet of floor space. Here they have been making  
radio and telephone apparatus for over 30 years.  
Thousands of the sets made in this factory are  
giving excellent service throughout the United  
States.

—And this year in particular—they will be fore-  
most because of the tremendous demand for the  
added power afforded by 7 tube Neutrodyne sets.

7 Tubes! Shielded! Single Dial!  
(Illuminated)

—Last year we sold many hundreds of 5  
Tube Three Dial Sets. The set we offer  
this year is not a 5 tube set nor even a 6  
tube set, but a powerful 7 tube Shielded,  
Single Dial Neutrodyne Set, much larger  
in size, and is as far ahead of the average  
6 tube set as the latter is conceded to be  
ahead of a 5 tube set.

—7 Tubes Mean Added Power. Shielded  
means elimination of noises caused by in-  
ternal coupling between stages—and Single  
Dial means simplicity and conven-  
ience.

High Quality Accessories You  
Get with This Set for

Only \$79.50 Complete

- 1 Latest 7-tube Fleetwood Neutrodyne Set
- 1 R. F. I. Large Cone Speaker
- 7 Genuine Cunningham CX30r A Tubes
- 3 45-volt B Batteries
- 1 Westinghouse Large Rubber Cased Storage  
Battery
- 7 Complete Aerial Equipment

Our Regular Price for This Outfit  
Would Be \$145!

Entire outfit guaranteed by the manufacturers  
and by the Outlet Company.

Electrified with PHILCO-AB Socket Power

Operates  
From  
House  
Current

\$129

COMPLETE  
In this highly figured  
Walnut finish  
Console Cabinet

Everyone Has Heard of the  
Philco Socket Power

The switch on the Fleetwood radio set controls everything. It  
is as easy as turning on your electric light. This Philco Socket  
Power alone sells at \$59.50.

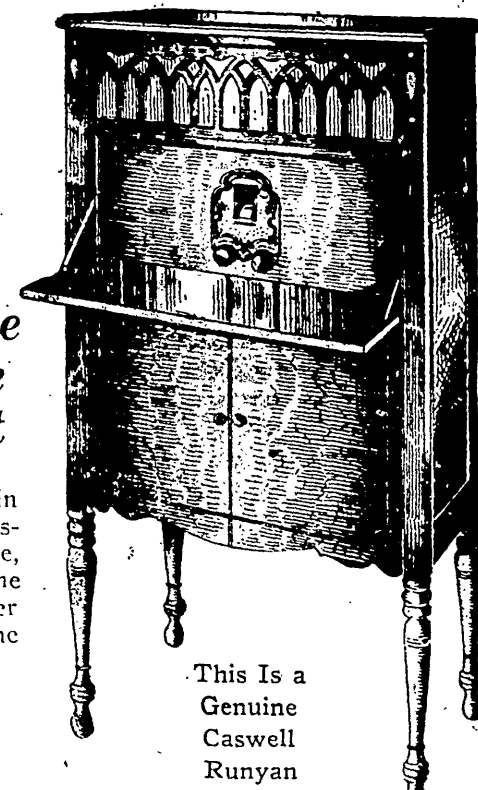
—When you buy one of these complete outfits at \$129 you  
are paying only \$49.50 more for the table model set and you  
receive a \$46 cabinet, a \$59.50 Philco instead of the battery  
equipment and you receive also a \$4.50 Power Tube instead of  
the regular CX30rA Cunningham Tube.

There Are More Philco Socket Powers in Use Than Any  
Other Single Type of Socket Power—Over 500,000 of  
Them Were Placed in Use in a Single Year.

If Sold at the Regular Price  
We Would Have to Charge  
You \$225 For This Outfit

Here is a superb, high priced outfit brought within  
your reach. The Outlet Company has made it pos-  
sible for you to have this Fleetwood Neutrodyne,  
equipped with Philco Socket Power, in a genuine  
Caswell Runyan Cabinet with built-in speaker  
(built to sell for \$46 alone), Caswell Runyan is one  
of America's finest cabinet plants.

\$3.50 Weekly  
After 1st Payment



This Is a  
Genuine  
Caswell  
Runyan  
Cabinet



## NUMBERING WAVE LENGTHS FAVORED

Caldwell Says System Would Be Help to Listeners

Proposal Made by National Electric Manufacturers' Association. Plan Might Result in Standardization of All Receiving Set Calibrations.

By the Associated Press.

Congress H. Caldwell, of the Federal Radio Commission, has proposed that the numbering of radio broadcast channels be changed so that the public will be able to find the stations more easily. Caldwell says that the present numbering system is confusing and that the new system would be based on wave lengths.

Mr. Caldwell, chairman of a committee of the National Electric Manufacturers' Association, has proposed that the numbering of radio broadcast channels be changed so that the public will be able to find the stations more easily. Caldwell says that the present numbering system is confusing and that the new system would be based on wave lengths.

He suggests simple numbering of channels running from 1 to 98, and declares the public would soon learn the numbers of their favorite stations. "I agree that the radio industry should make no contribution as simple as possible for the public. But whether the Radio Commission could properly issue licenses to broadcasters except in terms of fundamental units, I very much doubt," said Mr. Caldwell.

"That, however, need not prevent the radio industry and trade from coming up with Mr. Langley's suggestion if it seems desirable, marking instruction books to correspond and having the newspapers join forces in designating the channels by numbers."

He said he had not discussed the matter with other members of the commission and that this was merely his personal opinion and comment.

## WESTERNER WILL SUCCEED DILLON

Choice of Salt Lake City Man Comes as Complete Surprise

Harold Lafount, New Commissioner. Much Interested in Growth of Broadcasting During Last Few Years. Appointment Welcomed by Other Members

Almost a total stranger in Government radio circles and a complete surprise to the other members of the commission, Harold A. Lafount, of Salt Lake City, Utah, has been appointed by President Coolidge to succeed the late Col. John F. Dillon, who represented the Fifth Zone on the Federal Radio Commission.

Mr. Lafount is about 45 years old and has for the last 10 years been manager of the Pacific Land and Oil Company of Salt Lake City. He was educated at the Agricultural College of Utah, and was also active in the hardware business for 12 years.

While Mr. Lafount has not been connected with the radio industry, he is said to have been very much interested in its growth during the last few years and to have made a special study of broadcasting and broadcast reception. It is believed that the appointment was welcome news to the other commissioners, who for a period of several months, in addition to their own work, have been endeavoring to carry on that of the Fifth Zone. Many matters, however, have not been satisfactorily adjusted due to the pressure and it is almost certain that the new commissioner will find much to be done upon his arrival in Washington.

YOU HAVE sometimes noticed the inadequacy of some "Class A" sets. When you write you need a full description and get satisfactory results.

Wealth in Wash. Water. Firms which make use of valuable metals and it economy to save all the water in which the workmen wash and recover the particles of metal from it. One Kansas City firm alone recovers material valued at \$3000 every year by this operation.

**CHEVROLET**  
will be host at  
**GENERAL MOTORS**  
Family Party  
Tomorrow Night  
9.30

Eastern Standard Time  
(8:30 Central Standard Time)  
WELL, WFAP, WTIC  
WJAR, WTAG  
and 23 other stations

In the General Motors family are  
Chevrolet - Pontiac - Oldsmobile  
Oakland - Buick - LaSalle - Cadillac  
Fisher Bodies - General Motors  
Trucks - Yellow Cabs and Coaches  
Frigidaires Electric Refrigerators  
Delco-Light Electric Plants

## RADIO PROGRAMS

Continued From Page Eight.

**Greater New York Federation of Churches.**  
3:00 p. m.—Young people's conference under the direction of the Greater New York Federation of Churches.  
4:00 p. m.—Men's conference from the Bedford Branch, Y. M. C. A.  
5:00 p. m.—Lola Cabrera Gainsborg, pianist, and Arcadio Birkenholz, violinist.  
6:00 p. m.—Garcia Zolinski, coloratura soprano, and Giuseppe de Benedetti, tenor, with some food.  
6:30 p. m.—Weymouth Post, American Legion, band.  
7:00 p. m.—Catholic Theatre program.  
9:00 p. m.—Talk by David Lawrence on "Our Government."  
9:15 p. m.—Correct time.  
9:30 p. m.—Alvaret Kent hour.  
10:15 p. m.—Bible hour.

**WEEI-BOSTON-414.**  
11:00 a. m.—Service from Old South Church.  
1:00 p. m.—Sage, hour of hospitality.  
3:00 p. m.—Musical program.  
4:00 p. m.—Dr. S. Perkins Cadman, Bedford Branch, Y. M. C. A.  
5:30 p. m.—Five minutes of singing.  
6:30 p. m.—Burial of some of the Boston Automobile Club.  
7:00 p. m.—Newspaper sketches.  
7:30 p. m.—News.  
8:00 p. m.—Concert orchestra.  
8:30 p. m.—Musical program.  
9:00 p. m.—Correct time.  
9:15 p. m.—Alvaret Kent hour.  
10:15 p. m.—Talk by David Lawrence on "Our Government."  
10:30 p. m.—Cruising the air with Bill Harrison.  
10:35 p. m.—Radio review.  
10:45 p. m.—News dispatches.

**WTBL-SYRACUSE-238.**  
2:00 p. m.—International Bible students' program.  
4:00 p. m.—Columbia chain program.  
4:30 p. m.—Musical program.  
5:00 p. m.—Service from Delaware Baptist Church.  
5:30 p. m.—Orchestra.  
6:00 p. m.—Columbia chain program.  
6:30 p. m.—Columbia chain program.

**WFL-Philadelphia-408.**  
6:00 p. m.—Service from the Greater New York Federation of Churches.  
7:30 p. m.—Garcia Zolinski, coloratura soprano, and Giuseppe de Benedetti, tenor, with some food.  
8:00 p. m.—Service from Arch Street Presbyterian Church.  
9:15 p. m.—Correct time.  
9:30 p. m.—Alvaret Kent hour.  
10:15 p. m.—Talk by David Lawrence on "Our Government."

**WGSS-New York-349.**  
8:40 p. m.—Aloma Trio, Hawaiian guitars.  
9:00 p. m.—Studio ensemble.  
9:10 p. m.—Ruth Williams, lyric soprano.  
9:20 p. m.—Studio ensemble.  
9:30 p. m.—Ruth Williams, lyric soprano.  
9:40 p. m.—Aloma Trio.  
9:50 p. m.—Ruth Williams, lyric soprano.  
10:00 p. m.—Studio ensemble.  
10:10 p. m.—Aloma Trio.  
10:20 p. m.—Studio ensemble.

**WGR-Buffalo-305.**  
10:45 a. m.—Service from Westminster Presbyterian Church.  
12:00 p. m.—Weather forecast.  
12:10 p. m.—Lola Cabrera Gainsborg, pianist, and Arcadio Birkenholz, violinist.  
1:00 p. m.—Concert ensemble.  
1:10 p. m.—Concert from the Central Presbyterian Church.  
1:20 p. m.—Alvaret Kent hour.  
1:30 p. m.—Talk, "Our Government," by David Lawrence.  
1:40 p. m.—Correct time.

**WGY-Schenectady-240.**  
11:00 a. m.—Service from St. Peter's Episcopal Church.  
1:00 p. m.—Symphony orchestra.  
2:00 p. m.—Orchestra.  
3:00 p. m.—Columbia chain program.  
3:30 p. m.—Correct time.  
3:45 p. m.—Alvaret Kent hour.  
4:00 p. m.—Talk on "Our Government," by David Lawrence.

**WHAM-Rochester-274.**  
11:00 a. m.—Service from Baptist Presbyterian Church.  
1:00 p. m.—Musical concert.  
2:00 p. m.—Orchestra.  
3:00 p. m.—Musical milestones.  
4:00 p. m.—Dinner concert.  
5:00 p. m.—Studio program.  
5:30 p. m.—Studio program.  
6:00 p. m.—Vibrant melodies.  
6:30 p. m.—Glorious singers and Ulica Jubilee singers.  
7:00 p. m.—Correct time.  
7:10 p. m.—Glorious singers and Ulica Jubilee singers.  
7:20 p. m.—Weather forecast.

**WHAR-Atlantic City-212.**  
10:45 a. m.—Service from Chelsea Baptist Church.  
1:00 p. m.—Recital by trip.  
2:45 p. m.—Service from St. Andrews-by-the-Sea.  
7:00 p. m.—The Bible story man.  
7:45 p. m.—Service from Chelsea Baptist Church.

**WEN-New York-391.**  
9:00 a. m.—Children's hour.  
10:00 p. m.—"Three Little Sacks."  
10:10 p. m.—Symphony orchestra.  
10:20 p. m.—Dance orchestra.  
10:30 p. m.—Ensemble.  
10:40 p. m.—Alexander Haas and his "Keens" ensemble.  
10:50 p. m.—Jazz band.  
11:00 p. m.—News bulletin.  
11:10 p. m.—American hour.  
11:20 p. m.—Orchestra.  
11:30 p. m.—Orchestra.

**WIP-Philadelphia-508.**  
4:00 p. m.—Lecture by the Honorable Joe H. Hanley, direct from the German town, N. J. C. A.  
7:15 p. m.—Service from Holy Trinity Church.  
9:30 p. m.—Musical concert.

**WJZ-New York-4M.**  
1:00 p. m.—Feasture.  
2:00 p. m.—Rory and his gang.  
3:00 p. m.—Joseph Woodwind ensemble.  
3:30 p. m.—Debra Nadworney, contralto, and the trio.  
3:55 p. m.—St. George vesper service.  
4:00 p. m.—National radio vesper service.  
4:15 p. m.—Correct time.  
4:30 p. m.—Orchestra.  
4:45 p. m.—Musical literature.  
5:00 p. m.—Collier's radio hour.  
5:15 p. m.—Vibrant melodies.  
5:30 p. m.—Glorious singers and Ulica Jubilee singers.  
5:45 p. m.—Correct time.  
6:00 p. m.—Ulica Jubilee singers.  
6:15 p. m.—Don Amadio, the wizard.

**WKBW-Buffalo-211.**  
9:30 a. m.—Episcopal service from the studio.  
10:30 a. m.—Public worship, chapel of Church of the Tabernacle.  
3:00 p. m.—Service with sermon by Rev. James T. Haugh.  
7:00 p. m.—Evangeline service.  
10:15 p. m.—"Back Home Gospel Melody Four," from the studio.

**WMSG-New York-236.**  
7:00 p. m.—Blanchette Alvarez, piano accordion.  
7:10 p. m.—Mary Milder, concert pianist.  
7:20 p. m.—Blanchette Alvarez, piano accordion.  
7:30 p. m.—Mary Milder, pianist.  
7:40 p. m.—Aaron Goldberg, violinist.  
7:50 p. m.—Frances Friedman, contralto.  
8:00 p. m.—Aaron Goldberg, violinist.  
8:10 p. m.—Frances Friedman, contralto.  
8:20 p. m.—Emil Schneider, pianist.  
8:30 p. m.—Regina Kahl, soprano.  
8:40 p. m.—Charles Handel, composer.  
8:50 p. m.—Correct time.

**WOR-Newark-422.**  
3:00 p. m.—Symphony hour.  
4:00 p. m.—Concert band.  
7:45 p. m.—Sunday evening musical.  
8:45 p. m.—Elizabeth Keyes, harpist.  
9:00 p. m.—Evensong hour.

9:30 p. m.—American singers.  
10:00 p. m.—Columbia intimate hour.  
**WOO-Philadelphia-508.**  
10:45 a. m.—Service from Bethany Presbyterian Church.  
2:30 p. m.—Sunday school.  
5:00 p. m.—Organ recital.  
**WPG-Atlantic City-273.**  
3:15 p. m.—Sunday afternoon organ recital.  
4:15 p. m.—Community vocal and instrumental recital.  
5:00 p. m.—Light concert hour.  
5:15 p. m.—News flashes.  
5:30 p. m.—Concert orchestra.  
5:45 p. m.—Sunday evening musical.  
**WQAO-New York-385.**  
11:00 a. m.—Calvary morning services.  
7:30 p. m.—Calvary evening services.

**WNY-New York-809.**  
11:00 a. m.—St. Matthew's Lutheran Church.  
2:00 p. m.—Constitutional debate.  
2:15 p. m.—Open forum.  
2:30 p. m.—Adrian Selmer, tenor.  
2:45 p. m.—Ella Selmer, Mildred Foster, piano duet.  
3:00 p. m.—German hour of music.  
3:30 p. m.—Tito Venturi, tenor and guest artist.  
3:50 p. m.—Sara Goodman, concert pianist.  
4:05 p. m.—Mary Lubbock, soprano.  
4:15 p. m.—Goldwin Stewart, baritone.  
4:30 p. m.—Salvatore DeGiro, clarinet and saxophone solo.  
5:00 p. m.—Butler Dateport players, "Fathers' Song."  
5:20 p. m.—Ralph Rose, violinist.  
5:30 p. m.—Little Journeys Into Great American Industries, by Fred R. Still, Vice President of the American Flower Company.

**WTAG-Worcester-517.**  
4:00 p. m.—Men's conference from Bedford Branch.  
5:30 p. m.—National concert orchestra.  
6:30 p. m.—Weymouth Band.  
7:20 p. m.—Capitol Theatre program.  
9:00 p. m.—Talk, "Our Government," by David Lawrence.  
9:15 p. m.—Correct time.  
9:30 p. m.—News bulletin.

**WTIC-Hartford-535.**  
4:30 p. m.—Howard radio hour.  
6:30 p. m.—Symphonic ensemble.  
6:30 p. m.—Capitol Theatre organ.

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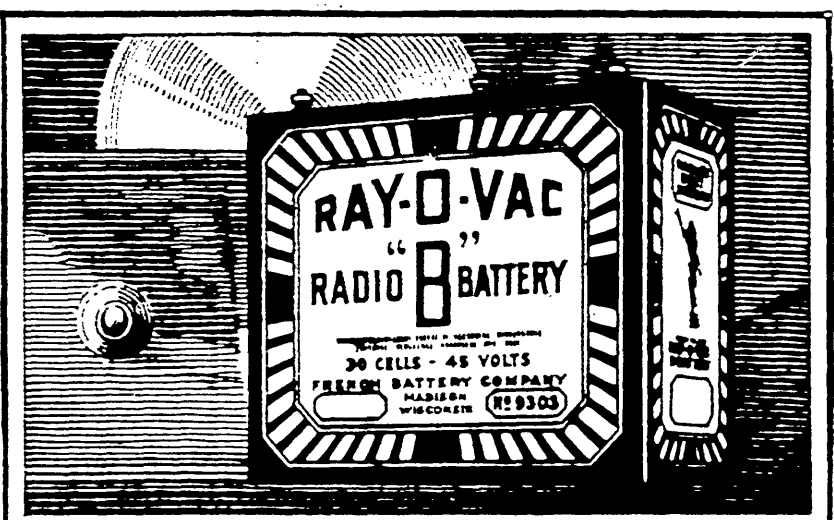
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## Fan Has Real Treat in Store if He Listens on Short Waves

Many Foreign Programs to be Heard and Also Relay Work in U. S.—Tests in Mine Indicate Radio Can Penetrate 500 Feet or More of Rock Strata

BY AUSTIN C. LESCARRON.  
The average radio listener-in has a real treat in store if he tries short-wave reception. Contrary to lay opinion there is nothing formidable or actually forbidding in engaging in short-wave reception. Of course, it is a bit more fussy than standard broadcast reception, but due to the appearance on the market of short-wave sets, special kits, simple converters and other offerings the average listener-in can now enjoy short-wave surprises if he has a mind to.

Perhaps the simplest stunt is to employ a so-called short wave converter, which is a regenerative detector circuit, the output of which is delivered to the usual audio amplifier set, so that the signals may be heard in the loud speaker. The output is often handled by means of a plug with the usual vacuum tube base prongs, which fits into the detector socket of the usual broadcast receiver. A short-wave converter may be made up by the broadcast listener from standard parts obtained from the local radio dealer, who can supply the necessary constructional information as well, or, mounting up by the local custom set builder, at low cost.

Another plan is to buy a short-wave set complete, at an investment far below that of the usual broadcast receiver. There are more and still more things taking place on the low waves. Of course there is much commercial and amateur dot-dash traffic being handled, which may or may not interest the radio listener-in. In addition there is a steadily increasing amount of radio broadcasting relay work, both here and abroad. Several of our leading broadcasting stations are handling short-wave relay transmitters, and it is a fact that programs which cannot be heard on the usual broadcast wave length may often be picked up, clear and loud on the short-wave channel. Abroad, there is much going on in the short-wave broadcast relay field. The British are experimenting with a scheme of short-wave broadcasting for world-wide broadcasting. A London amateur, Gerald Marcuse, is transmitting programs on short waves. A station in Melbourne, Australia, will soon

be broadcasting on short waves. A large manufacturer of vacuum tubes, Philips of Holland, is sending out excellent programs on short waves which are heard even to the antipodes. Soon the British will be transmitting programs regularly on short waves in effecting an exchange of programs with the United States. The experiments should be getting under way within the next few months.

Hence, all in all, there is much going on in the short-wave field. There is the thrill of distance, of international reception, and of taking part in radio in the making. Even the blase radio fan will get a brand new thrill out of short-wave reception.

Tests conducted recently by the United States Bureau of Mines in a Colorado metal mine indicate strongly that radio waves will penetrate 500 feet or more of rock strata. These preliminary experiments were observed by Dr. A. S. Eve, who is conducting a study for the bureau with the idea of determining the possibilities of various methods of geo-physical prospecting for the location of underground mineral deposits.

The experiments participated in by Dr. Eve were conducted with a super-heterodyne set with nine tubes in the Caribou mine. The first test was held at a depth of 220 feet, where, by means of a loop, a strong and clear reception was obtained of a musical concert given at Denver, 50 miles distant. The evidence pointed strongly to the conclusion that this clear reception was due to the penetration of the radio waves of the solid rock strata, although there was a remote possibility that the reception was obtained through shaft and cross-cull openings which, however, the loop did not point. The nearest metal conductors—iron rails—were 66 feet away.

The next series of experiments was conducted at a depth of 550 feet when "mushy" reception was obtained from Denver. The type of reception was, however, as good as could be obtained above ground at the time of making the test, the night being unfavorable for general radio reception. This series of tests was conducted at the end of a

cross-cut reached with many turns and 200 feet from the shaft. A pipe came down the shaft and followed the tunnel up to 80 feet from the point of observation.

In previous experiments conducted by the Bureau of Mines at its experimental mine near Pittsburgh, it was at first concluded that radiation and induction would penetrate rock for considerable depths. Subsequent investigations have shown that in every case the transference of radiation was by some conductors in the mine, electric wires, pipes or rails, all of which abound in modern mines.

It is possible that at Caribou the radio waves excited the conductors in the shaft, and these in turn excited rails and pipes, which brought the radiation to within 70 feet of the experimenters, and that the strong amplification of the radio apparatus enabled the radiation to bridge the gap. This Dr. Eve considers, is improbable, but not impossible.

The experiments conducted at the Caribou mine tend to confirm the view that radiation passes through rock with, of course, much attenuation. It is known that radio signals will just penetrate through a good conductor like sea water to a maximum depth of about 50 or 60 feet, and there is no reason why radiation should not penetrate to 10 times that distance through a poor conductor like dry rock.

(Copyright, 1927.)

### PERPENDICULAR WAVE

Curtis Flying Field Will Try Experiment at Garden City.

An application has been received by the Federal Radio Commission—the first of its kind—from the Curtis Airplane and Motor Company at Garden City, L. I., to build a perpendicular short-wave beam radio station to communicate with airplanes in flight.

The request was received from Capt. Edmund B. Moore, head of the engineering division of the company, who

explained that it was desired to undertake experiments in marking and locating their flying field so that aviators could pick it up in a fog.

"The beam will automatically voice our identity, which will probably be 'Curtis Flying Field,'" Mr. Moore informed the Radio Commission. "A plane approaching will very likely first pick up the carrier wave over the field and later the automatic signal will probably be heard."

It was explained that fog was the bane of the life of an airman and if the fog hazard could be eliminated by means of perpendicular shortwave radio beams, flying would be advanced 100 years.

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### VOICES ALIKE

Peculiar Sameness Noted Over Radio Due to Receivers.

In all fairness to those prominent personages who talk over the radio, it should be kept in mind that most of them have more distinguished voices than loud speakers would seem to indicate. It is not that radio spoils voices; rather it improves them in most instances. But there is a peculiar sameness, particularly in the case of women's voices.

This largely is a matter of reproduction in the average household's receiver. The radioist who has one of the older type sets hears most of the celebrities as having nasal, tinny voices. But if he happens to have one of the power type sets, most voices come in with a newness that suggests great power of address.

Thus the person who listens to famous people through one set finds them all surprisingly alike, never realizing that his neighbor has an altogether different picture of the vocal qualities of the same broadcaster.

## TO MAKE STATIC USEFUL SERVANT

Device Enables Erstwhile Nuisance to Warn of Storms

Recorder, Invented by C. Francis Jenkins, Shows Intensity and Direction from Which Disturbance is Coming—Navy Gives It Exhaustive Tests

Static is to be made a useful servant of navigation by indicating the location, intensity and route of hurricanes and storms at sea, even though such weather disturbances are hundreds of miles away. The use of static for this new aid to navigation has been developed through an invention by C. Francis Jenkins, Washington scientist, radio engineer and inventor, which device enables records to be made of static, the intensity and direction from which it is coming.

Tests of the static recording device have been made between Arlington Naval Radio Station and the U. S. S. Kittery in cruises covering many thousands of miles. With the Jenkins recorder it was possible to make observations and gain information as to the course of storms even when weather reports in code from shore could not be received.

It was discovered that static grew more intense when meteorological conditions between Arlington and the ship were disturbed. Interesting records were made of the intensity and direction of the static. These records, taken at various points in western Atlantic waters when storms were occurring within a few hundred miles of where

the Kittery was steaming, furnished evidence which enabled the Kittery's navigator to change his course and avoid storms which ravaged the Bahama Islands and wrought havoc on the Florida coast.

The apparatus devised by Mr. Jenkins includes a radio receiving set hooked up to a radio compass loop and to a disc compass card recording machine. Charts are placed on the recording disc and readings are taken at frequent intervals. These readings indicate the volume of static and its intensity in different directions. This information in the hands of experienced navigators has proved itself of vital importance.

Further benefits can be obtained, Mr. Jenkins stated, by establishing this apparatus at several points along the coast. Readings taken at these points and brought together at a central point furnish a composite picture of the activity of static. This correlated data will indicate threatening storms, their approximate direction, distance and route, as periodical readings are taken.

With such information at hand, shore stations can broadcast warnings to ships at sea and other maritime interests, so that navigators can take the necessary precautions to safeguard lives and property entrusted to their care.

### Charge Battery More.

Though eliminators and power equipment have cast the subject of batteries somewhat in the background, the storage battery still is an important unit in most sets and radioists are learning more about its proper care. One of the things many overlook, however, is the fact that an overcharge is beneficial to the battery. This should be done twice a month if the set is used regularly, and the charging should be done at a battery service station if the home charger fails to charge with complete effectiveness.

Radio owners are learning, too, that the best way to leave the battery if the set is not to be used for several weeks is in a fully charged condition. Leaving the battery on a low rate of trickle charging also is permissible.

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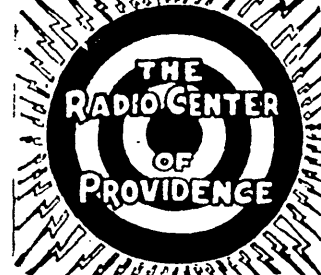
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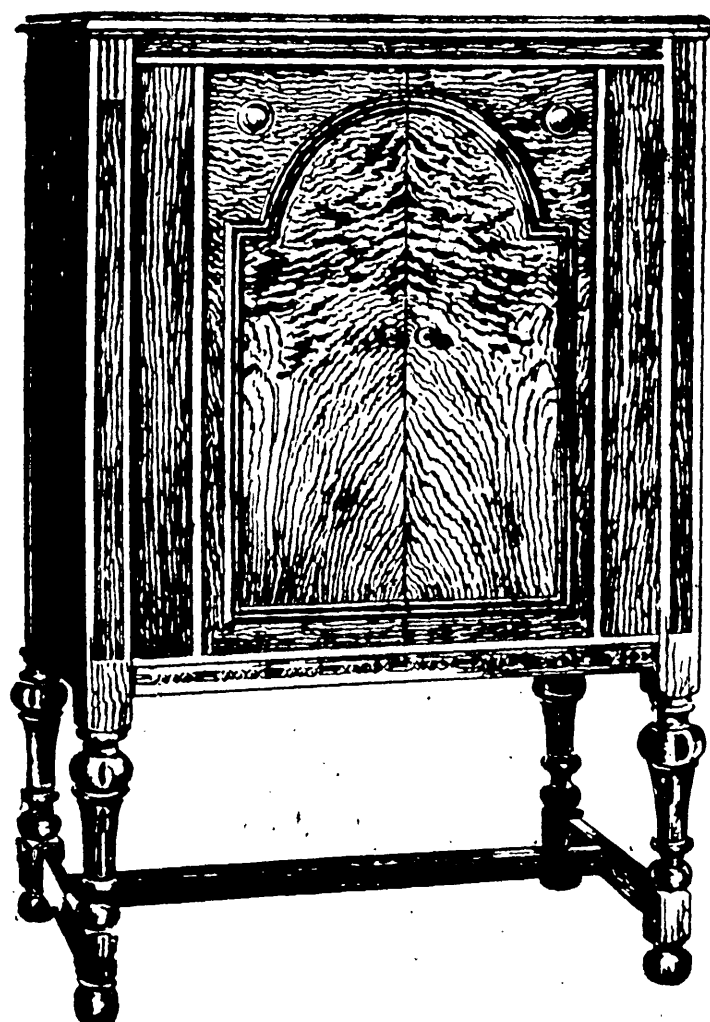
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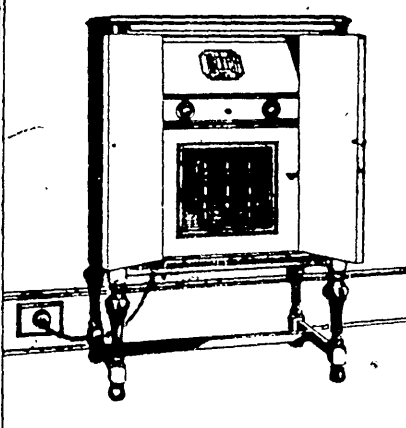
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SYNCHROPHASE  
RADIO



Makers of  
quality radio  
since 1909.

THE HARTFORD ELECTRIC SUPPLY CO. Hartford, Conn. Exclusive Rhode Island Distributor

Authorized Dealers for Grebe Synchronphaser

**B. & H. Supply Co., Inc.**

116 Mathewson Street

Gaspee 5550

## NEW SITE SOUGHT FOR STATION WRC

Point Between Washington and  
Baltimore Favored

WEAF's Reserve Transmitter May  
Be Used.—Power is 5000 Watts.  
Service Range Would Take In  
Philadelphia, Atlanta and as  
Far West as Detroit

On the chance that Station WRC  
may finally be able to secure the 5000  
watt transmitter now being held in  
reserve by Station WEAF in New York  
city, officials of the National Broad-  
casting Company in the capital, it has been  
learned, have been looking over ten-  
tative sites upon which the more pow-  
erful transmitter might be erected be-  
tween Washington and Baltimore.

Laurel, about half-way between the  
cities, apparently was considered too  
far away, but the vicinity of Sandy  
Spring, nearer to Washington, it seems,  
has been looked upon with more favor.  
The ideal location appears to be about  
eight or nine miles out. It is thought,  
however, that regardless of whether  
or not it eventually comes to Wash-  
ington, the former WEAF set will be  
held in reserve for at least six months,  
until the new 50,000-watt transmitter  
gets into its stride, inasmuch as it  
usually takes that length of time for  
a new radio station to be "shaken  
down" into reliable working order. Sta-  
tion WRC is owned by the Radio Cor-  
poration of America, but is operated by  
its subsidiary, the National Broad-  
casting Company.

"As far as consistent reception is  
concerned," an official of one of these  
companies, "give me a good 5000-watt  
set, such as the one used up to now by  
WEAF, and I would rather have it to  
serve the community in and around  
Washington with than one of much

greater power, because there would not  
be nearly so much fading. At the  
present time, the service range of WRC  
is about 100 miles. If we were able to  
secure the WEAF transmitter, which,  
because of its higher power would of  
course have to be located outside of  
the city, our service range would very  
likely be increased to 500 miles.

"As it is now, we reach even  
nearly Baltimore and Richmond spas-  
modically, but if the 5000-watt WEAF  
transmitter were installed here, we  
would not only cover those cities regu-  
larly but our service range might in-  
clude the territory from Philadelphia to  
Atlanta, and probably as far west as  
Cincinnati and Detroit. It would mean  
much to the listeners in the district,  
inasmuch as the quality of reception  
would be improved. At the same time,  
it would extend the service of the Na-  
tional Capital over a much wider area."

Provided the permission of the Fed-  
eral Radio Commission were secured,  
the power of WRC, which is now oper-  
ating on 500 watts, would be increased  
10 times and it would be in a class  
with other well-known 5000-watt sta-  
tions, among which are WBAL, Balti-  
more; WSM, Nashville; WPG, Atlantic  
City; WTAM, Cleveland; WJR, Detroit;  
WCCO, Minneapolis, and WLS, Chicago.

Those with whom the decision rests  
as to whether or not Washington shall  
have this improved service are David  
Sarnoff, vice president of the Radio  
Corporation, and M. H. Aylesworth,  
president of the National Broadcasting  
Company, both in New York.

In the meantime, work is going for-  
ward in equipping the new down-town  
studios of WRC in the top of the Na-  
tional Press building. The promise is  
that these new studios will be among  
the best appointed and most up-to-  
date in the country. This, it is be-  
lieved, is only the first step toward the  
fulfillment of the desire of the National  
Broadcasting Company to have a plant  
in Washington, comparable in impor-  
tance to the capital of the nation.

"You Can Fool the People."

It seems almost incredible that a  
great mass of people could be worked  
up to a pitch where they were con-  
vinced that they saw something which  
really did not exist. Hundreds of peo-  
ple crowded around the Rouen Cath-

edral some time ago, and stood there for  
hours, gazing at the steeple top under  
the impression that there was a man  
on top of the steeple engaged in an  
acrobatic performance. An attaché of  
the cathedral at last thought it was  
his duty to go aloft and rescue the  
man and end the performance, but as  
he approached the top there was no  
acrobat to be seen. The people in the  
crowd agreed that he had not descend-

ed while the other was ascending and  
finally it was concluded that the thing  
was a myth. The acrobat existed only  
comprising the throng.

How Railroads Are Operated.

An interesting demonstration of how  
railroads are operated is shown by a  
model built for the New York and New  
Haven Railroad Company, which makes  
the matter perfectly clear to the lay-



## Your Own Home is the Place to Hear A Stromberg-Carlson

Operating entirely direct from an electric light socket.

It's just as simple for us to give you a  
Stromberg-Carlson demonstration at home  
as in our store and incurs no more  
obligation.

Call us on the 'phone and we will help  
you entertain your friends and they can  
appraise the superb qualities of the Strom-  
berg-Carlson tone, design and crafts-  
manship.

**UNITED MUSIC CO.**

233 WEYBOSSET ST.  
New England's Largest Stromberg-  
Carlson Dealer

## A New Thrill in Radio Awaits You

Come in and  
HEAR

the difference when  
the Willard "A-B"  
Power Unit is used.

**WILFRED ROY CO.**

(WILLARD SERVICE)  
Distributors for the  
Blackstone Valley  
7 1/2 School St., Pawtucket, R. I.  
Telephone Pawtucket 5368

## Let Music Tell You

Come in and see the

**WILLARD**

"A-B" Power Unit

Hear the  
Difference

**FULLER BATTERY CO.**

INC.

(Distributors)

140 BROADWAY,

Providence, R. I.

Gaspee 1213



An impression of  
Frank Hruby  
broadcasting from  
W7AM.

## The Clarion Call of the Clarinet

tells you clearly which make  
of Power Unit will go far-  
thest in making your set  
give the kind of performance  
you like to talk about.

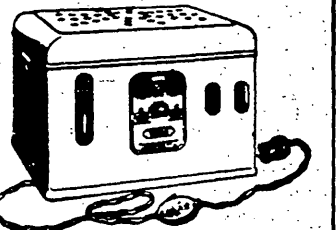
Listen in when there's a  
well-played clarinet solo on  
the air. Then, leaving your  
set exactly as it was, plug in  
Willard Radio Power.

**HEAR**

the

**Difference!**

Compare the fullness of the  
notes, the clearness of tone.  
Make any test you like.



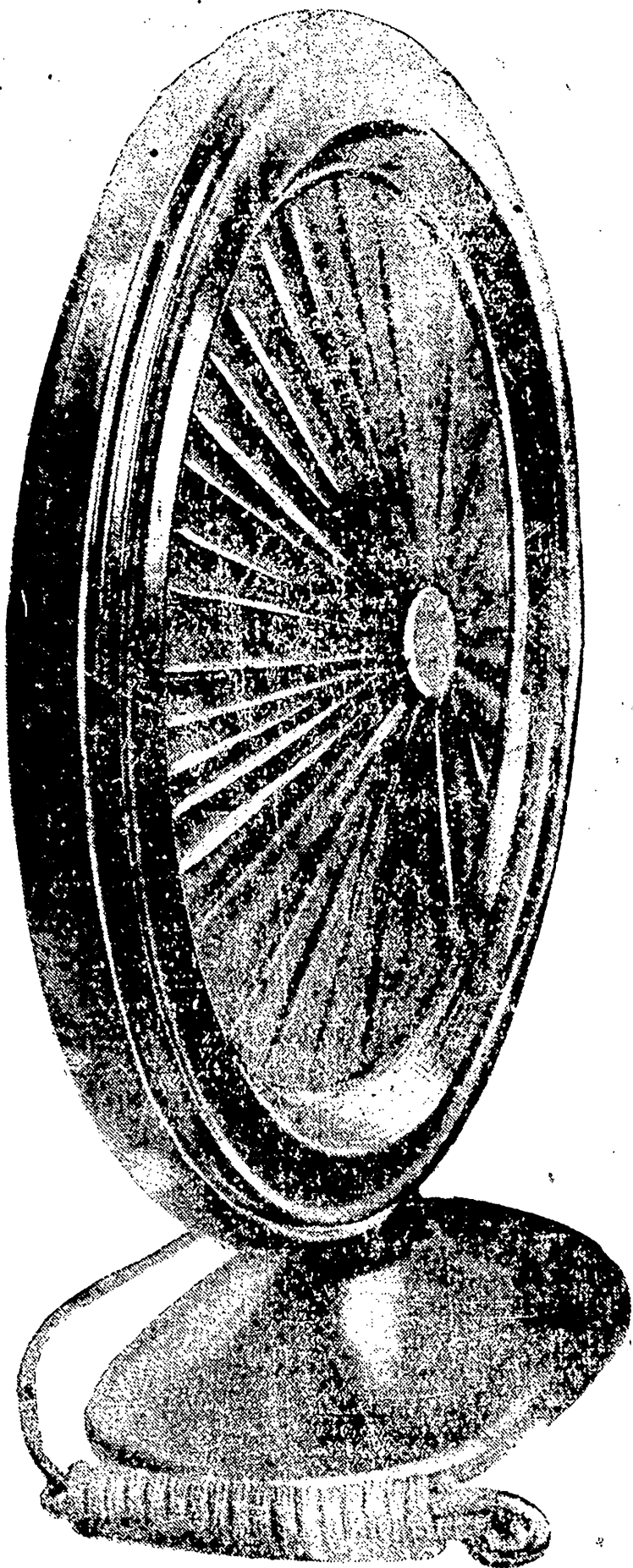
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The  
**WILLARD**  
"A-B" Power Unit

The Willard "A-B" Power Unit  
operates from your lamp socket.  
Gives steady "A" Power and the  
kind of "B" Power you need for  
steady reception. Delivers 180  
volts at 40 milli-amperes. Turns  
itself on when you tune in, and off  
when you're through. Ask for de-  
monstration.

Ask your Lighting Company,  
your Radio Dealer or your  
Willard Service Station to  
demonstrate for you. Let your  
own ears hear the difference.

**Willard**  
RADIO POWER



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This Time With the Greatest Radio Bargain We Have Ever Been Able to Offer---and Prob-  
ably the Greatest Bargain We Ever Will Be Able to Offer.

# THE SONOCHORDE TRADE MARK JUNIOR RADIO REPRODUCER

This Is Not an Obsolete or "Second" Speaker. It is a well-known,  
standard make that we have been fortunate enough to buy in a  
large quantity and offer to you at this unheard-of price.

Read What The Manufacturer Has to Say:

**WARNING**

SAVE THIS  
GUARANTEE

This is a QUALITY INSTRUMENT and should be handled as such.  
This instrument is GUARANTEED against faulty workmanship and  
defective materials. If TAMPERED with or MISHANDLED, this  
guarantee becomes VOID IMMEDIATELY, and a cost charge will  
apply on repairs. This guarantee MUST accompany each instru-  
ment returned as defective or for repair.

Speakers are sold to  
you packed in origin-  
al factory sealed car-  
tons. While the lot  
lasts .....

Reg. List Price \$15

**\$5**

**THE SALE STARTS AT 8 A. M. MONDAY, SO BE ON HAND TO GET YOURS WHILE THEY LAST**