

# GLOBE PICK-UP PICTURES AUDIENCE



Here is the control operator at WJY-WJZ with the new double pick-up microphone half open. All of the harsh, mechanical parts are enveloped and hidden by the unique globe arrangement. The globe is about eighteen inches in diameter and stands on a mahogany pedestal.

The heart of WJY-WJZ, an oscillograph that shows the Radio waves as they leave the antenna. This allows corrections to regulate the modulation, etc. There is an actual "motion" picture of the wave on the revolving square mirror. Operator W. E. Tesch is observing.

Reputed the finest and most modern station, WJY-WJZ, atop the Aeolian building, New York City, has probably the most novel pick-up microphone in use today. This transmitter is shown above in the Classic studio. (There is also a Jazz studio.) At the left, the pick-up is shown closeup. The globe is really a sphere atlas and typifies the world, the invisible audience of Radio. The sensitive microphone is concealed within the thin gauze globe, painted to make it more realistic. The seas are deep green while the continents are tan. The unique arrangement is meant to aid many other artists who have found it difficult to give their best in a soundproof studio with no visible listeners or applause. Photos © K. & H.

## CFCN PLANT HELPS TO CALIBRATE SETS

CANADIAN STATION SENDS ON VARIED WAVES

Announcer Begins at 10:30 O'clock and Works on Rising Scale from 200 Meters

By Jeffrey J. Dingman  
**CALGARY, ALTA.**—With the object of aiding Radiophans to tune in more easily and expeditiously on broadcasting stations on their scheduled times and wavelengths, CFCN, the broadcasting station of The W. W. Grant Radio, Ltd., at Calgary, is now conducting a service which will enable listeners to calibrate their receiving sets.

One night a week the announcer at CFCN broadcasts on many different wave lengths, varying from 200 metres to 750 metres. The announcer commences at 10:30 o'clock, Mountain Standard time, and announces that CFCN is working on 200 metres, asking Radiophans who are on their air to note carefully just what position on their dials the pointers are in while signals are being received on this wave length.

**Great Aid to Listeners**  
 This is repeated every few minutes on rising wave lengths, and thus listeners are able to record on the dials of their receiving sets the various wave lengths. This tends to allow them to tune in more quickly when they know a certain station is broadcasting on a regulation wave length at a set hour.

Many communications have been received by CFCN congratulating the management on this Radio service feature, which, judging by the number and tone of the communications received, popular and much appreciated.

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 Phone expert. Repaired phones for U. S. Navy. Can repair yours. Work guaranteed, rates reasonable.  
**RADIALL ELEC. CO., Passaic, N. J.**

## TWO SUPERSENSITIVE CIRCUITS

(Both Copyrighted)  
 My Highly Improved Reinartz brings in all important stations on both coasts and Mexican border, loud, clear and without distortion. We dance to music from Atlanta received on one loud Reinartz unit. Build one of these wonderful sets from my blueprints and specifications, price \$30.00 or with perfect and complete double wound spirovocal coil, \$35.00 by mail. No other windings used. Photo of my set on a glass panel with every order.  
 This copyrighted circuit is the most successful of any Reinartz modification yet produced, and is patented the most. Thousands are in use.  
 My W. D. 11 Circuit is especially designed for use with the "Pickle" tube and brings out the full value of that little tube at other circuit can. Stations 1000 miles away come in clearly on one tube. This set is small, compact, portable. For the man who wishes the highest efficiency, this is the set to build. Price of blueprint and specifications, 50c, or with complete and perfect windings, \$35.00. Photo of set with every order.  
 Either set is easy to build, easy to operate. Everything clearly shown.  
 Sets built from these plans will receive all broadcasting stations operating under the new laws. Their wave length range is from 140 to 670 meters.  
**S. A. TWITCHELL**  
 1925 Western Ave. Minneapolis, Minn.

## FLEWELLING ANSWERS

By E. T. Flewelling

(Editor's Note.—This department is written by Mr. Flewelling, the inventor of the famous super circuit. From the questions sent him each week care of Radio Digest, he picks the one considered most informative for all and answers it in this column.)

**Use of Loop Aerial**  
 (Submitted by A. W. H., Osceola, Iowa.)  
**Question.**—In using the Flewelling Super on a loop should I connect the two ends of the loop to the binding post in the regular way or how should the loop be used?

**Answer.**—The Flewelling Super picks up so much energy through its own wiring that a loop is not of very much use. If you use a short piece of wire, say 5 to 6 feet long and let it hang down from your set, you will secure as good results as you would with a good loop. Due to this habit of picking up its own energy, the Flewelling set robs a loop of any attempt that it might make to show directional effects as it does on, say, a Radio frequency set. The writer's own personal preference is to simply connect his set to the nearest radiator or water pipe and "go to it." Fully as good and generally better results are obtained in this way as upon a regular set with a good antenna.

## They Didn't Like the Paint and He Didn't Like Radio

**CHICAGO.**—John P. McNamara painted the front steps of a house he owned at 1355 Taylor street recently. This did not please the tenants, Mr. and Mrs. Frank O'Connor, and to show their displeasure they walked down the newly painted steps and went out. When they returned they found the aerial of their Radio set torn down. Yesterday O'Connor obtained a warrant for McNamara charging disorderly conduct.

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Mounted on any panel in a few seconds—2 screws serving as connections behind panel.  
**Get stations you never heard before**  
 No pencil markings—assure unbroken range of 130 degrees. Clarifies signals—eliminates humming. Complete with ether .00025 or .0005 mfd. Micon Cond. **\$1.00**  
**Without Condenser . . . . .75c**  
 At your dealers—otherwise send purchase price and you will be supplied postpaid.  
**Chas. Freshman Co. Inc.**  
 Radio Condenser Products  
 106 Seventh Ave. New York

## WJAX INSTALLS NEW LIGHT-SIGNAL SYSTEM

Announcer Can Communicate with Operator Without Speaking

**CLEVELAND, O.**—In order to insure the highest class of service from WJAX, the Union Trust Co. is planning to install a soundproof announcer booth inside its studio. While the program is going on the announcer will remain within the booth and so can communicate with the operator at all times over a private telephone, even though the operator is only in the next room.

A system of signal lights will be installed for immediate communication between the announcer and the operator. These lights will be amber, green, red and white. When the announcer is ready to proceed with any number on the program, he will flash the amber light to the operator. That will mean, "I am ready." The operator will then flash a green light, which will mean, "The set is in operation." He will follow this with a red flash which will mean, "The microphone is ready—go ahead." The flash of a white light to either the announcer or the operator will mean, "Answer the telephone."

In this way, even while the programs are going on, the announcer can talk to the operator, arrange for the next number on the program, and so forth, without in the least interfering with the actual broadcasting.

The ringing of three silver chimes is the signal that announces programs from KPL.

**MAGNAVOX TYPE R3.** Latest nationally advertised models in original sealed factory cartons. List \$15. Special introductory offer \$25. Radio Central, Dept. D, Abilene, Kansas.

## This Convict Eases His "Time" with Receivers

Ohio Penitentiary Inmate Asks to Install His Set

**COLUMBUS, OHIO.**—The most rabid Radiophan in this section has been found. He is Erwin F. Kumber, an inmate of the Ohio penitentiary serving from three to five years for automobile stealing. He was returned recently to Cleveland to testify at the trial of his alleged partner and was given permission to return to his cell with his Radio outfit.

Kumber brought the set back from his trip and has installed it in the prison. The concert hours have been set from 6 to 7 P. M. and a loud speaker will be used. After these hours, Kumber will be allowed to continue his listening in with an individual headset.

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 UV-200, C-30, AP Inductors. . . . . \$3.50 each  
 UV-201, C-30, AP Amplifiers. . . . . 3.00 each  
 UV-8, DV-8-A, \$3.50; UV-202. . . . . 4.00 each  
 And Guarantee Them Equal to New  
**QUICK SERVICE** Include with your order: re-plated parts; postage for one round per tube. If preferred, tubes will be returned C.O.D. repair charges.  
**Abalene Radio** 416 D Broadway New York, N. Y.

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291 Broadway New York City

**FLEWELLING CIRCUIT**  
 Every part complete, including drilled panel and book of diagrams and instructions. **\$11.95**

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 Every part complete, including drilled panel and book of diagrams and instructions. **\$10.95**

Two-stage Audio-Frequency Amplifier. Every part complete for above circuits at **\$11.00**

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3 Plate Variable; value, \$1.75	1.05
13 Plate Variable; value, 2.50	1.20
23 Plate Variable; value, 3.50	1.35
43 Plate Variable; value, 4.50	1.55
13 Plate Vermer; value, \$3.50	3.75
23 Plate Vermer; value, 6.00	4.00
43 Plate Vermer; value, 6.50	4.25

Honeycomb Coils, 50 turns mounted. . . . . .95  
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 Double Coil Mountings. . . . . 2.45  
 Triple Coil Mountings. . . . . 3.55  
 Reinartz Coils and Mounting. . . . . 1.45  
 Jacks, Single Circuit; value, 60c, special at. . . . .50  
 Double Circuit; value, 80c, special at. . . . .45  
 Multiple Point Inductance Switch with Knob and Dial (15 Switch Points) . . . . . 1.45  
 Lightning Arresters, approved. . . . . .50  
 Three-Inch Dial; unbreakable, heat resisting composition, high finish; special. . . . . .50  
 Two-Inch Dial, same design, for rheostats and potentiometers; special at. . . . . .25

**Audio Frequency Transformer.** Designed for use with W. D. 11 tubes; list, \$4.50; price, \$2.75  
 Variocoupler—Litz Wire Wound Secondary; value, \$4.50; special. . . . . 2.25  
 Ball Bearing Inductance Switch; value, 75c; special. . . . . .30  
 V. T. Sockets, nickle-plated, brass, slow, composition base; value, \$1.00; special at. . . . . .40  
 Aluminum Loud Speaking Horn, nickel plated, highly polished; \$3.00 list. . . . . 3.75  
 Filament Rheostat, 6 ohm. . . . . .65  
 Filament Rheostat, 20 ohm. . . . . .50  
 Filament Rheostat, 50 ohm. . . . . .50  
 With 2" Dial, 15c extra.

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