BUILD YOURSELF RADIO OUTFIT AND GROW YOUNG AGAIN

Knowledge of Electricity Not Necessary for Construction of Simple Set That Will Bring in Broadcasts From 10 to 15 Miles-Putting Wires, Copper Posts and Piece of Mineral Together One of Joys of Life.

RADIO HELPS INTELLECTUAL BACKGROUND OF COUNTRY

BY SAUL EMANUEL.

O YOU want to grow young again?

A foolish question. Who doesn't? Well, then, here's the recipe. Build yourself a radio set and you will taste once more the joys of your boyhood's intense interest in things.

"What do I know about electricity?" yest will ask. You won't have to know much about the wondore of electricity to build a simple set that will bring in broadcasts from 10 to 15 miles away.

You don't know why the gas engine of your automobile sends it along the highways, yet you run the machine and run it well.

Tou can easily build a radio set and run it well, and you won't have to get too deep into technicalities to do it. There is no great mystery about radio. Of course, there are certain fundamental principles concerning it, as is in every art. Anyone can learn these easily.

Radio is no new art. For many years thousands of boys and men have been devotees of the fascinating science. The greater part of them built their own sets. Many of them became experts and are now among the leaders in the radio field today.

The advent of broadcasting brought the attention of the public to radio and the ranks of the experimenters increased rapidly until they now number in the hundreds of

perimenters increased rapidly until you made yourself will soo they now number in the hundreds of a great deal to you in every

Problems Are to Simplify Receiver and Prevent Confusion of Broadcast Messages, Says Writer.

R ADIO as the means of bringing to the citizens of the United States inspiring music, the upitfiting words of great teachers, the everlasting principles of our political fathers, in made the key-notes of an article written by Major-notes of an article written by Major-n

Editor Radio Waves and Rippies: (1)

Can I use a 4000-meter coil on a single tube set to receive the long wave spark and are stations? (2) In constructing an aerial does it make any difference if it is drawn tight or not? (3) My storage battery corrodes very badly at the terminals; can I do anything to prevent this? (4) Should the negative side of the "B" battery go to the positive of the negative side of the "A" battery?

A FAN Milton Or.

1. Very but would advise the use

Editor Radio Waves and Rippies: (1)
Will a loss coupler increase my receiving range using a crystal detector? (2)
What is meant by capacity effect? (3) How can I make a good variocoupler?

1. A crystal set has certain limitations in that it cannot receive any signals from stations further than about 25 miles away unless the sfations happen to be unusually powerful.

2. On a tuning coil if the control of diagram of the control of diagram of diagram

BIG BUSINESS FINDS RADIO READIEST, SPEEDIEST MEANS OF COMMUNICATION

Service Which Defies Weather Conditions Being Adopted by Large Concerns and Extensions in All Parts of Country in Near Future Are Predicted.



Brondcating information for use in the industrial world is now a regular service of the department of commerce. Official in department of commerce giving out information from South America for motor camanufacturers.

figure finals waves and firspine (D) control the test is provided by the provided and the provided by the provided and the provided and the provided by the provided and the provided and the provided by the provided and the provided and the provided by the provided and the provided and the provided by the provided

hgs, so that in event of an accident he rescuers could communicate with ings, so that in event of an account the rescuers could communicate with them. If this problem is satisfactorily solved, the experts will then try to devise a small compact transmitting set for the minors, so that they could advise their rescuers just where they were located in case of accident.

where they were located in case of accident.

The latter problem will be an extremely difficult one to solve, because the set must not only be compute but it must be devoid of any sparking contacts that might unite the gases in the mine. Such small sets as these would have to comprise a vacuum tube transmitter, probably in the order of a five-watt set. They would have to utilize some form of dry cell high voltage batteries for the plate of outlies some form of dry cell high voltage batteries for the plate of outlies some form of dry cell high voltage batteries for the plate of outlies of the tube as it would not be feasible to run high voltage generators in the workings.

NBW YORK, Oct. 7.—A wireless broadcasting station of the latest type has been installed at police headquarters in this city, and within a few months the police boats, police inspection district headquarters and stations will be equipped with receiving sets, so that they may obtain early information on stelen automobiles and crimes and criminals. The police department has received the special permission of the department of commerce through Secretary Hoover to operate on a special wave length of 490 meters, a band not allocated to anyone else, so that there will be no interference whatever with the police broadcasting station.

Several methods have been developed in the last few months which eliminate the use of the storage hattery and permit the working of a receiving set direct from the electric wires.

It has been found, however, that should be made clear to all radio rans. The remarkable been experienced by radio has proved to be fertile ground for the activities of get-rich-quick" fakers of all varieties, particularly the frandulent stock promoter and the army of solicitors urging the public to get in on the ground floor.

At the outset, therefore, it will be a wise plan for the would-be investors under the content of the substituted ing current unless he knows some-

a wise plan for the would-be inves-tor in radio stock to remember one point very clearly, namely, that all the reliable radio apparatus is fully protected by patent rights and can only be manufactured by corpora-tions that have been engaged in the business of constructing radio ap-paratus for some years. There are, however, one or two exceptions to this rule in the cases of new com-panies, but they are so busy turnpanies, but they are so busy turn-ing out their apparatus that they have no time to indulge in any wild-cat promotion scheme or other stock selling propositions.

There are no opportunities for

***Company of the control of the con

voice and all signals.

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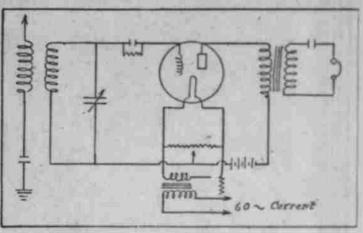
advertised for last 2 weeks will be continued for one more week.

> (The Oldest Exclusive Radio Store in Portland) Mail Order Service-Write for Catalog (Installers KGW)

J. B. WEED, Mgr.

NEW METHODS ELIMINATE USE OF STORAGE BATTERY

Receiving Set Is Worked Direct From Electric Wires but Few Amateurs Have Had Success With Plan.



It is not advisable for the average fan to tamper with the house lighting ourrent unless he knows something of electricity in general. The storage battery is the most safe and same source of current for them.

If you have had some experience with the high amperage currents of the house-lighting system and desire a good circuit for lighting the tube filaments with the 110 A. C. try the circuit which accompanies this article. It has been and still is used by a few amateurs, and gives fatrly good results A sixvelt step-down bell-ringing transformer is used with a potentiometer.

In place of the telephones, a tale phone transformer is abstituted—the high voltage winding being connected to the plate circuit of the lamp, and the low voltage of the transformer is undertuned to the plate circuit of the lamp, and the low voltage of the transformer to the bead phone transformer to the bead phone through a small 6002 micro-faracondenser. This implicate what may be known as a "lum trap." It is in this trap that the low voltage with the low voltage with the low voltage with the low voltage with a sound of the line humaning conscitutes what may be known as a "lum trap." It is in this trap that the low voltage with a low voltage with the low v

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