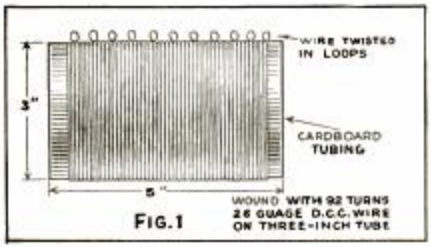

FIG. 1

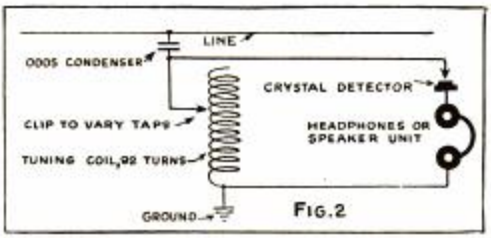

FIG. 2

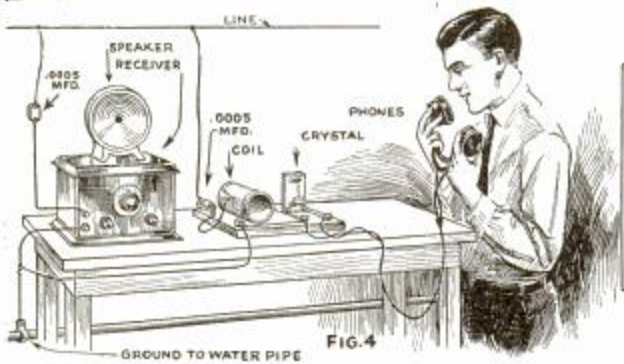

FIG. 4

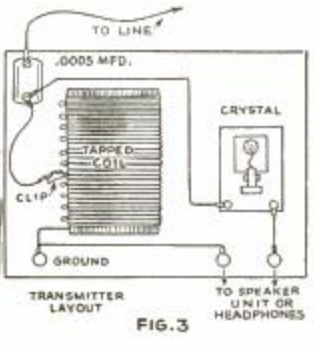

FIG. 3

Wired Wireless for the Experimenter

How would you like to talk to your friend across the way or down the street? This may be easily done by those who are experimentally inclined, and the results are very fascinating. The connecting wire may be strung according to the usual methods employed by boys for years past to hook up back-yard telegraph and telephone lines, care being taken not to approach any lighting or power lines. The parts used are those owned by the average radio fan. A crystal set is used as the transmitter in connection with any three-tube receiver of the regenerative type. The crystal set, Fig. 3, consists of a home-made tuning coil, wound as in Fig. 1, and a crystal detector, connected as shown in Fig. 2. A good set of headphones and a speaker are also required. The connections from the receiver and crystal transmitter are both taken directly to the line, as shown in Fig. 4. When transmission is started, the regenerative receiver is made to oscillate, then, listening in on the crystal set, the latter is adjusted to the oscillating wave emitted by the receiver. Now, by speaking into the headphones connected to the crystal set, the voice will be heard at the remote receiver. The voice will come through fairly loud and can be heard from the loud speaker. To answer, the same procedure is followed at the other end of the line. A second loud speaker can be used as a microphone instead of the headphones if desired. A transmission schedule may be arranged, or a bell system for signaling on the same line can be installed and operated with dry cells. No one can listen in on your conversation unless they are provided with the same equipment, and no radio amateur license is required for this type of transmitter.—D. A. Brown, Marion, Ohio.

Test Your Tubes Often

In the days of the old tungsten-filament tubes they were used until they failed to light, but present-day tubes employing oxide-coated filaments and heaters, will continue to light long after they have ceased to be useful. It is obvious, therefore, that the only way to ascertain if a modern tube is functioning properly is to test it, or have it tested, at frequent intervals.

¶For further information on any radio construction article write to the radio department; this service is free.