

FIG. 9 (A)

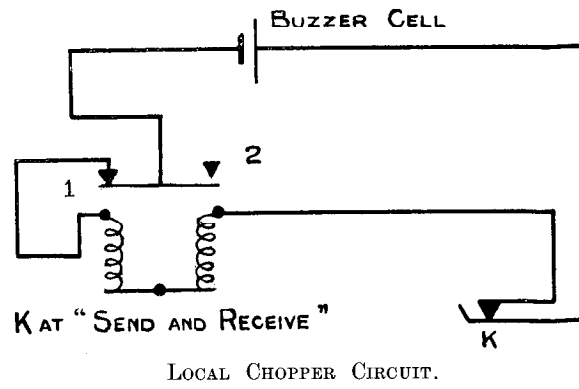
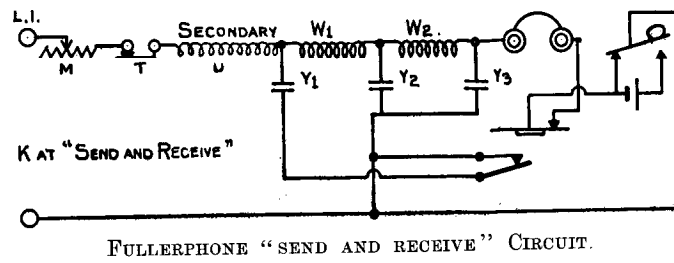


FIG. 9 (B)



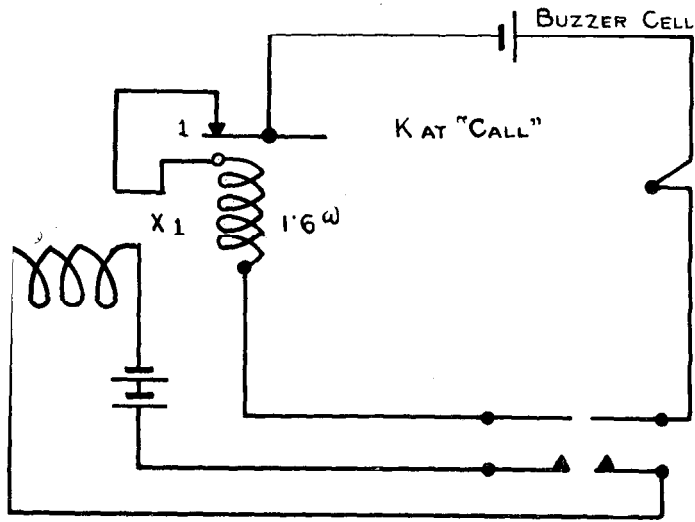


FIG 9 (c)—CALLING—PRIMARY.

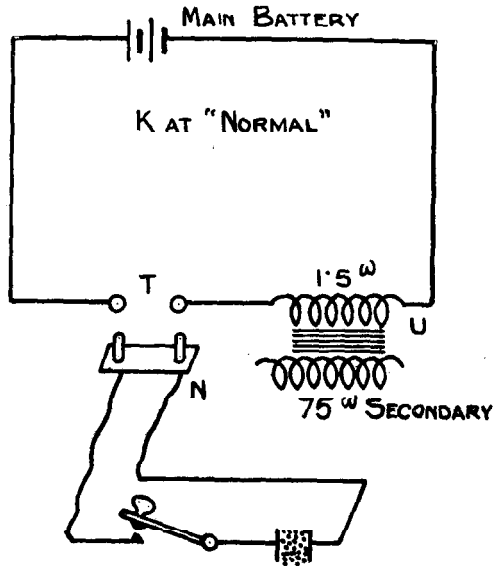
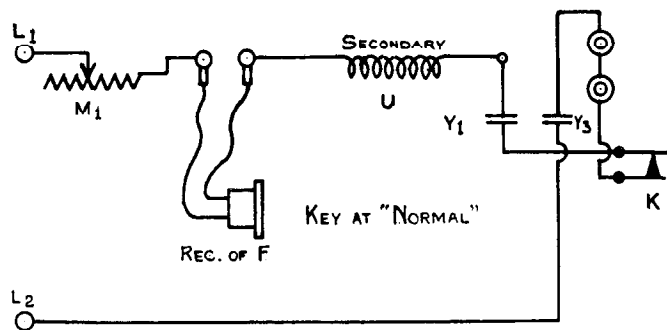


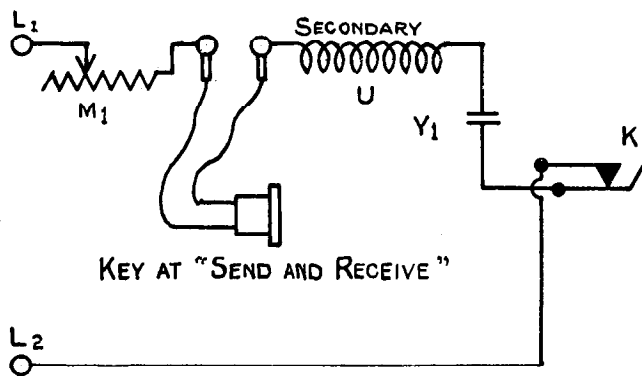
FIG. 9 (D)—SPEAKING—PRIMARY.

FIG. 9 (E)



CALLING AND SPEAKING SECONDARY.

FIG. 9 (F)



SPEAKING SECONDARY (SWITCH AT "SEND AND RECEIVE").

**12. Tests.**

1. Put switch A to "send and receive." The buzzer should work quietly and steadily.

Short circuit L1 and L2 on operating the Morse key buzzer signals should be heard in the head receivers.

If the vibrator does not buzz, either contact I requires adjustment (*see* below) or the buzzer cell is run down, or there is a disconnection. See that the battery connections are clean and tight.

If the buzzer cell is run down and no spare is available, change its position with one of the other cells.

If the vibrator buzzes but no signals are heard on operating the Morse key, contact 2 of vibrator requires adjustment (*see* below).

If the vibrator buzzes and clicks are heard instead of buzzer signals on operating the key, there is a fault in the main Fullerphone "send and receive" circuit.

2. Put switch A to "call." Buzzer should buzz loudly. If L1 and L2 are short circuited a very strong buzz should be heard in head receivers and hand set if connected.

3. Switch A to normal—L1 and L2 connected and insert hand set. Work the switch in hand set, clicks should be heard in both hand and head receivers. Keep switch in hand set depressed and blow into transmitter. Noises should be heard in all receivers.

If these results are not obtained look to connections of main battery, hand set, and to condition of microphone.

**13. To adjust Vibrator.**

1. Unclamp and withdraw both contact screws 1 and 2. With switch A at "send and receive" screw down contact 1 till a steady buzz is heard, then clamp screw 1.

2. Short circuit L1 and L2. Keeping the Morse key depressed, and the buzzer running, slowly screw down contact 2 until a good clear note is heard in the head receivers; then clamp screw 2.

3. The buzzer should start readily when switch A is turned to either position "send and receive" or "call." It should sound much louder at "Call."

**14. To Test Potentiometer.**

Short circuit L1 and L2. Put switch A into position "send and receive." Do not work Morse key. Now move switch B, Figs. 1, 3, 4, 5—L into position 1 or 2. A buzz should be heard in the head receiver which varies in strength as the handle, Figs. 1, 3, 4, 5—M is turned. This variation should be gradual. This buzz should be heard equally strongly with key B in position 1 or 2. If this does not happen look to connections of potentiometer battery. Then if confident that No. 2 contact of buzzer is adjusted see to sliding contact of potentiometer.