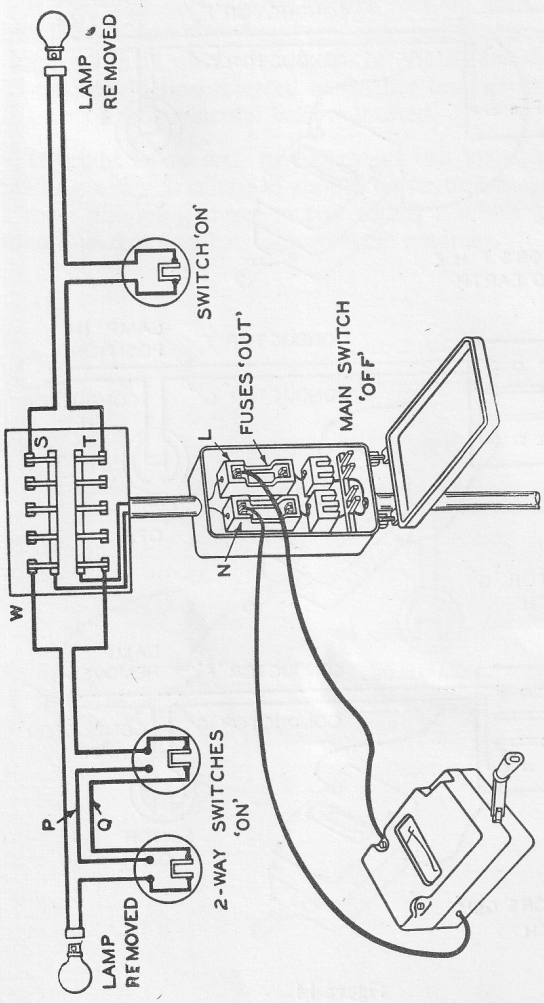

Figure 15
Tests between conductors on whole installation

(b) *Insulation tests between conductors*

Remove all lamps.

(The main switch must be open, all fuses inserted at the distribution board, and all single-pole switches in the closed or "ON" position* as in the previous test.)

Connect one terminal of the Megger Insulation Tester to fuse contact L (Figure 15), and the other to the contact N and make a test.

Two readings should be taken on an installation containing 2-way switches, one with both switches in one "ON" position (Figure 15) and the other with both switches in the alternative "ON" position; this will ensure that both inter-switch wires (P and Q, Figure 15) are included in the test.

If the result of the test between conductors is also satisfactory, no further insulation tests are necessary and the installation may be passed as sound.

If, however, the results of the tests are unsatisfactory, proceed to the distribution board, withdraw all fuses and test each branch circuit individually between conductors until the faulty circuit or circuits are located.

Having established the circuit upon which the fault lies, disconnect any component part of that circuit which it is convenient to remove. Disconnect, for instance, the flexible from ceiling roses and test again to see whether the removal of these small sections has cleared the fault.

It is as well to remember that although faults do occasionally occur in ordinary straight runs of cable, this is not the first place to look for trouble. It is much more frequently the case that faults, both between conductors and to earth, occur at switches, in ceiling roses, in lampholders, in junction boxes, etc.

**To test whether 2-way switches are in the "ON" position, insert the lamp they control. A Megger Insulation Tester connected between contacts L and N Figure 15 will show zero if the switches are in the "ON" position.*