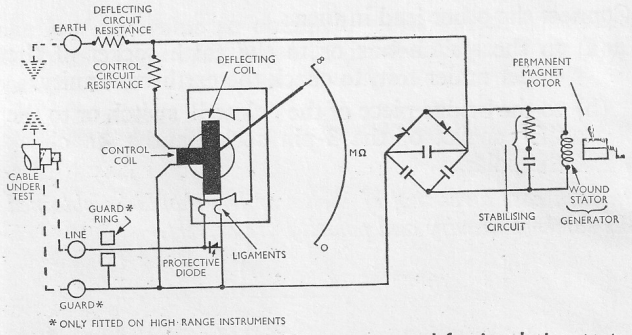

Figure 22. Major Megger Tester arranged for insulation test

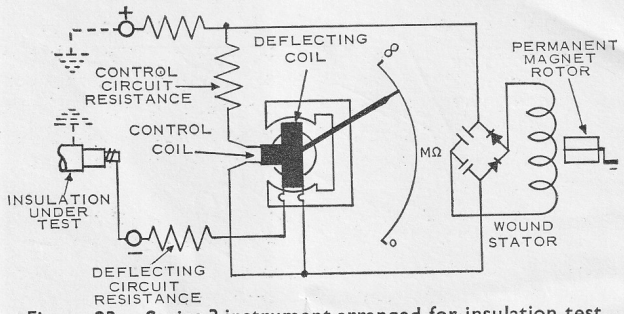

Figure 23. Series 3 instrument arranged for insulation test

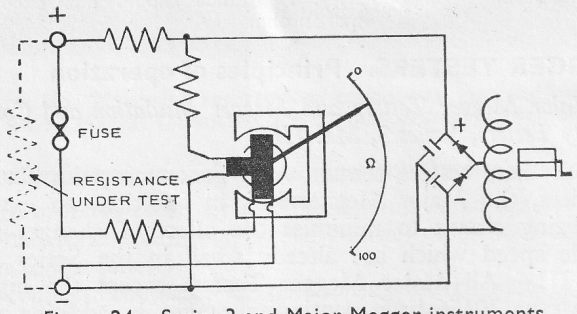

Figure 24. Series 3 and Major Megger instruments arranged for continuity test

a guard terminal and circuit whilst the continuity range is replaced by a "discharge" position on the switch.

This feature, combined with a stabilizing circuit having twice the effectiveness of the other models, facilitates its use on capacitive circuits.

The ohmmeter movement contains no control spring, the latter being replaced by a control or pressure coil connected across the generator in series with a fixed control circuit resistance. The pointer will therefore only take up a definite position when the generator handle is turned.

The deflecting or current coil is also connected across the generator and, for insulation tests, it is in series with the resistance under test.

The instrument measures the ratio of the currents in the two coils, which will depend only on the value of the resistance under test, since variations in the pressure generated, due to varying handle speeds, affect both the coils in the same proportion. The instrument is therefore a true ohmmeter and is calibrated in megohms and thousands of ohms.

The guard circuit in Cat. No. 70156 enables leakage current passing over the surface of the object under test to be returned directly to the generator without passing through the deflecting coil of the ohmmeter.

For continuity tests, the change-over switch connects the deflecting coil *in parallel* with the resistance under test (see Fig. 24) instead of in series with it, and thus the scale reads in the opposite sense.

2. *The Battery Megger Tester*

This instrument differs from the Series 3 and Major Megger Testers in that it operates from a self contained rechargeable battery instead of a hand generator, and incorporates a milliammeter movement instead of the cross coil ohmmeter movement in the Series 3 and Major Megger Instruments.

Simplified diagrams of the test connections are shown on the next page.