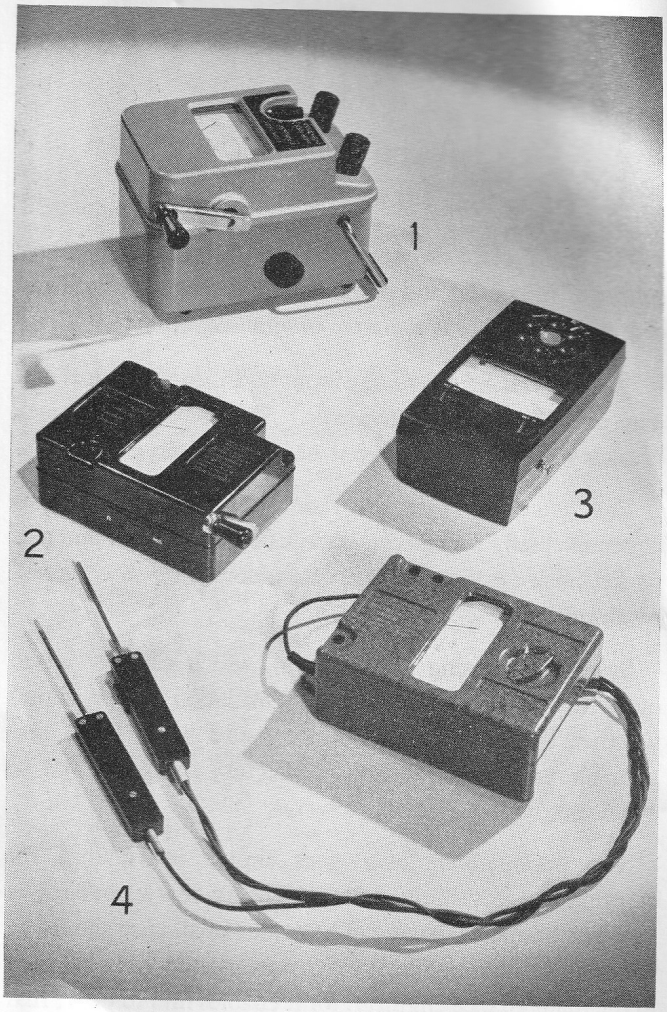

Figure 1. A group of Megger testers

1. The Major "Megger" Insulation and Continuity Tester. (Cat. No. 70154).
2. The Series 3 Insulation and Continuity Tester. 3. The Battery "Megger" Tester.
4. The "Megger" Circuit Testing Ohmmeter.

INSULATION RESISTANCE

The value of insulation is expressed in terms of its electrical resistance, the practical unit being the megohm (1 million ohms).

The insulation resistance of different materials varies, and the resistance of any given material will alter according to a number of factors the chief of which, probably, is the degree to which it absorbs moisture. This absorption of moisture lowers the resistance of the material in question, while an accumulation of dirt upon the surface of the material, though it does not theoretically alter the insulation resistance of the material itself, does in effect do so, since it provides a conducting path through the dirt along the surface of the material.

The effect of moisture on insulating material is well shown in the table in Figure 2.

The safety of electrical installations and apparatus depends on the condition of the insulation, and it is very desirable, therefore, that the condition of this insulation should be ascertained from time to time, to make sure that it is not deteriorating through the accumulation of dirt, damp, or in any other way.

This resistance can be measured very simply by means of a Megger Insulation Testing Set which indicates directly on a scale the insulation resistance of the apparatus or installation under test.

Time	Insulation Resistance
On placing in drier ..	1000 ohms.
After ½ hour	1.1 megohms.
„ 1 „	6.0 „
„ 1½ „	15.0 „
„ 2 „	26.0 „
„ 3 „	36.0 „
„ 4 „	40.0 „

Figure 2. Tests illustrating the variation in insulation resistance, due to the presence of moisture