

ELECTRICITY - 100 YEARS AGO

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A DIRECT-READING OHMMETER

We illustrate herewith a new instrument, a direct-reading ohmmeter. This instrument, made by the American Electric Specialty Company, 123 Liberty Street, New York, is designed for the quick measurement of resistance with moderate accuracy, in much the same manner as a portable voltmeter notes voltage and a portable ammeter the amperage. The idea of the maker is that it is adaptable for use where testing sets might not be used because of the greater cost or because of the requirement of both the battery and galvanometer, and moreover that the ohmmeter may be used other than by expert electricians.

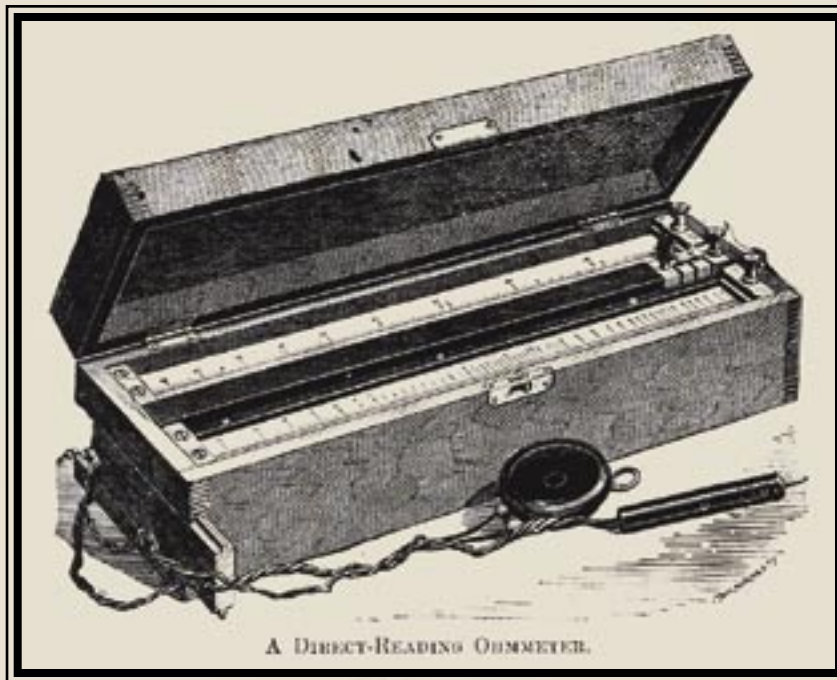
Its operation is as follows: The unknown resistance is connected across the binding posts marked X, and the plug at the end of the bridge is placed in a hole marked with a color corresponding with that of the numbers of the scale which it is desired to use. There are three scales numbered in black, red and blue, thus

giving the bridge a wide range, and as the plug holes are correspondingly colored, there can be no mistake as to which scale to read. In the farther end of the box is a compartment containing a telephone receiver and stylus which has at its extremity a small battery key.

The telephone is placed to the ear, the battery key is depressed and the light wire which is stretched over the scale is touched in different points by the stylus

until a point is found where there is no sound in the receiver. In doing this the stylus is held in much the same manner as a pen, the forefinger serving to depress the battery key. The scale is 30 inches long and divided into two parts for compact construction, but so rapidly can its entire length be traveled by the stylus that the point of silence is almost instantly found. The

sound dies away as the critical point is approached and at that point ceases altogether.



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