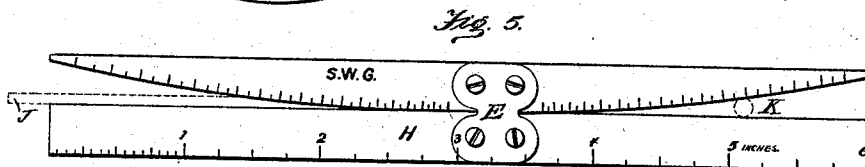
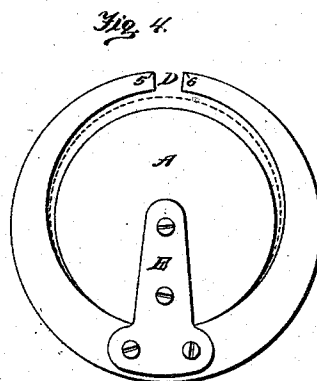
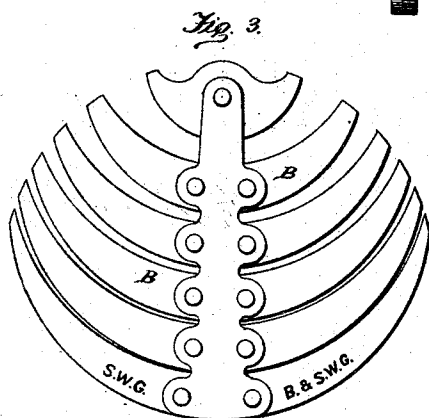
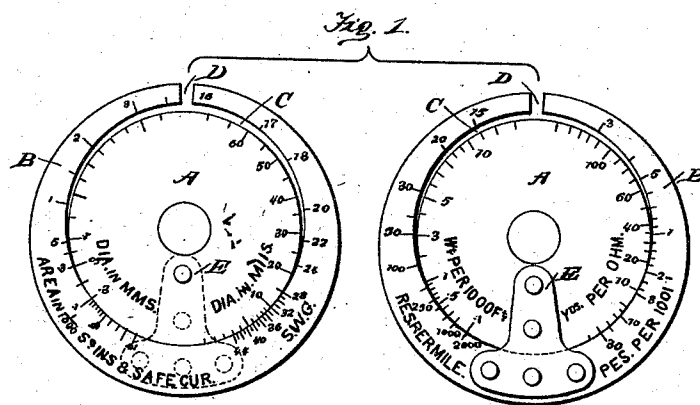


(No Model.)

J. POOLE.
WIRE GAGE.

No. 513,596.

Patented Jan. 30, 1894.



Witnesses:

Chas. L. Clutch.

Wm. Stockbridge

Inventor.

Joseph Poole.

by E. H. Stockbridge.

Attorney

UNITED STATES PATENT OFFICE.

JOSEPH POOLE, OF MANCHESTER, ENGLAND.

WIRE-GAGE.

SPECIFICATION forming part of Letters Patent No. 513,596, dated January 30, 1894.

Application filed January 9, 1893. Serial No. 457,855. (No model.) Patented in England November 2, 1892, No. 19,697.

To all whom it may concern:

Be it known that I, JOSEPH POOLE, a subject of the Queen of Great Britain and Ireland, residing at Moss Side, Manchester, in the county of Lancaster, England, have invented certain new and useful Improvements in Wire-Gages, (for which I obtained Letters Patent in Great Britain on the 2d day of November, 1892, No. 19,697,) of which the following is a specification.

This invention relates to improvements in gages for wire, sheet metal and other articles, and it has for its objects to provide a simple device that may be used as an ordinary gage, but it is especially designed for gaging electric wires, being so constructed as to indicate the resistance of a given length and diameter of wire, as more fully hereinafter set forth. The above-mentioned objects are attained by the means illustrated in the accompanying drawings, in which—

Figure 1, represents a view in elevation, showing the front and rear faces of the gage. Fig. 2 represents an edge view of the same. Figs. 3, 4 and 5 represent modifications of my improved gage.

Referring to the drawings, by letter, A indicates a disk placed eccentrically within a ring B, having a crescent-shaped space C between the two in which the wire to be gaged is placed. The space C is widest at one end of a diameter of the disk A and reaches its narrowest part at or about the other end. At the widest part of the space, the ring B is preferably divided as at D to admit the passage of a wire which may thus be gaged at any part of its length. The wire being admitted is passed along the space C toward one of its ends as far as possible when the marks opposite its stopping point indicate its diameter.

In the gage illustrated in Fig. 1, which is especially designed for the use of electrical engineers, the gage is so graduated that if the wire is moved in one direction along the space C, the spot at which it stops would indicate its diameter in millimeters, its sectional area in thousandths of a square inch, and its safety limit for an electric current on one face of the gage; and the number of yards per ohm, and the resistance in ohms per hun-

dred feet, or other convenient length on the other. Should the wire be moved toward the other end of the space C the gage would indicate its diameter in thousandths of an inch or other unit, and its number according to the standard wire gage on one face and on the other its weight per thousand feet and its electrical resistance per mile. The circular inner disk is secured to the outer ring by a bracket or plate E.

In the modification shown in Fig. 3 of the drawings, the gage consists of a multiplicity of crescent-shaped plates B mounted on a bracket E having crescent-shaped gage spaces between them.

In the modification shown in Fig. 4, the disk B is not circular but is turned off at one side, the original curve being indicated by dotted lines. The opening D both in this and its equivalent forms may have its opposite faces approaching each other so as to be of different widths at the two ends.

In the modification shown in Fig. 5 is illustrated a gage for measuring sheets as well as wires. This consists of two parts, one G being curved and the other, H, straight. The straight part of the gage may be conveniently marked in inches on one side and in the metric system on the other. The outside straight edge of the part G may also be marked with convenient scales or measures and is perfectly parallel with the edge of the part H. The curved edge of the part G may also be suitably marked. The two parts are secured together, as before, by a bracket, E.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A wire, string or similar gage characterized by a tapering channel formed by the eccentric edges of a disk and a ring constructed and arranged substantially as hereinbefore described and as illustrated by the accompanying drawings.

2. In a wire, string or similar gage having a tapered channel formed by the opposed eccentric curves of a disk and a ring, an opening formed through the ring at or about the widest part of the tapered channel to admit of the passage of the wire string or other ar-

title substantially as hereinbefore described and as illustrated by the accompanying drawings.

3. A wire string or similar gage having a
5 tapered channel formed by the opposed eccentric curves of a disk and ring and an opening through the ring at or about the widest part of the tapered channel, forming the opening with inclined faces so as to act as a gage
10 for one or more thicknesses of wire string or similar articles substantially as described and as illustrated by the accompanying drawings.

4. A gage for sheet metal, wire or similar articles having a tapered passage one side of
15 which is formed or bounded by the curved edge of a segment of a disk or ring substantially as described and as illustrated by the accompanying drawings.

5. A sheet metal, wire, string or similar
20 gage having a tapered channel one or both of the sides of which are formed or bounded by

curves and being impressed engraved or otherwise marked to give information additional to the gage of the article being measured, substantially as hereinbefore described 25 and as illustrated by the accompanying drawings.

6. A sheet metal, wire, string or similar gage formed with a tapering channel one or both sides of which is or are formed or bound- 30 ed by curves substantially as hereinbefore described and as illustrated by the accompanying drawings.

In testimony that I claim the foregoing as my invention I have signed my name, in pres- 35 ence of two witnesses, this 16th day of December, 1892.

JOSEPH POOLE.

Witnesses:

GEORGE WILLIAM ROWE,
WILLIAM E. HEYS.