(No Model.)

W. D. SPENCER.

DEPTH GAGE.

No. 379,423. Patented Mar. 13, 1888.

Fig. 1.

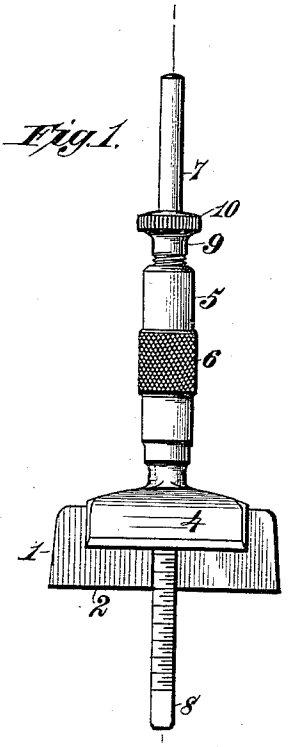


Fig. 2.

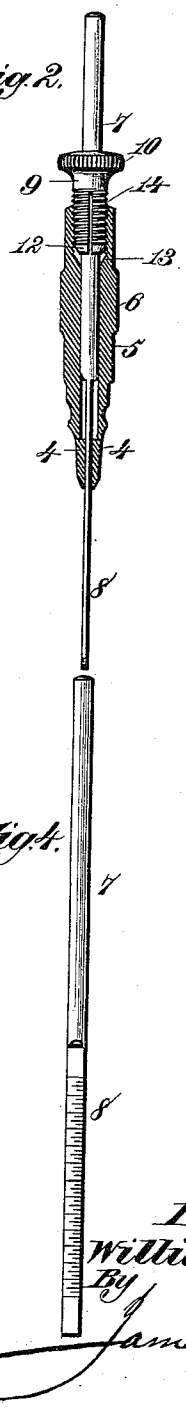


Fig. 3.

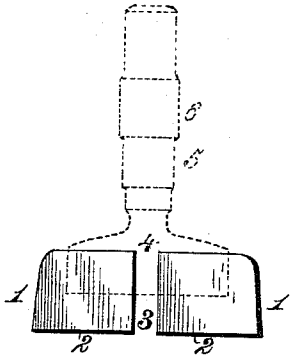


Fig. 4.

Witnesses.
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UNITED STATES PATENT OFFICE.

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DEPTH-GAGE.

SPECIFICATION forming part of Letters Patent No. 379,423, dated March 13, 1888.

Application filed December 27, 1887. Serial No. 259,086. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. SPENCER, a citizen of the United States, residing at Middletown, in the county of Middlesex and State of Connecticut, have invented new and useful Improvements in Depth-Gages, of which the following is a specification.

My invention relates to depth-gages, and the purpose thereof is to provide a simple and accurate gage whereby interior measurements may be readily and accurately determined.

It is the purpose of my invention to provide a novel and improved construction of the base-plate, whereby the spindle may be carried through the same and its graduations fully and distinctly exposed to view and caused to register with the straight edge of the base-plate. It is also my purpose to combine with the spindle a simple locking device or clamp, whereby said spindle may be adjusted longitudinally and fastened at any point without displacing the adjusted spindle.

The invention consists in the several novel features of construction and new combinations of parts, hereinafter fully set forth, and definitely pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation of an instrument in which my invention is embodied. Fig. 2 is a central section of Fig. 1, the section plane lying in the axis of the spindle. Fig. 3 is a detail view of the base-plate, and Fig. 4 is a view of the spindle detached.

In the said drawings, the reference-numeral 1 designates the base-plate of the gage, having a straight-edge, 2. In the center of the plate is formed a slot or channel, 3, at right angles to the straight-edge and of any suitable width. The base-plate 1 is inserted between two inclosing-plates, 4, having a tubular stem or handle, 5. A part of the cylindrical surface of this handle may be milled, if desired, as shown at 6.

The spindle of the gage consists of a cylindrical rod of steel, 7, of a size to slide easily in the stem 5, and having at its end a flat bar, 8, preferably a little thinner than the base-plate 1, and of a width to fit the central slot or channel 3 and to slide therein. The flat portion of the stem is graduated in any suitable way.

Upon the cylindrical part 7 of the stem is fitted a tubular screw, 9, having a milled head, 10, and tapped into the end of the stem. The end of the screw is beveled off at 12 to give a conical form or taper thereto, and the threaded end of the stem which receives the screw is provided with a shoulder, 13, with which the beveled end of the screw engages. This screw is split by a central cut, 14, and when turned into engagement with the shoulder 13 it is clamped upon the stem 7 with great force. A very small movement of the screw is sufficient to effect this result.

The manner of using this instrument is familiar to all artisans. The straight-edge 2 being placed on the surface of the article, the screw 9 is turned to release the stem, which is pushed downward till its point rests on the bottom of the recess or opening. The screw is then clamped on the stem, and the gage may be used for fixing a similar depth in another recess or opening.

What I claim is—

1. In a depth-gage, the combination, with a base plate having a slot or channel therein, of a tubular stem or handle, and a gage-stem composed of a cylindrical portion moving in the handle and a flat graduated portion lying in the channel in the base-plate, and a split tubular screw tapped into the end of the handle and having a beveled point engaging with a shoulder in the handle, substantially as described.

2. In a depth-gage, a base-plate having a central slot or channel and provided with a tubular handle, in combination with a stem having a flat graduated portion moving in the slot of the base-plate and a round portion moving in the tubular handle and clamped by a split tubular screw, substantially as described.

3. In a depth-gage, the combination, with the base-plate having a central channel and inclosed between plates having a tubular handle, of a stem having a round portion moving in said handle and a flat graduated portion moving in the slot of the base-plate, and a split tubular screw tapped into the end of the handle and having a beveled end engaging a shoulder in the handle, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM D. SPENCER.

Witnesses:
HENRY S. LEONARD,
ELIHU W. N. STARR.