

(No Model.)

S. W. WILCOX.
PLUMB BOB.

No. 584,803.

Patented June 22, 1897.

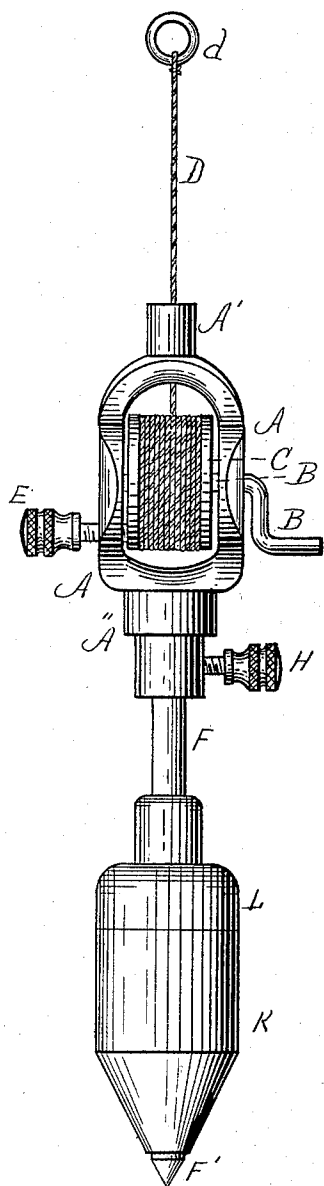


Fig. 1.

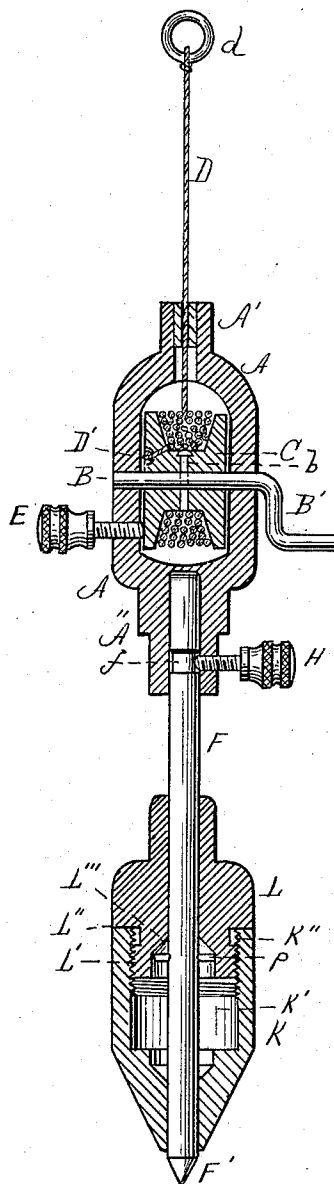


Fig. 2.

WITNESSES.

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SAMUEL W. WILCOX, OF MENDON, MASSACHUSETTS.

PLUMB-BOB.

SPECIFICATION forming part of Letters Patent No. 584,803, dated June 22, 1897.

Application filed February 6, 1897. Serial No. 622,296. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL W. WILCOX, a citizen of the United States, residing in Mendon, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Plumb-Bobs, of which the following is a specification.

This invention relates to an improved construction whereby the plumb-cord may be wound upon a reel, so as to prevent tangling or knotting, and may be unwound to any length desired and the reel held stationary at the desired point, and whereby the bob may be centered in any desired hole, countersunk or otherwise.

The nature of the invention in detail is fully described below and illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of my improved plumb-bob. Fig. 2 is a vertical section of the same.

Similar letters of reference indicate corresponding parts.

A represents a frame, preferably metallic, formed at its upper end into the centrally-perforated extension A' and at its lower end into the downward extension A". A horizontal shaft B has its bearings in this frame and extends therefrom into the crank B'. Fast on this shaft, by means of the pin b or equivalent construction, is the reel C, around which is wound the cord D. The inner end of this cord is secured to the reel by passing it through a suitable passage therein and knotting it at the outer end of said passage, as shown at D', Fig. 2. This cord extends from the reel up through the central perforation in the extension A' and is provided at its upper end with a suitable handle or ring a. A set-screw E extends through the frame B and is adapted to be set against the face of the reel in order to hold the latter in any desired position.

A spindle or rod F, pointed at its lower end at F', extends up through a suitable vertical opening in the extension A' and is held removably therein by a set-screw H, which extends through the extension A' into the groove f, formed in the spindle F. The bob is made in two parts—viz., the lower conoidal-shaped part K and the upper part L. The lower portion K is chambered out at K' and

internally screw-threaded at K'', and the upper portion L is externally screw-threaded at L' and is provided with an annular shoulder L'', which seats itself upon the upper end of the portion K when the portion L is screwed into it, as shown in Fig. 2. The portion L is chambered out at L''', and a pin P extends horizontally through the spindle F and into said chambered portion L'''. As the bob is bored to receive the spindle it is thus allowed to move up thereon until the pin P comes in contact with the lower wall of the chamber K'. Thus the point F' of the spindle can be dropped into an opening or hole and brought to the center thereof by the conoidal form of the lower end of the bob, the point of such spindle being allowed to reach to the bottom of the hole by the provision above described for relative vertical play between the bob and the spindle.

When the plumb-bob is not in use, the cord B is wound upon the reel C, and when the device is to be used the set-screw E is loosened and the cord allowed to be unwound to the desired extent, when the set-screw E is again tightened and the reel held stationary.

The spindle may be removed by loosening the set-screw H and the bob removed from the spindle by unscrewing the upper portion L. All the parts of this device are preferably made of metal.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a plumb-bob, a frame located above and independent of the plumb-bob proper; a reel supported by and turning in said frame and provided with a suitable cord extending up therefrom; the vertical spindle or rod F' adjustably secured within said frame and extending downward therefrom; and a plumb-bob secured to the lower end of said spindle beneath and independent of the frame and reel, said spindle extending entirely through the plumb-bob proper and projecting down below its lower end, substantially as described.

2. In a plumb-bob, the frame A provided with the vertically-perforated upward extension A', and the vertically-bored downward extension A''; the reel C supported in said frame and adapted to be operated by a crank; the cord D wound upon said reel and extending through the perforation in said upward

extension; the set-screw E extending through said frame against the reel; the vertical spindle or rod F extending downward from the bore in said downward extension; and a bob
5 supported by said spindle or rod, substantially as described.

3. In a plumb-bob, the frame A, A', A''; reel C supported thereby; the cord D wound upon said reel and extending up through said
10 frame; the spindle or rod F extending downward from the frame and provided with the pin P; the lower portion K of the bob cham-

bered out at K' and internally screw-threaded; and the upper portion L of the bob chambered out at L''' and externally screw-thread- 15 ed and thereby united with said lower portion, said portions K, L being bored to receive the spindle and adapted to move vertically thereon, substantially as set forth.

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Witnesses:

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