E. HOLMES.
Peg-Cutter.

No. 225,284. Patented Mar. 9, 1880.

FIG, 1

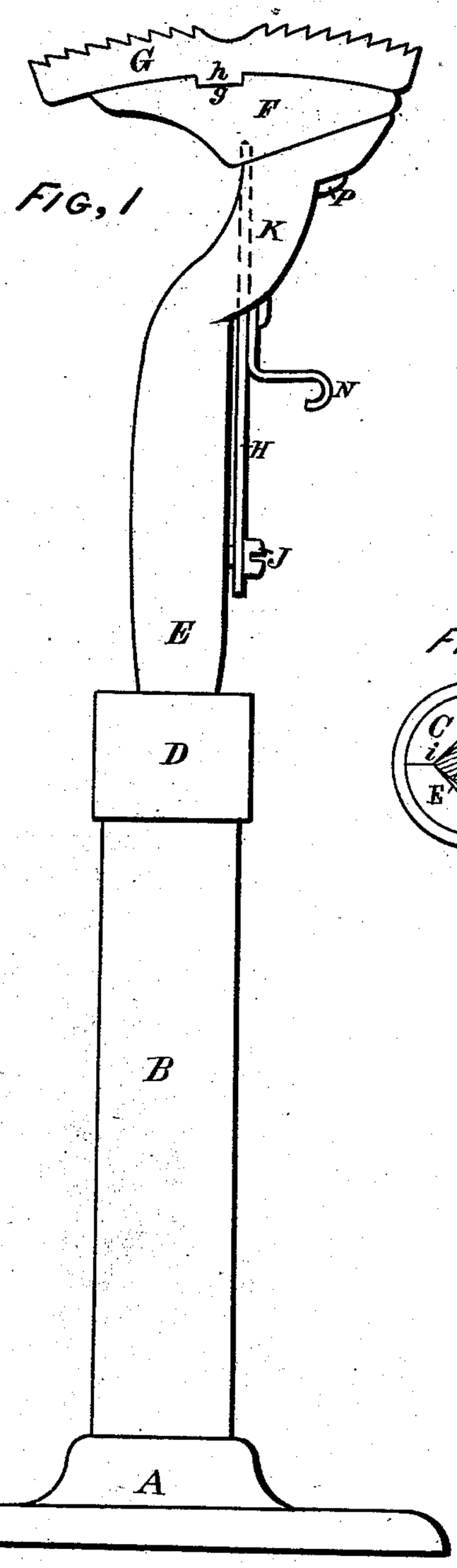
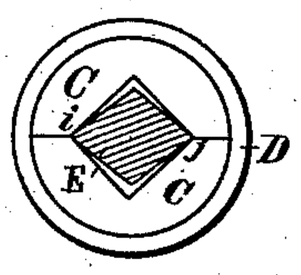
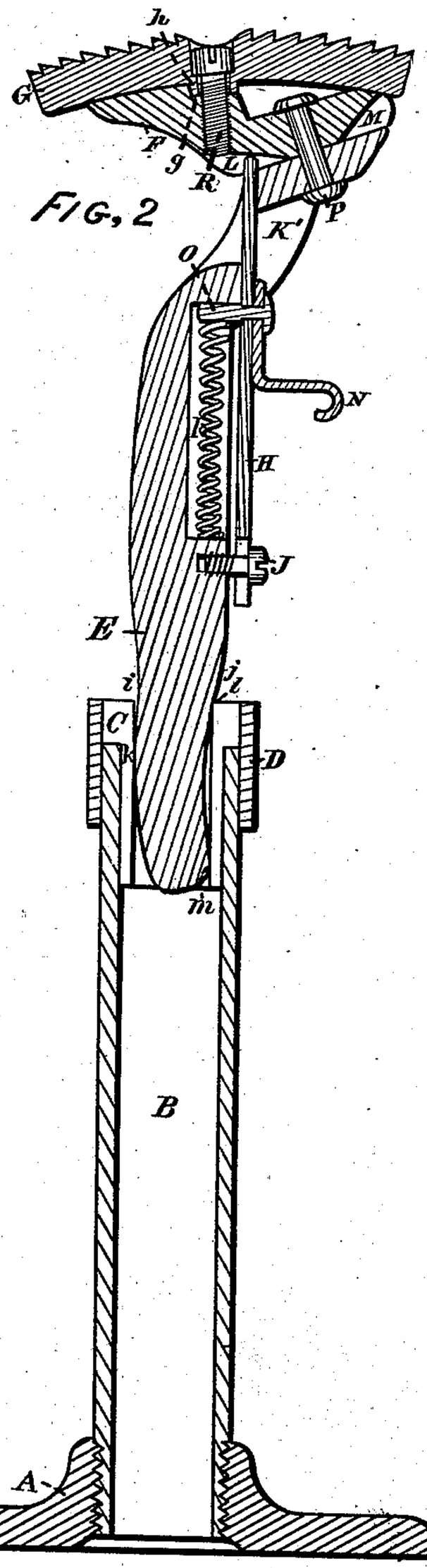


FIG. 3



FIG, 2



WITNESSES,
John T. Whitman
Ebew Hutchinson

INVENTOR,
Elijah Holmes,
By Eugene Humphrey,
his atty.

UNITED STATES PATENT OFFICE.

ELIJAH HOLMES, OF LYNN, MASSACHUSETTS.

PEG-CUTTER.

SPECIFICATION forming part of Letters Patent No. 225,284, dated March 9, 1880.

Application filed December 23, 1879.

To all whom it may concern:

Be it known that I, ELIJAH HOLMES, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Peg-Cutters, which invention is fully set forth in the following specification, reference being had to the accompanying drawings.

My invention relates to mechanism for cutting the projecting ends of pegs from the inside of boots and shoes, and known as a "counter peg-cutter;" and the invention consists in certain details of construction, arrangement, and combination of parts constituting such improved cutting implement, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of my improved peg-cutter. Fig. 2 is a central vertical section of the same. Fig. 3 is a plan of the socket and a cross-section of the insertible cutter-shank.

A is the horizontal circular base, designed to be screwed to the counter. B is a wrought-iron tubular standard, threaded at its lower end into a central hole in the base and supporting in its top a quadrilateral socket composed of two inserted parts, C C. These combined socket-pieces have a circular exterior, in part fitting the tubular standard and in part capping the same flush with its exterior surface, and filling a band or collar, D, which is placed around the top of the standard and socket, and the whole being heated and cooled, the collar is thereby shrunk thereon, giving additional strength and security to the parts when so combined. The standard thus constituted is light, strong, and cheaply constructed and convenient in use. A detachable shank, E, is inserted in said socket. This shank supports the swivel-bed F, on which the curved peg-cutter G is mounted. Said shank also carries a vertical locking-slide, H, actuated by a spring, I, placed in a recess or cavity formed in the body of said shank. Said slide is slotted at its lower end, through which a screw, J, is threaded into the shank, and serves as a support and guide to that end of the slide, the upper end of the slide being supported and guided by the curved walls K K′ of the upper part of shank E, between which said slide operates to enter a slot, L or M, in said swivel-bed F, to secure it in the position shown, or its reverse. Said slide H is also provided with and carries a thumb or finger rest, N, for depressing the slide to release the swivel-bed. The rest is attached to the slide by a rivet, which forms a part of the spring-depressor O, against which the spring I reacts to throw said slide upward into locking contact with the swivel-bed when said bed is turned on its pivot P, to bring the cutter G into place to be operated either in the heel or toe of the shoe, as may be required. Said swivel-bed is transversely grooved on its upper side at *g*, and the curved cutter-plate has formed on its back a corresponding transverse rib, *h*, which fits said groove and serves the important purpose of giving greater strength and durability to the peg-cutter by re-enforcing the coupling-screw R and relieving the same from lateral or torsional strain when the cutter is in use, this method of re-enforcing the coupling-screw being cheaper and much more effective than the usual mode of employing additional screws, involving extra drilling and tapping, or the employment of dowel-pins.

Another novel and useful feature is contained in the peculiar construction of the socket end of shank E. A cross-section of this portion of the shank, Fig. 3, is lozenge-shaped, or rhombic, the body of the shank tapers toward the end, and the corner lines of its acute angles *i j* are curved, as shown, Fig. 2, thereby securing contact with the interior of the socket, when seated therein, at three bearing-points, *k l m*, the form of its angular body being such that two of its angles are greater and two less than the angles of the socket wherein it is inserted.

Whatever dust passes into the socket falls through the hollow standard and base without clogging or interfering with the seating of the shank therein, which shank, constructed as described, always finds a ready and firm seat in the socket, whatever the relative position of its sides to those of the socket may be.

Standards which are solid below the socket require to be frequently detached from the counter and inverted to clear them of accumulated dust. The hollow standard or dust-depository described obviates the necessity of such frequent removal from the counter.

A cutter mounted upon a swivel-bed and locked in position on the shank is not new.

What I claim is—

1. In combination with the swivel-head F, having a horizontal movement, and its supporting-shank E, the locking-slide H, formed or provided with a finger-rest, N, and a spring-depressor, O, the spring I, and guide J, all constructed and arranged to operate together and relatively to each other substantially as and for the purposes specified.

2. In combination, a quadrilateral socket, C, and an insertible shank or bar, E, the latter being formed with two of angles greater and two less than the angles of the socket, and the body thereof tapered and curved, as described, whereby the shank, when inserted in the socket, will firmly seat itself therein upon three bearing-points, *k l m*, substantially as and for the purposes specified.

3. In a peg-cutter, a tubular standard, B, mounted upon a horizontal base, A, and having an inserted quadrilateral socket, C, all substantially as and for the purposes specified.

4. In a peg-cutter, the tubular standard B, threaded into the cast base A, the divided socket C C, inserted in the tube, and the encircling band D, all constructed, combined, and arranged to operate together as an upholding cutter-support, substantially as specified.

ELIJAH HOLMES.

Witnesses:
EUGENE HUMPHREY,
EBEN HUTCHINSON.