

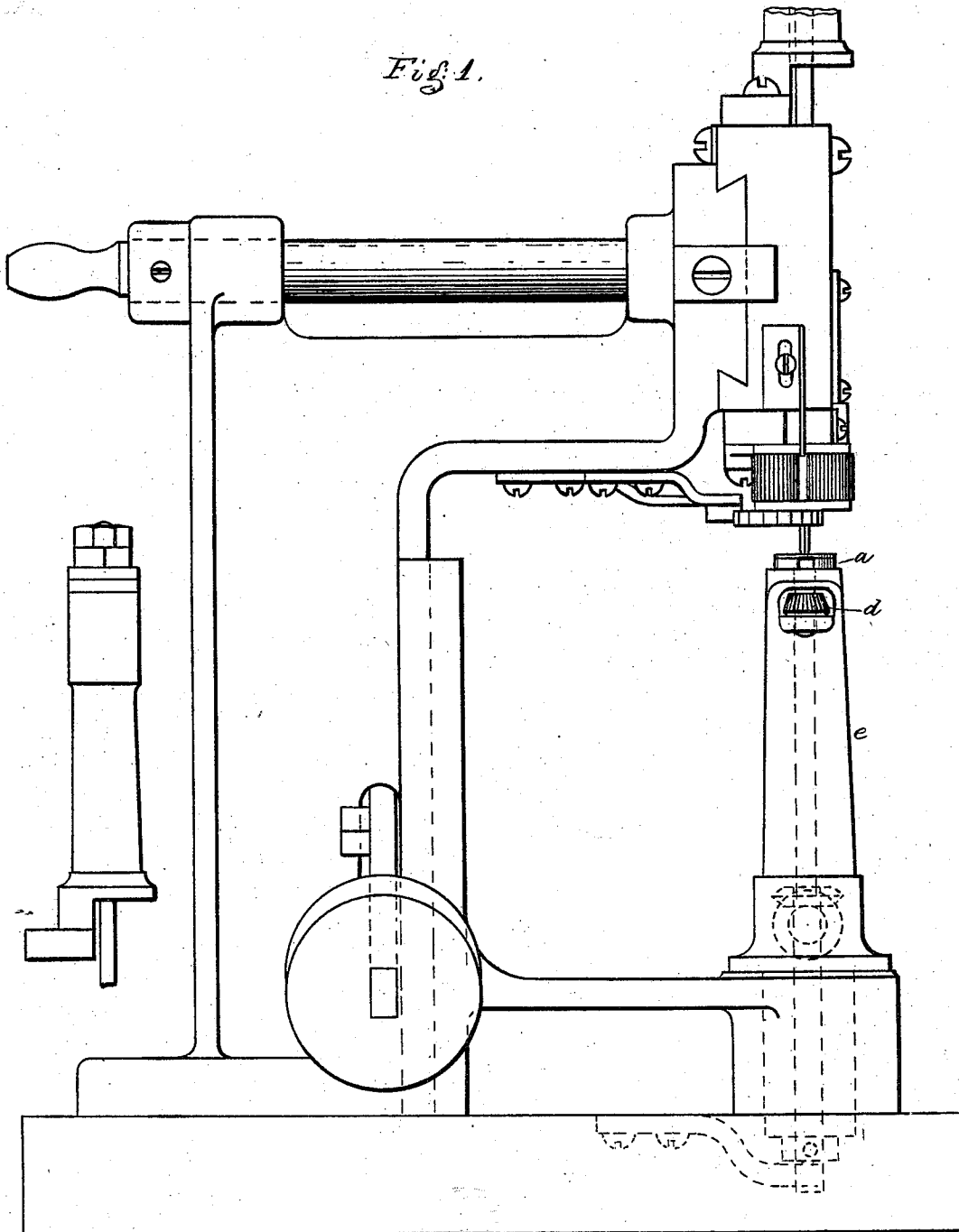
B. F. STURTEVANT & J. E. BICKFORD.

PEGGING-MACHINE FOR BOOTS AND SHOES.

No. 173,428.

Patented Feb. 15, 1876.

Fig. 1.



WITNESSES,
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W. J. Pratt.

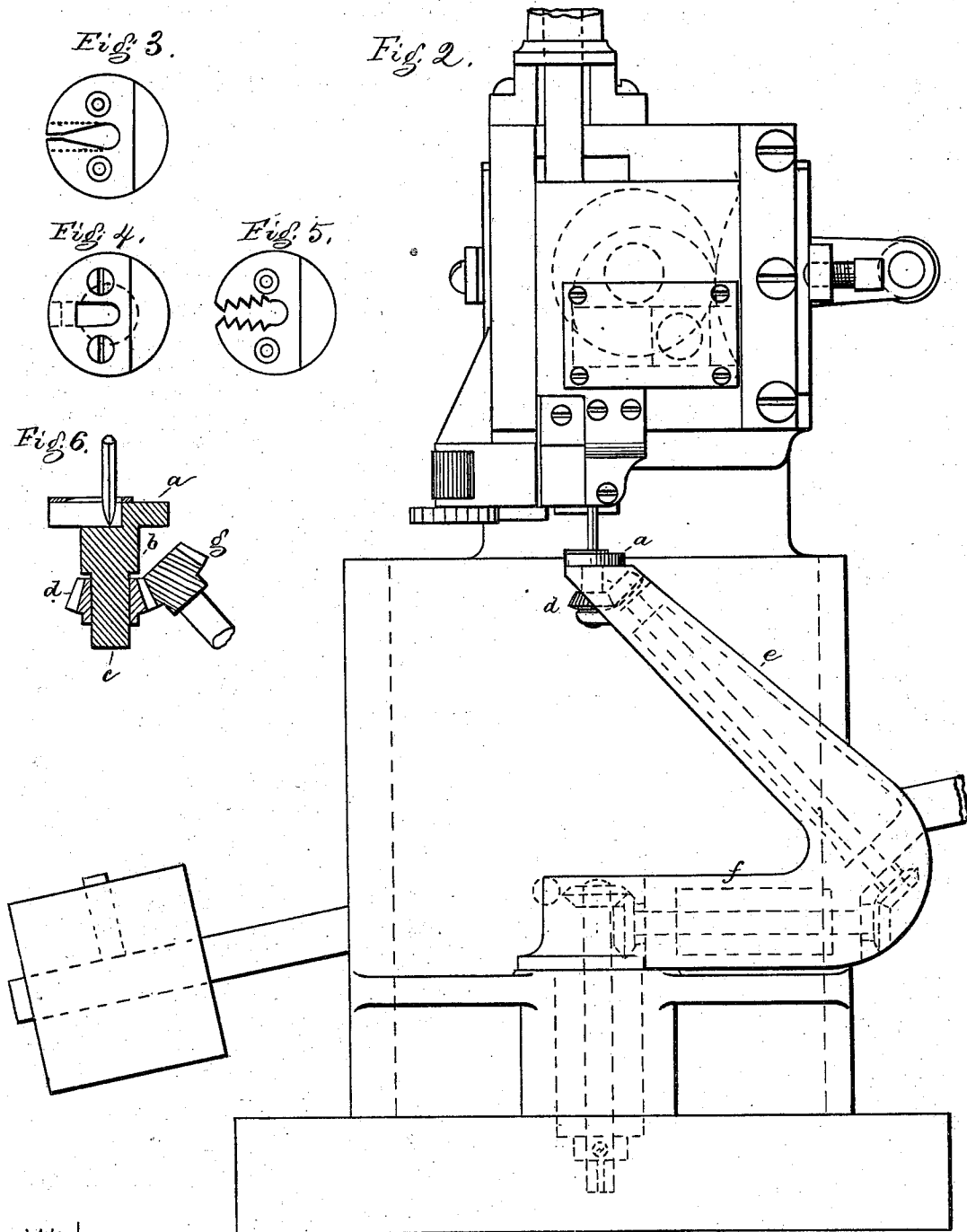
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PEGGING-MACHINE FOR BOOTS AND SHOES.

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L. H. Bratton.
W. J. Pratt.

Inventors.

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UNITED STATES PATENT OFFICE.

BENJAMIN F. STURTEVANT AND JOHN E. BICKFORD, OF BOSTON, MASS.,
ASSIGNORS TO SAID STURTEVANT.

IMPROVEMENT IN PEGGING-MACHINES FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. 173,428, dated February 15, 1876; application filed
January 21, 1876.

To all whom it may concern:

Be it known that we, BENJAMIN F. STURTEVANT and JOHN E. BICKFORD, of Boston, county of Suffolk and State of Massachusetts, have invented an Improvement in Pegging-Machines, of which the following is a specification:

This invention has reference to devices, for use in connection with a rotating horn, which permit the employment of the awl which makes the perforations in the sole for reception of the pegs as the implement for feeding the boot or shoe upon the horn to determine the distance apart of the pegs.

In such an organization we make use of a cap resting on, and pivoting in, the horn-tip, and combine with said cap mechanism which holds the cap from rotating with the horn as it is turned under, and with reference to, the pegging mechanism, to admit of continuing the pegging operation around the toe and heel. This combination is needed because the awl descends in the center line of the cap, and then moves forward a distance equal to the distance apart of the centers of the pegs; hence, in the cap must be made a slot for the traverse of the awl-point projecting through the leather, and this slot must be maintained in the path of the feeding movement of the awl. Moreover, if the peg-points protruding through the leather are not cut off the said slot must be continued to and through the periphery of the cap, to let the peg-points pass as the work is fed over the cap on the horn end.

In the drawing which forms part of this specification, the pegging-machine head shown is one well known to the public as the "Varney Pegger," which, having been patented, will not be described or referred to otherwise herein than incidentally.

The arrangement for raising and lowering the horn shown in the drawing is identical with what is shown in an application by us now pending before the Patent Office, and, hence, will not be herein described.

Figure 1 of the drawing is a side elevation of a pegging-machine provided with a rotating horn embodying our invention. Fig. 2 is

a front view of the same. Figs. 3, 4, and 5 are plans of the cap on the horn end variously modified; and Fig. 6 is a central vertical section taken through the cap.

The cap *a* is made with a pivot or shaft, which, at *b*, fits in a vertical bearing made in the horn end, the part *c* receiving the bevel-gear *d*, which is nearly, or quite, contained in, and protected by, the horn end. The inclined arm *e* and the horizontal arm *f* of the horn are fitted to receive and retain in proper bearings the inclined and horizontal shafts, (shown in dotted lines, Fig. 2,) while concentric with the axis of rotation of the horn there is fixed a vertical shaft, (also shown in dotted lines,) which does not rotate; and on said shafts are fixed bevel-gears, meshing into each other, as shown, the meshing pairs having the same number of teeth, and the gear *g* on the upper end of the inclined shaft meshing into the gear *d* on the cap-shaft, gears *g* and *d* having the same number of teeth.

By the connection, through gears and shafts, as shown and described, of the cap *a* with the fixed gear on the vertical shaft, it will be obvious that the cap will be held from rotation with the horn, and that the slot cut in the cap for reception of the awl-point and peg-points, and for the traverse movement of said points, will remain, practically, fixed with reference to the direction of the feed movement given to the sole.

In Figs. 3, 4, and 5 the cap is shown as surmounted with movable plates of steel, designed to operate as cutters, which are interchangeable for others as they become worn, dulled, or broken.

In Fig. 6 the central opening is shown as elongated into a radial slot, which slot is adjusted, through adjustments of the gearing described, so as to be in line with the feed movement given to the sole.

The cutter shown in Fig. 3 would crease and weaken the peg-points as, by the feed given to the sole, they passed between the converging blades, so that, by action of a peg-float or hand peg-cutter, they would break off smooth with the inner surface of the inner sole.

In Fig. 5 the cutter is like that shown in

Fig. 3, except, only, that its cutting-edges are serrated, and by it the peg ends are creased, so that they can be easily broken off.

Fig. 4 shows a cutter by which the peg ends are cut or broken entirely off in the act of feeding the work along on the horn.

If it is not desirable to cut or weaken the projecting peg ends, then the cutter-plate can be taken off, and the driven peg ends will project into, and will pass out of, the slot or channel cut in the cap *a*. (Seen in dotted lines in Fig. 3.)

With the Varney pegger-head the peg-hole is made in one location, and the peg is driven in another; but with some forms of pegger-heads the awl and peg-driver act in the same line by offset or lateral movements of both, in which case a surface-feed is used.

With our invention herein shown any known practical form of pegger-head having the following instrumentalities may be used: a surface for resisting the upward thrust, an edge-gage, an awl and peg-driver, and mechanism for properly operating them, a peg-feeder, and a cutter of pegs from peg-strips, and mechan-

ism for properly operating them, and a mechanism for feeding the soles over the horn end.

We claim—

1. The combination, with the horn of a pegging-machine, of the slotted or grooved cap, held against the rotation of the horn by means substantially as described.

2. The combination, with the feeding device for moving the shoe, of a stationary cutter, attached to the horn, and against which the ends of the pegs are borne and cut as the shoe is being pegged, substantially as described.

3. A pegging-machine horn having at top a slotted passage for the reception of the awl and peg, and out of which the pegs pass by the feed movement of the shoe, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

BENJ. F. STURTEVANT.

JOHN E. BICKFORD.

Witnesses:

G. W. GREGORY,

S. B. KIDDER.