G. S. HEATON.

Machine for Making Box-Toes for Boots and Shoes.

No. 162,381. Patented April 20, 1875.

Fig. 1.

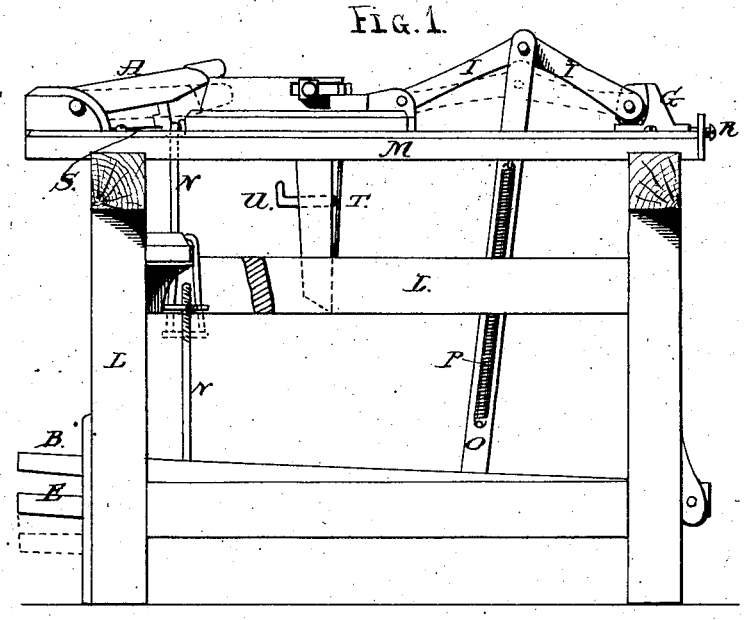
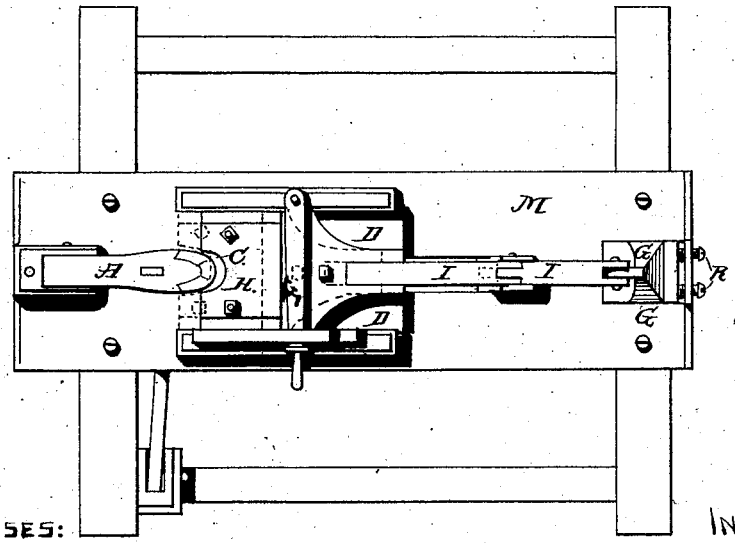


Fig. 2.



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GEORGE S. HEATON, OF PORTSMOUTH, NEW HAMPSHIRE.

IMPROVEMENT IN MACHINES FOR MAKING BOX-TOES FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **162,381**, dated April 20, 1875; application filed February 15, 1875.

To all whom it may concern:

Be it known that I, GEO. S. HEATON, of Portsmouth, Rockingham county, in the State of New Hampshire, have invented an Improvement in Machines for Making Box-Toes for Boots and Shoes; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings forming part of this specification.

The nature or essence of my invention consists in certain combinations of devices in machines for making box-toes for boots and shoes, which will be fully understood by the following description.

In the accompanying drawings, Figure 1 is a vertical section of my improved machine for making box-toes. Fig. 2 is a top view of the same.

Upon a suitable frame, L, is placed a table, M, to which a last, A, is pivoted at the heel, so the toe may vibrate up and down, as indicated by dotted lines, Fig. 1. This last A is connected with treadle B by means of rod N, so as to be brought down with necessary force in molding the leather for the box-toe. A plate-spring S, Fig. 1, raises the last from the mold as soon as the treadle B is relieved from pressure of the foot. The slide or carriage D is provided with a cap-plate, H, which extends forward so as to cover part of the mold C. This slide is moved forward by means of the elbow-lever J, and the plate H bends the leather over the top of the last, as shown in Fig. 2. After the toe is molded, the slide D is carried back by means of the hand-lever F. A small plate-spring, T, pushes the slide or carriage D gently forward. The tension of this spring is made adjustable by means of the set-screw U, and thus the slide D is always made to work up to the last A in proper manner. Two springs, P, serve to draw back the slide D, by raising the elbow-lever as soon as the pressure of the foot is withdrawn from the lever E. On the rear of the table M is a movable block, G, made adjustable by set-screws R, for the purpose of adjusting the stroke of the lever I, and the motion of the carriage D and sliding plate H, at pleasure, to suit the style of box to be made.

The piece of leather, being cut in suitable shape for making a box, is placed upon the top of the mold C, when the last A is brought down by means of the treadle B, moved by the foot. Then the carriage D and sliding plate H are moved forward, as seen in dotted lines in Fig. 2, by means of the foot-lever E, thus completing the shape of the box-toe, as represented in Fig. 2. The carriage D is moved back by the hand lever, Fig. 2, and then the box may be removed from the last.

Having described my invention, I claim—

1. The carriage D, provided with the cap-plate H, in combination with the elbow-lever I, foot-lever E, hand-lever F, and spring T, all substantially as and for the purpose set forth.

2. The adjustable block G, in combination with the elbow-lever I, carriage D, and spring T, for adapting the machine to mold different styles of box-toes, substantially as set forth.

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