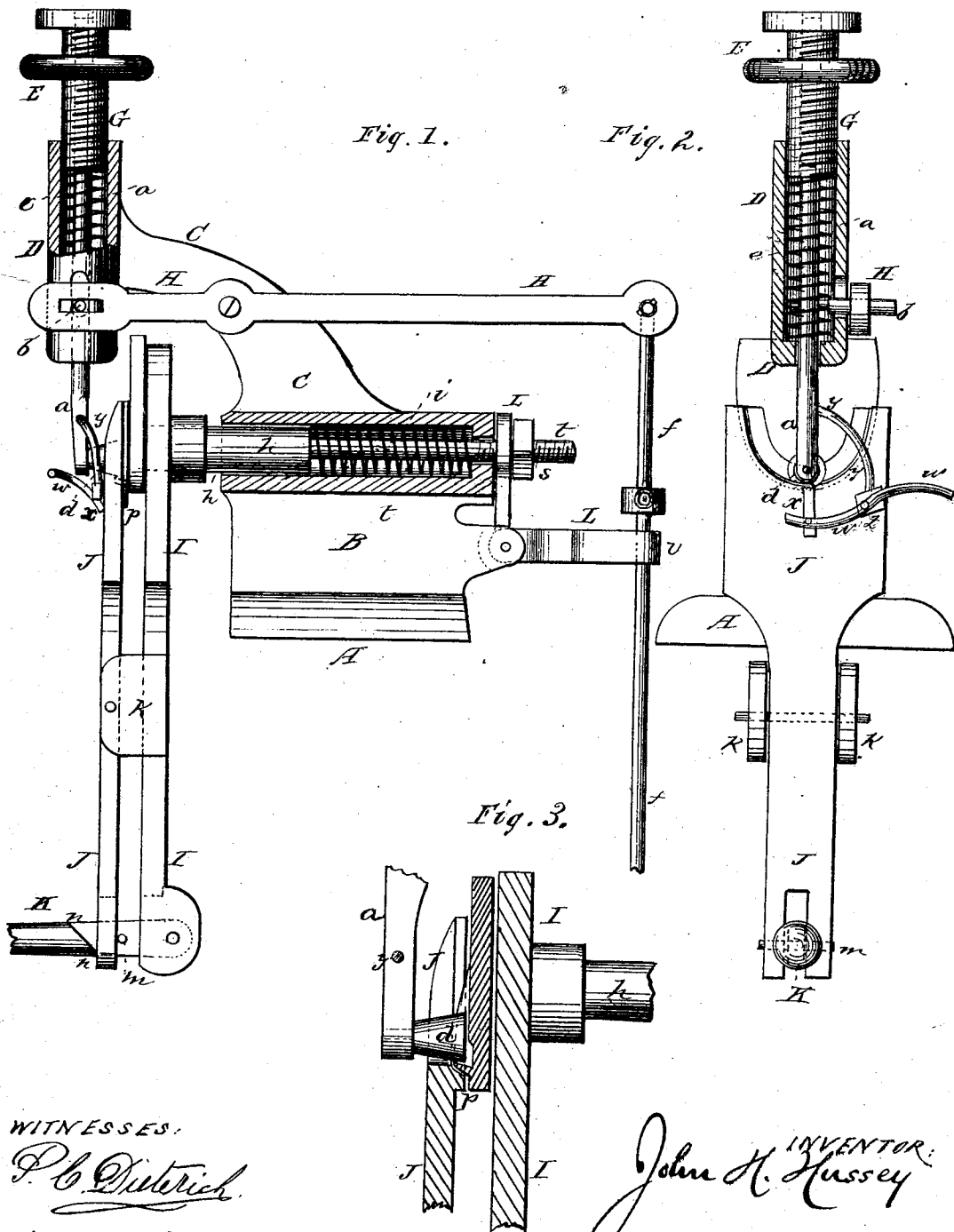


J. H. HUSSEY.
Machinery for Forming Shoe-Tips.

No. 159,181.

Patented Jan. 26, 1875.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN H. HUSSEY, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF HIS RIGHT TO ADLER, CLEMENT & WEIL, OF SAME PLACE.

IMPROVEMENT IN MACHINERY FOR FORMING SHOE-TIPS.

Specification forming part of Letters Patent No. **159,181**, dated January 26, 1875; application filed January 12, 1875.

To all whom it may concern:

Be it known that I, JOHN H. HUSSEY, of Baltimore, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Machines for Forming Shoe-Tips; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a machine for forming the tips on shoe-soles after the soles have been channeled by the ordinary channeling-machines, as will be hereinafter more fully set forth.

In the accompanying drawing, A represents the bed of my machine, to be secured to a table, bench, or other convenient place, said bed being formed with a standard, B, from which projects a curved arm, C, having, at its upper front end a vertical tubular socket, D, as shown. Through the socket D passes a rod or shaft, *a*, provided on one side with a pin or arm, *b*, which projects through a vertical slot in the side of the socket D. The lower end of the rod or shaft *a* is flattened, and at the extreme lower end is attached a cone, *d*, on the side toward the standard B, the apex of the cone being against the shaft. The shaft is forced downward by means of a spring, *e*, surrounding the same within the socket D, and the tension or force of this spring is regulated by means of a hollow screw, G, with jam-nut E inserted in the upper end of the socket. The arm *b* of the shaft *a* passes through a slot in the front end of a lever, H, which is pivoted to the side of the arm C, and the rear end of which is, by a rod, *f*, connected with a treadle underneath. In the standard B is formed a horizontal tube for the reception of a shaft or plunger, *h*, which is forced forward by means of a spring, *i*, within said tube. On the front end of the plunger *h* is secured a plate, I, which forms one jaw of the clamp for holding the sole. Between pro-

jections *k* on the plate I is pivoted another plate or jaw, J. The lower ends of both plates are forked, and in that of the plate I is pivoted a lever, K, which is provided with a pin, *m*, to pass in on the inner side of the lower end of the plate J when the lever is turned downward to stand in a horizontal direction, thereby bringing the upper end of the plate J against the plate I. The forked end of the plate J straddles the lever K between the pin *m* and shoulders *n n* formed on the lever, so that when the lever is turned down the clamp is actually locked. The upper end of the plate or jaw J is cut concave, in the form of the tip desired, and the edge is beveled to correspond with the inclination of the cone *d*. On the inner side of the plate J is a curved flange, *p*, as far below the beveled concave edge as the distance desired between the edge of the sole and the tip. From the rear end of the plunger *h* projects a screw-rod, *t*, which passes through one end of an elbow-lever, L, pivoted to the back of the standard, and a nut, *s*, is placed on the screw-rod *t* for said lever to work against. The other end of the lever L is slotted, and through the same passes the treadle-rod *f*, upon which is an adjustable collar, *v*, as shown. By pressing down upon the treadle the lever H will raise the shaft *a*, and at the same time, by means of the collar *v*, lever L, and nut *s*, the plunger *h* will be drawn back. This leaves ample room for the insertion of the sole in the clamp formed of the plates I J. The sole, having already been channeled, is placed with the toe resting on the flange *p*, and fastened by the lever K, as described. The foot is now removed from the treadle, when the clamp will move forward and the shaft *a* downward, in such relation to each other that the cone *d* will pass under tip into the channel, and raise the tip against the beveled edge of the jaw J. The clamp, with the sole, is now turned, as on a pivot, by the aid of the lever K as a handle, thereby causing the cone *d* to raise and form the whole tip. The edge of the tip is, at the same time, cut and trimmed by a knife, *x*, attached to a lever, *w*, which is pivoted to a swivel-joint, *z*, on an arm, *y*, projecting from the shaft *a*.

For different sizes of boots and shoes different plates or jaws J must be used.

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

1. The combination of the cone *d* and concave beveled jaw J, for raising and forming tips on soles, substantially as herein set forth.

2. The combination of the shaft *a* with cone *d*, spring *e*, regulating-screw G, and jam-nut E, for the purposes herein set forth.

3. The combination of the clamp I J, plunger *h*, and spring *i*, as and for the purposes herein set forth.

4. The jaw J, provided with concave beveled edge, and flange *p*, in combination with

the plate or jaw I and lever K, all substantially as and for the purposes herein set forth.

5. The combination, with the shaft *a* and plunger *h*, of the levers H L and treadle-rod *f*, with the adjustable collar *v*, substantially as and for the purposes herein set forth.

6. The combination of the shaft *a*, arm *y*, swivel-joint *z*, lever *w*, and knife *x*, for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

J. H. HUSSEY.

Witnesses:

L. H. WIEMAN,
L. D. MILLER.