

J. W. HATCH.  
Lasting Boots and Shoes.

No. 205,745.

Patented July 9, 1878.

Fig:1.

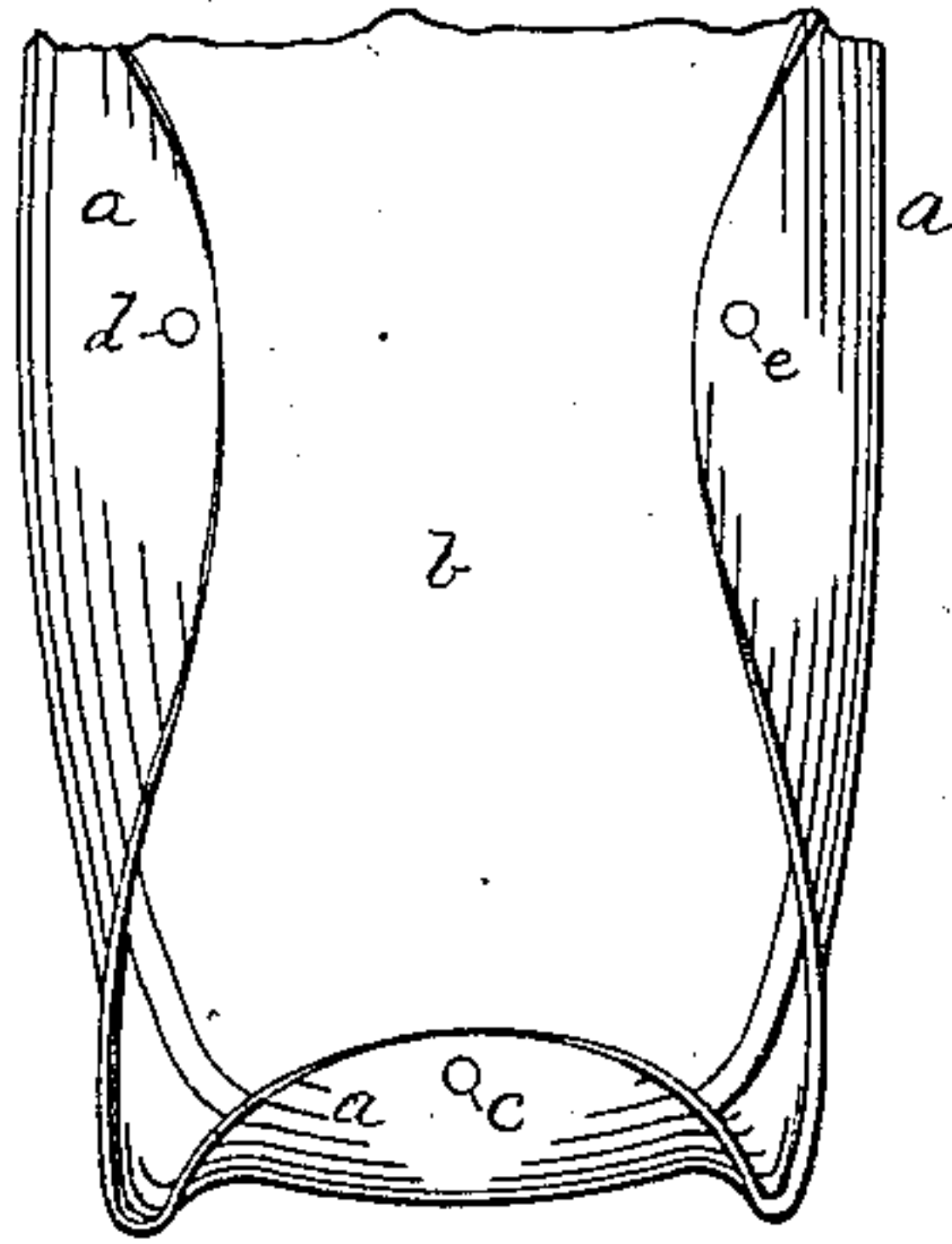


Fig:2.

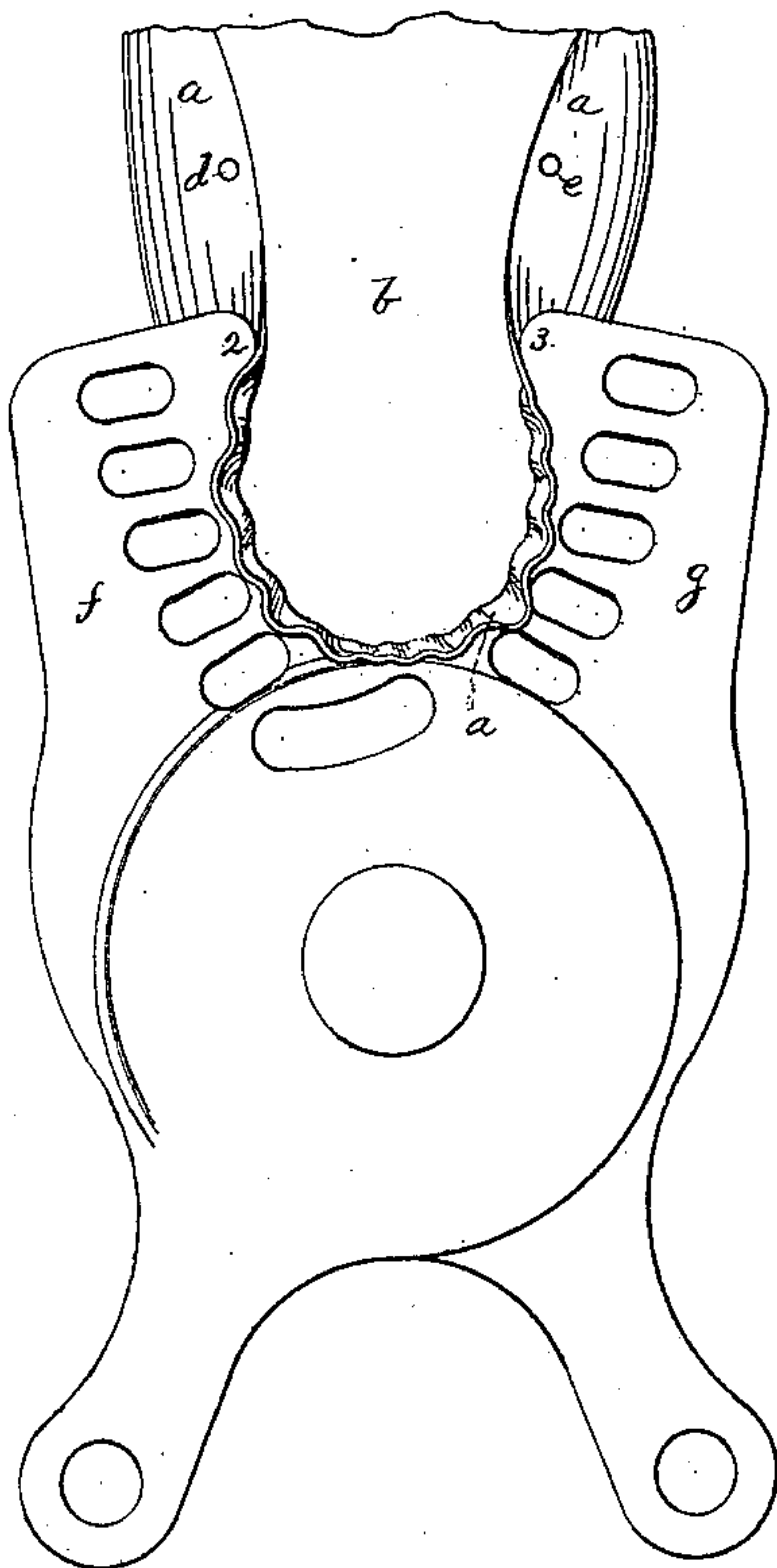
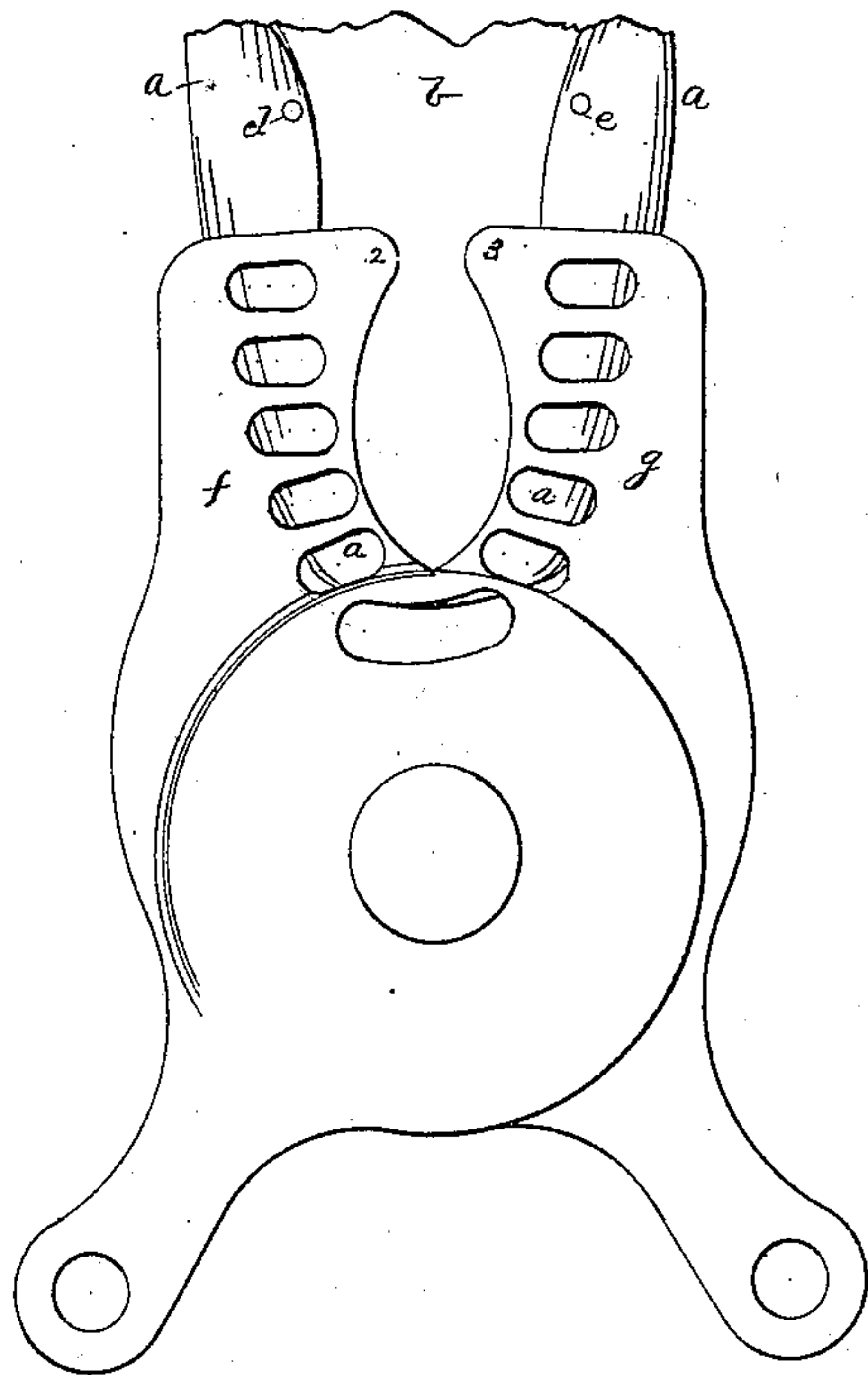


Fig:3.



Witnesses.

L. O. Connor.  
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# UNITED STATES PATENT OFFICE.

JESSE W. HATCH, OF ROCHESTER, NEW YORK.

## IMPROVEMENT IN LASTING BOOTS AND SHOES.

Specification forming part of Letters Patent No. 205,745, dated July 9, 1878; application filed May 27, 1878.

*To all whom it may concern:*

Be it known that I, JESSE W. HATCH, of Rochester, county of Monroe, State of New York, have invented an Improvement in Method of Lasting Boots and Shoes, of which the following is a specification:

This invention relates to an improvement in method of lasting boots and shoes.

Figure 1 represents, in bottom view, the toe of a boot or shoe with the upper tacked to the inner sole at each side of the ball of the foot; Fig. 2, a bottom view of the toe of a shoe, with crimping-jaws rested thereon, so as to press the upper upon the edge of the inner sole, and with the edge of the upper ruffled and turned up within the edge of the crimping-jaws; and Fig. 3, a bottom view of the toe of a shoe, the crimping-jaws having been closed to plait or lay the edge of the upper smoothly over upon the inner sole at the toe.

In my process, as is usual, the upper *a* is secured to the inner sole *b* at the toe by a tack, *c*, or otherwise, and at each side the ball of the sole by tacks *d e*, they retaining the upper in proper position to be lasted evenly. This done, the boot or shoe is placed in a lasting-machine provided with crimping-jaws *f g*, substantially such as described in United States Letters Patent No. 193,446, and such jaws are made to rest with their inner edges or a portion thereof upon the upper at the edge of the inner sole, and then, by ordinary hand-operated lasting-pinchers, the edge of the upper is seized and pulled sufficiently to draw said edge toward the center line of the inner sole, working around the toe from the end or corner 2 of one jaw to the edge or corner 3 of the other, the tack *c* during such operation being withdrawn. The upper, below the jaws, being drawn in this way snugly against the last all about the toe and ball portion of the last, is turned upward, ruffled evenly, and retained in such position by the pressure of the jaws upon it above and the inner sole below, all as in Fig. 2.

Drawing or pulling the edge of the upper over toward the central portion of the inner sole while said upper is held by the crimping-jaws or other well-known toe-crimping devices, (they operating to retain the upper in firm contact with the inner sole, thereby preventing the upper from slipping back,) and

ruffling the edges of the upper inside the jaws, preparatory to crowding said edges over smoothly and evenly upon the inner sole by the forward and closing movement of the jaws in position to be tacked or fastened, constitutes the novel step of the method herein described, such step enabling the upper to be drawn firmly and snugly against the last all about the toe at front and sides before the jaws operate to lay the edges of the upper in position to be tacked, the jaws, in their final closing movement from the position shown in Fig. 2 to that in Fig. 3, drawing and fitting the upper yet closer upon and stretching it about the toe of the last, and crimping it evenly without any large bunches.

When lasting boots or shoes of heavy or strong material, or where it is desired to strain the upper quite hard about the last as the jaws close over the inner sole, the ruffled portion of the upper, turned up, as before described, in front of the jaws, is held by hand up against the edge of the jaws as they close and move over the inner sole.

The pressure of the jaws upon the material may be regulated, as desired, according to the class of material of which the upper is composed, by means of screws or other proper adjusting devices commonly employed with the said jaws. As the material is drawn under the jaws by the pinchers the downward pressure of the jaws may be, and oftentimes will be, relaxed momentarily.

I claim—

That improvement in the method of lasting the toe of a boot or shoe which consists in holding the edge of the upper down upon the inner sole by toe-crimping jaws, then drawing and ruffling the edge thus held by hand-operated devices, and finally, by said jaws, crowding such ruffled edge held up in front of the jaws, as described, over upon the inner sole toward the central portion of the toe of the inner sole, all substantially as and for the purpose stated.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JESSE W. HATCH.

Witnesses:

G. W. GREGORY,  
N. E. WHITNEY.