

(No Model.)

A. F. PRESTON.
LASTING PINCERS.

No. 585,940

Patented July 6, 1897.

FIG. 1.

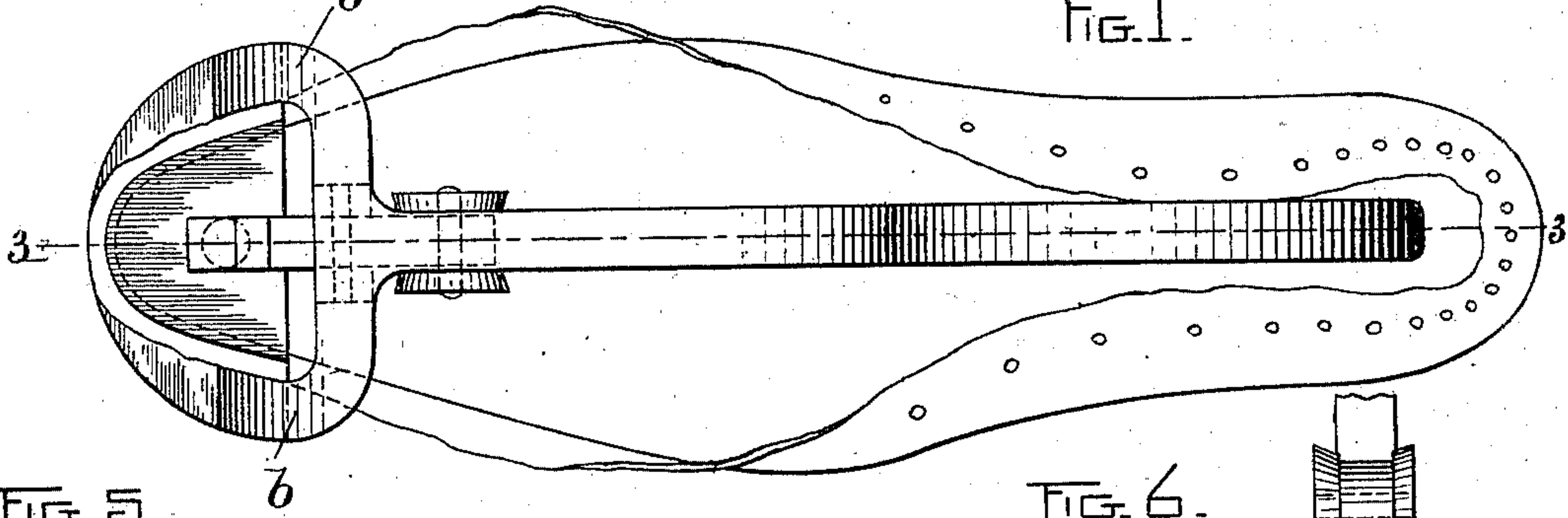


FIG. 5.

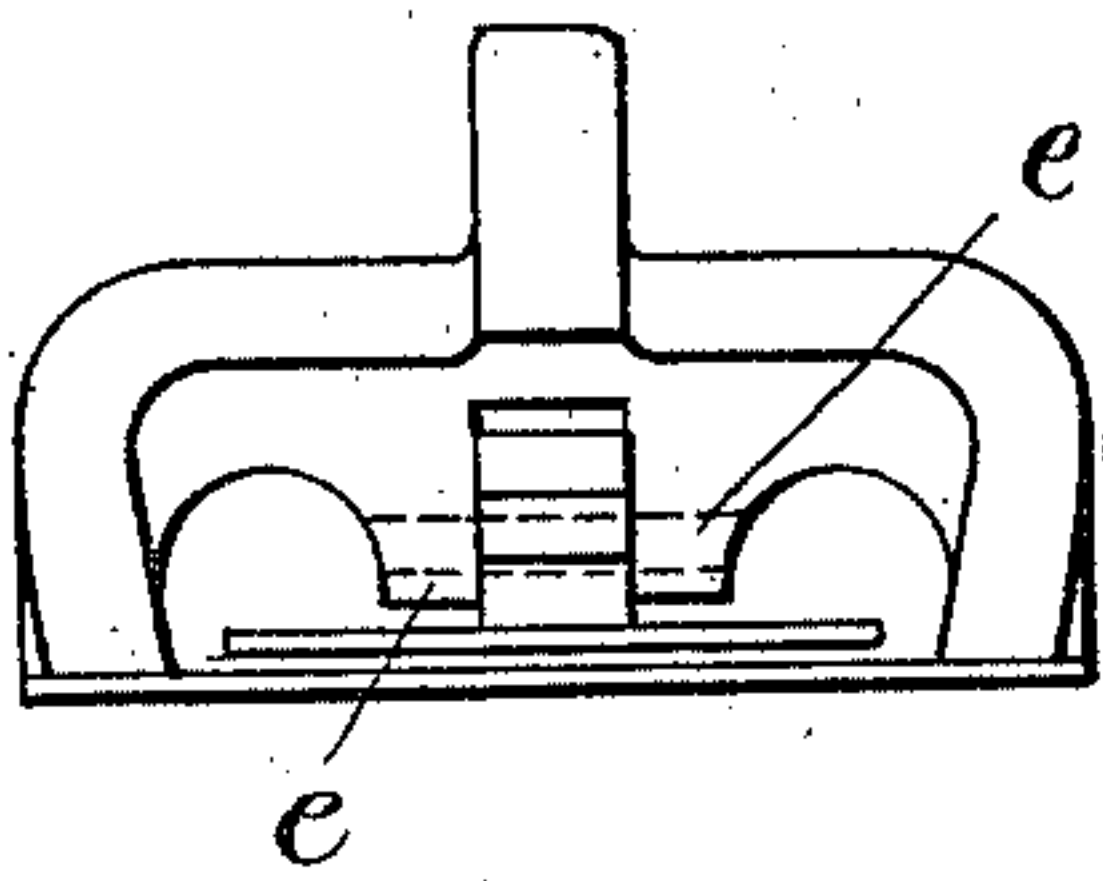


FIG. 6.

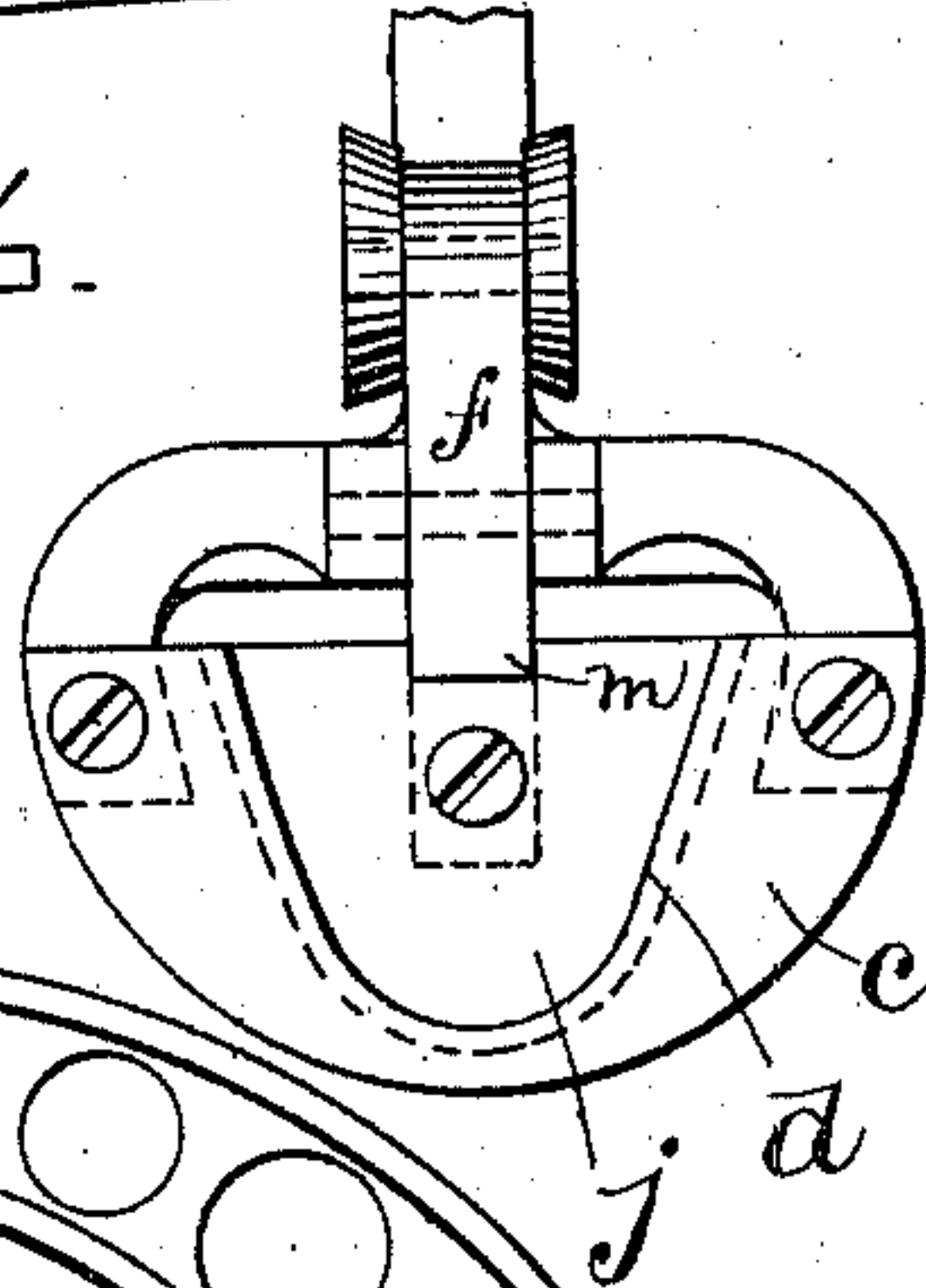


FIG. 2.

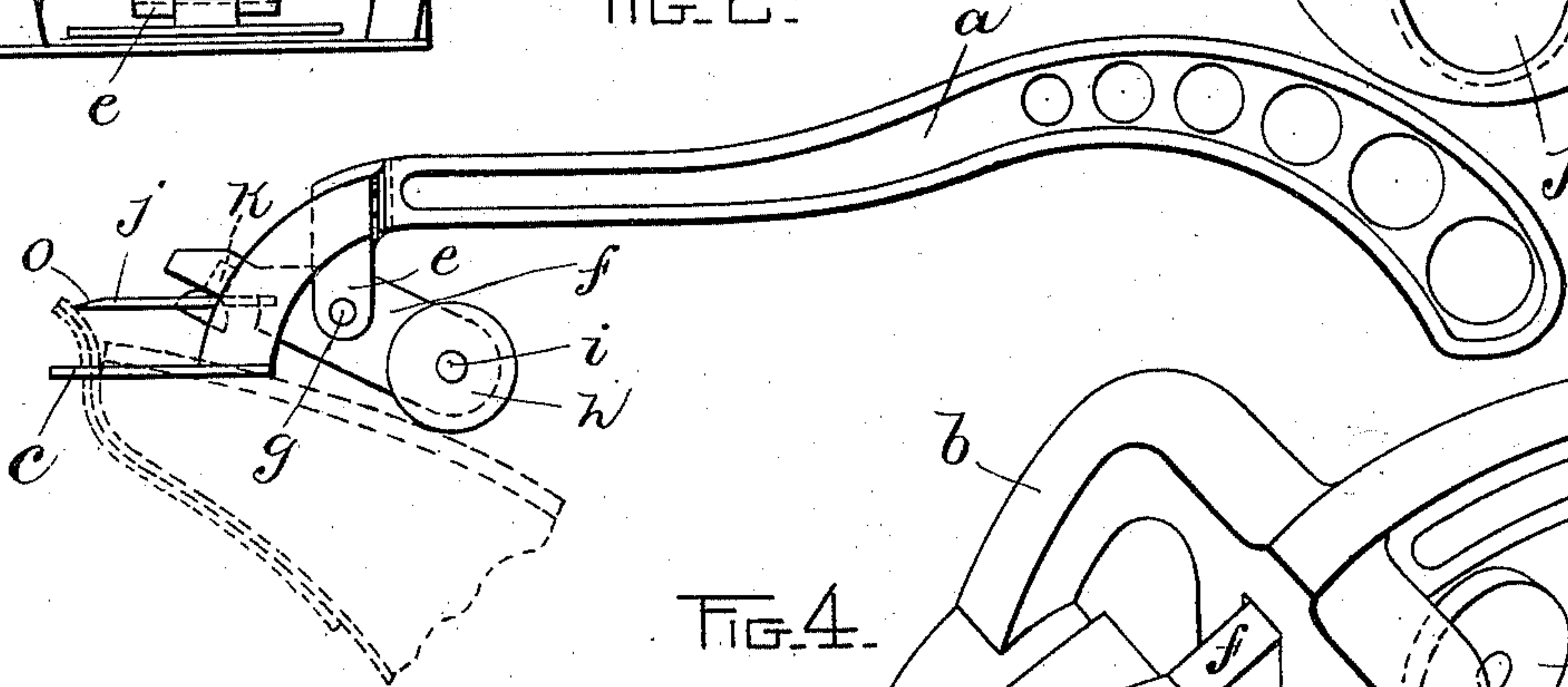


FIG. 4.

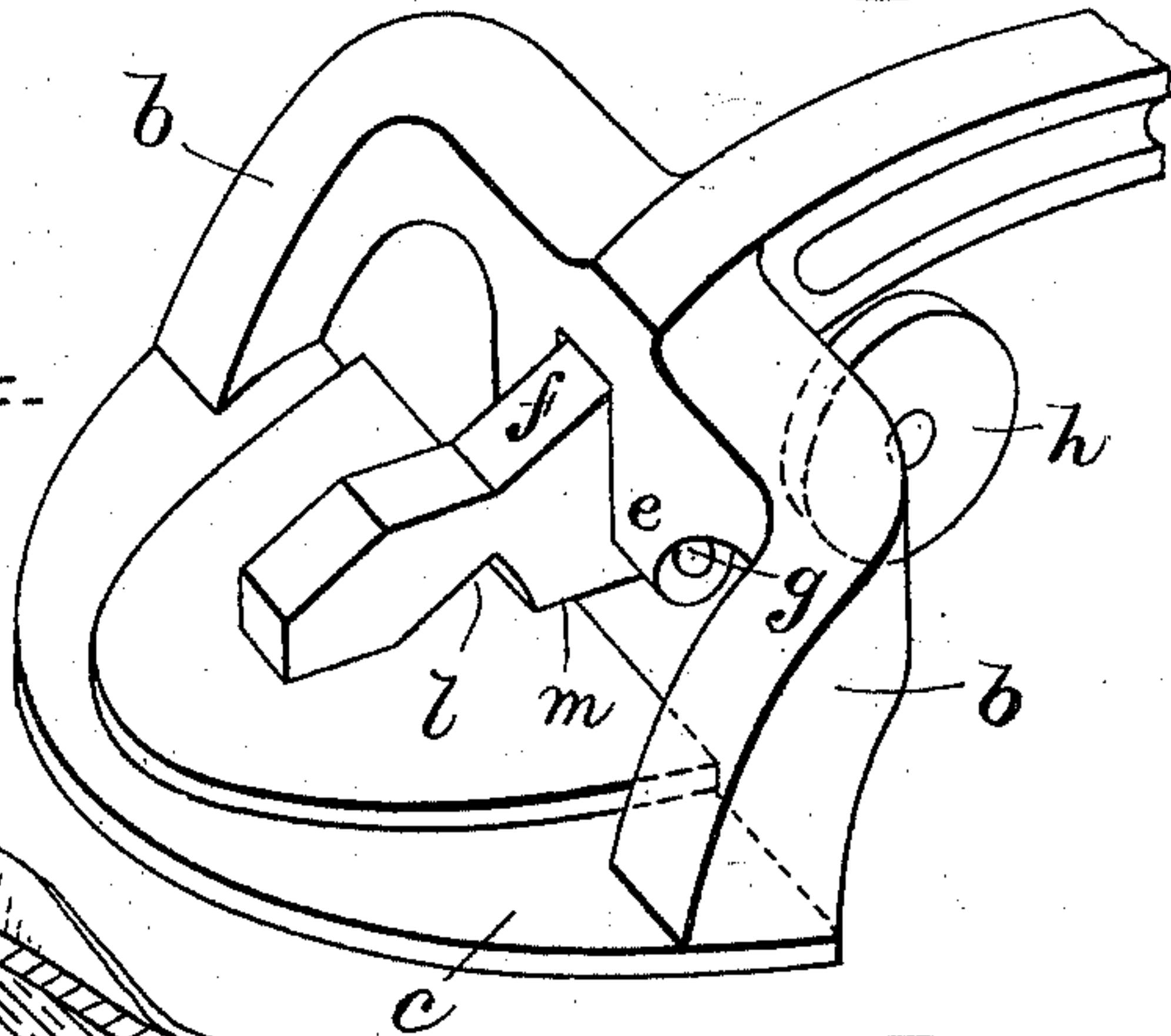
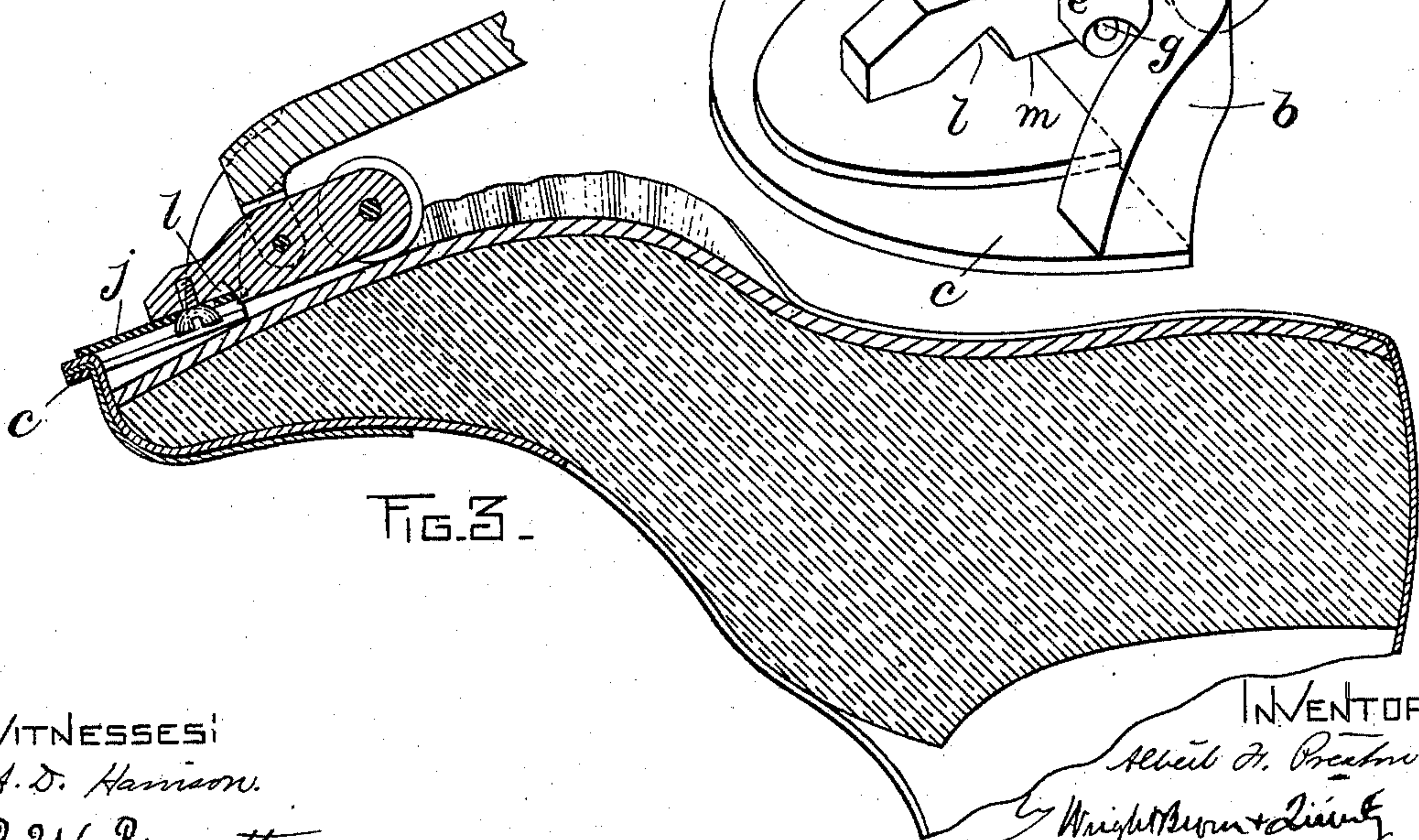


FIG. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ALBERT F. PRESTON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE
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LASTING-PINCERS.

SPECIFICATION forming part of Letters Patent No. 585,940, dated July 6, 1897.

Application filed August 29, 1896. Serial No. 604,312. (No model.)

To all whom it may concern:

Be it known that I, ALBERT F. PRESTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Lasting-Pincers, of which the following is a specification.

This invention relates to that class of lasting-pincers or appliances in which two jaws are employed for grasping the edges of the upper at the toe and drawing them past the face of the last in order that the toe-wipers of a lasting-machine may fold them in upon the insole, the jaws being arranged to release the said edges gradually when the latter are engaged by the wipers.

The object of the present invention is to add such improvements to the pincers of the character described as to render them better fitted for accomplishing their work and enhance their efficiency and at the same time to simplify and reduce the number of parts thereof.

To these ends the invention consists of pincers possessing those improved features of construction and arrangement which are illustrated on the drawings and now to be described in detail and then pointed out in the claims hereto annexed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which like reference-characters indicate like parts or features wherever they occur.

Of the drawings, Figure 1 is a bottom plan view of a last with my improved pincers in the act of drawing the toe of the upper taut over the toe of the same. Fig. 2 is a side elevation of the pincers with the jaws separated. Fig. 3 is a central vertical longitudinal section through the last and the pincers on the line 3 3 of Fig. 1. Fig. 4 is a perspective view of the front end of the pincers with the jaws in a clamping position. Fig. 5 is a front elevation of the pincers. Fig. 6 is a bottom plan view of one of the jaws.

In the drawings, *a* indicates the handle, which may be of any convenient or desirable shape and which is bifurcated at the forward end to form a yoke. To the two arms *b b* of the yoke, which are curved laterally from the handle, I secure a plate *c*, recessed, as at

d, to form a concave jaw, the recess being substantially of the shape of the toe of the sole to which the upper is to be secured. The handle is likewise formed or provided with two ears *e*, in which a short lever *f* is pivoted by means of a pin *g*. At the rear end the lever is provided with antifriction-rollers *h*, mounted on a shaft *i*, which extends therethrough, and at the front end has secured thereto a plate *j*, which forms the convex jaw. The last-mentioned jaw coacts with the concave jaw for gripping the edges of the upper, as I shall hereinafter show. Said jaw is secured to the lever *f* by a screw *k*, which has a semispherical head, as shown in Figs. 2 and 4, the jaw being provided with a slot through which the screw passes and the lever being cut away or recessed at *l* to permit the plate or jaw to have a limited movement relatively thereto, whereby said plate may always remain in parallelism with the plate or concave jaw *c*. The plate or jaw *j* is cut away at *m* to receive the edge of the lever *f*, whereby it is prevented from rotating on the screw *k*.

When the pincers are used in drawing the toe of an upper past the face of the last for permitting the wipers of a lasting-machine to draw the edges of the upper in folds upon the insole, the concave jaw is placed so that the toe of the last projects into the recess *d*. The edges of the upper project onto the plate or jaw, and the rollers *h* of the lever rest upon the sole of the last. Then the handle *a* is pressed toward the last, with the rollers as a fulcrum, with the result that the edges of the upper are firmly grasped between the two jaws. The faces or gripping portions of the jaws lie in a plane which is at right angles to the direction of pull of the pincers, so that the leather is drawn over the inner edge of the plate or concave jaw at right angles, and the grip upon the same is greatly multiplied. By employing two flat plates as jaws, one of which is free on its lever to always lie in parallelism with the other, the edges of the upper are all grasped with the same strength, and no greater pull is experienced by one portion of the leather than another, and hence the upper is drawn over the toe of

the last without stretching it more one way than the other and without any danger of wrinkling it.

It will be observed that the concave jaw is
5 arranged entirely beneath the convex jaw, and hence the operator is enabled to see his work at all times, which he is not able to do when working with pincers in which the large concave jaw is located above the convex jaw,
10 as will be readily apparent to any one versed in the manner of operating pincers of this general class. This feature of arrangement is of importance in my invention, for I believe that I am the first to employ in pin-
15 cers a small convex jaw arranged entirely above the larger concave jaw. Again, by employing only one handle the tool is rendered handier and easier to operate and can be more easily grasped and manipulated than when
20 two or more handles are used, for the reason that the handles have to be drawn together by the strength of the fingers, whereas the handle in my case is operated with the strength of the wrist and arm. Moreover, the
25 employment of two separated friction-rollers *h h*, one on each side of the lever *f*, prevents the pincers from rocking and pulling with a greater force on the edges of one side of the upper than on the edges of the other side.

30 In addition to the above-described features I sometimes form the convex jaw with a chisel or sharp edge, as shown at *o* in Fig. 2, so that the edges of the upper and the folds of the latter are scarfed or reduced to a feather-edge
35 by the action of the wipers of the lasting-machine drawing the said edges of the upper from between the jaws of the pincers.

Having thus explained the nature of my invention and described one way of embodying
40 the same, without, however, having attempted to set forth all the forms in which it may be embodied or all the modes of its use, I now declare that what I claim is—

1. A lasting-pincer comprising a jaw hav-
45 ing a recess corresponding substantially in shape to the toe or heel of a last, a jaw having a convex edge and arranged in a plane parallel to and above the plane of the recessed jaw, and means for operating said jaws, the
50 recessed jaw being arranged entirely below the jaw with the convex edge whereby the operator can see the work.

2. A lasting-pincer comprising a jaw having a recess corresponding substantially in shape to the toe or heel of a last, a jaw hav- 55 ing a convex edge and arranged in planes parallel to and above the plane of the recessed jaw, a handle to which one of these jaws is secured, and a loose short lever pivoted to the handle and secured to the other jaw. 60

3. A lasting-pincer comprising a single handle bifurcated at its end, a concave jaw consisting of a flat recessed plate secured to the bifurcated end of the handle, and a convex jaw consisting of a flat plate hinged to the 65 handle.

4. A lasting-pincer comprising a single handle formed at its end with two arms, a concave jaw secured to the said arms, a short lever hinged to the handle and adapted to 70 have one end rest against the last, and a convex jaw secured to the other end of said lever.

5. A lasting-pincer comprising a single handle formed at its end with two arms, a concave jaw secured to the said arms, a short 75 lever hinged to the handle, a convex jaw secured to one end of said lever, and an anti-friction-roller mounted on the other end of said lever.

6. A lasting-pincer comprising a concave 80 jaw, a convex jaw, a handle secured to the concave jaw, a lever secured to the convex jaw and pivoted to the handle, and two separated rollers mounted on the lever.

7. A lasting-pincer comprising a concave 85 jaw consisting of a recessed plate, a convex jaw consisting of a plate having a curved edge, and means for closing and opening them, one of said jaws being provided with a cutting edge. 90

8. A lasting-pincer comprising a concave jaw consisting of a recessed plate, a convex jaw consisting of a plate having a curved edge and means for closing and opening them, said convex jaw being provided with a cut- 95 ting edge.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 28th day of August, A. D. 1896.

ALBERT F. PRESTON.

Witnesses:

MARCUS B. MAY,
A. D. HARRISON.