

(No Model.)

E. W. ARNOLD.
LAST.

No. 409,551.

Patented Aug. 20, 1889.

Fig. 1.

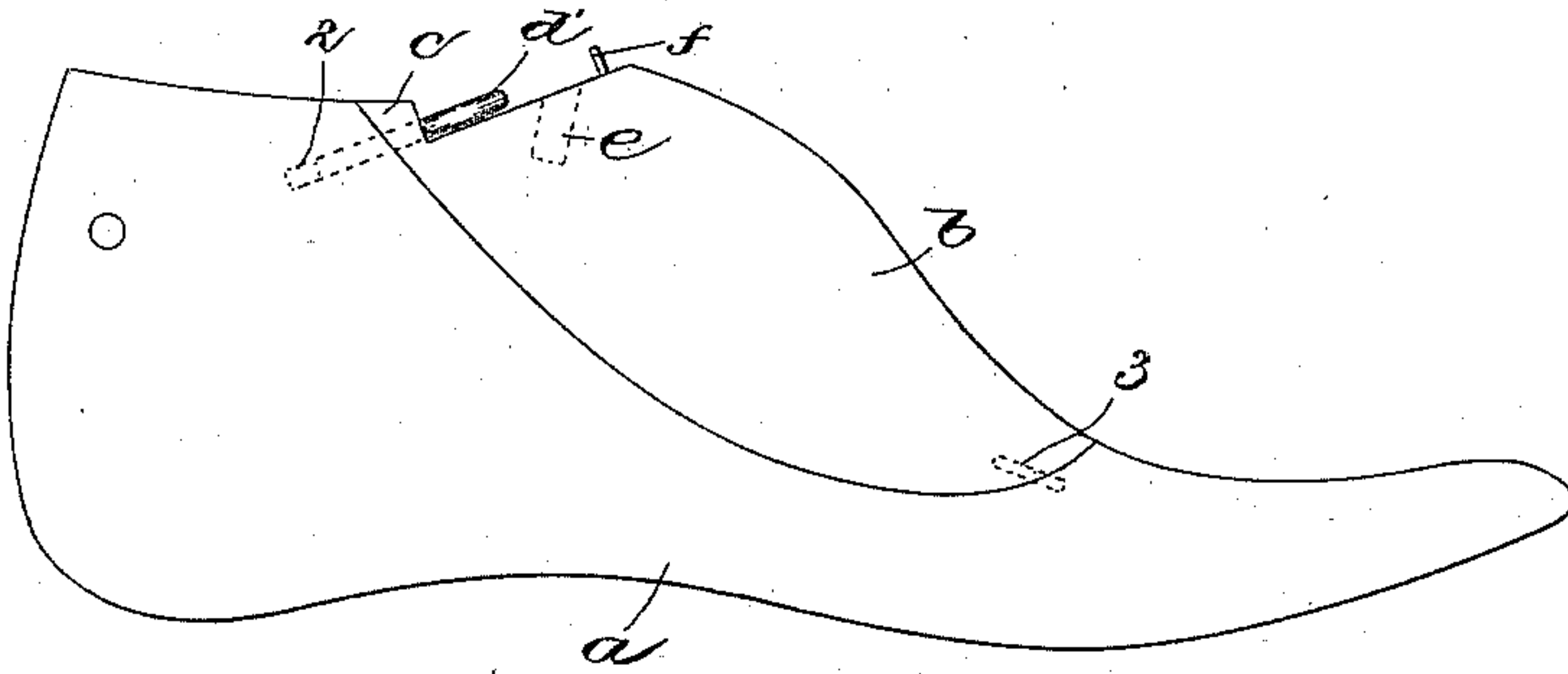


Fig. 2.

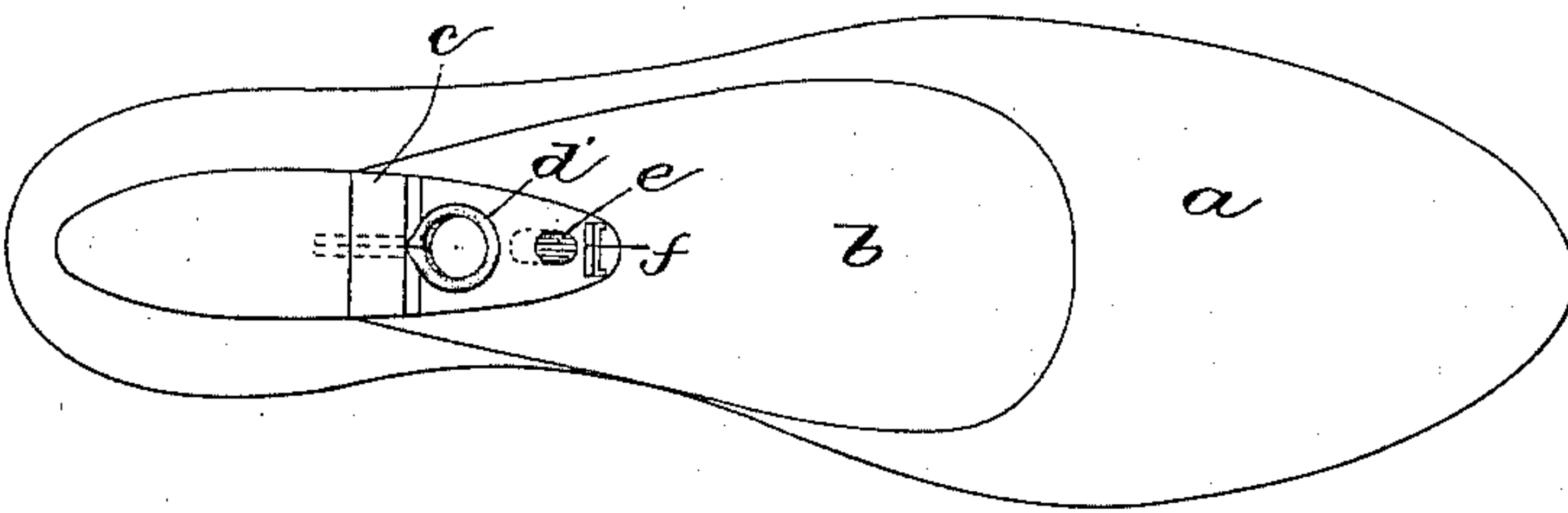
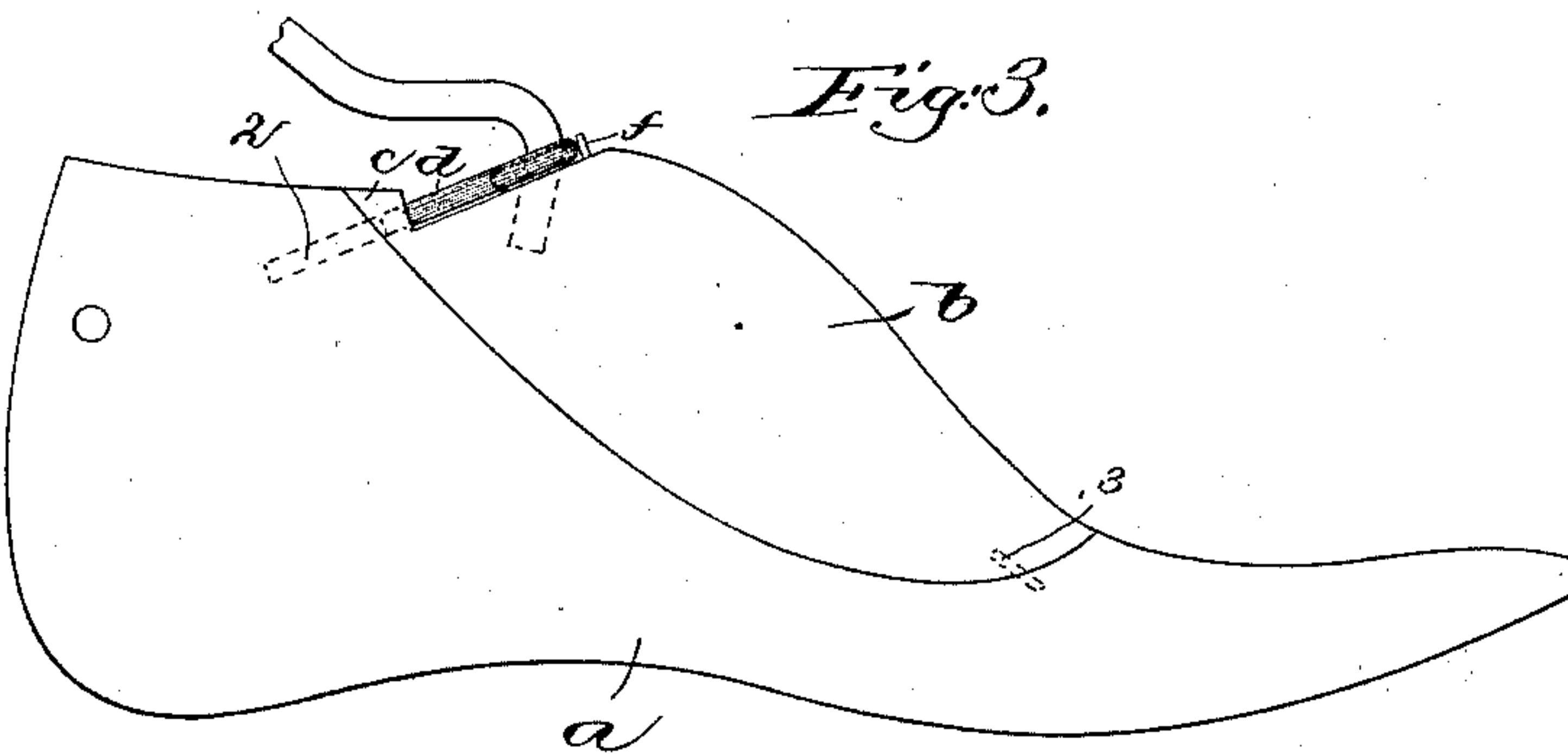


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

ELIPHAZ W. ARNOLD, OF WEYMOUTH, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO GEORGE W. OSGOOD, OF SAME PLACE.

LAST.

SPECIFICATION forming part of Letters Patent No. 409,551, dated August 20, 1889.

Application filed February 14, 1889. Serial No. 299,850. (No model.)

To all whom it may concern:

Be it known that I, ELIPHAZ W. ARNOLD, of Weymouth, county of Norfolk, State of Massachusetts, have invented an Improvement in Lasts, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to provide a last with suitable means by which the last-block may be securely locked in position, may be released with facility, and the block removed by a last-hook, and which may be applied to any last at very little expense.

In accordance with this invention the last-block is cut away or formed at the top to present a shoulder, projection, or lip, through which passes a pin which enters a hole or recess in the last-body. The pin has a loop-like or hooked end to be engaged by the last-hooks. A hole or recess is also formed in the top of the last-block in the path of movement of the pin, which is designed to receive the end of the last-hook when the pin is withdrawn, by means of which the last-block may be withdrawn. A suitable stop or abutment is provided for limiting the movement of the pin.

Figure 1 shows in side elevation a last embodying this invention; Fig. 2, a top view of the last shown in Fig. 1; and Fig. 3, a view similar to Fig. 1, showing the pin withdrawn by the last-hook, which is in proper position to withdraw the last-block.

The last-body *a*, of any usual or suitable shape, has a pin-receiving hole 2. (See dotted lines, Figs. 1 and 3.) The last-block *b* is cut from the last-body in usual manner, and has at its lower end a pin 3 for preventing displacement. The last-block *b* has at its upper end a shoulder, lip, or projection *c*, which is herein shown as formed by cutting away or removing a portion of the last-block. A hole is formed through the projection, shoulder, or lip *c*, which registers with the hole 2 in the last-body. A pin *d*, having a loop-like or hooked end or head *d'*, passes through the hole formed in the shoulder, lip, or projection and enters the hole 2 in the

last-body to lock the last-block in position. A hole *e* is formed in the top of the last-block *b* in the path of movement of the pin *d*, and a limiting-stop *f* is provided next the hole *e* for limiting the movement or withdrawal of the pin.

When it is desired to remove the last-block *b*, the last-hook, which is bent at its end, as shown in Fig. 3, engages the head of the pin *d*, and by pushing the hook forward toward the toe of the last the pin is withdrawn and the end of the hook drops into the hole *e*. By then pulling upon the last-hook in a direction toward the heel end of the last the block may be withdrawn.

I do not desire to limit my invention to any particular form of pin to lock the block in position, nor to any particular form of limiting-stop; and I would further add that the limiting-stop may in some instances be omitted, if desired. The shoulder, lip, or projection *c* may be formed in various ways—that herein shown representing one way.

I claim—

1. The last-body *a*, having a pin-receiving hole, combined with the last-block *b*, having a projection, shoulder, or lip at the top, provided with a pin-receiving hole registering with the pin-receiving hole in the last-body, the pin for said hole having a hook-engaging end or head, and a hole formed in the top of the last-block in the path of movement of the pin to receive the end of the hook, substantially as and for the purpose set forth.

2. The last-body *a*, having a pin-receiving hole, combined with the last-block *b*, having a lip *c*, provided with a pin-receiving hole registering with the pin-receiving hole in the last-body *a*, the pin for said hole and the hole formed in the top of the last-block in the path of movement of said pin to receive the hook, and the limiting-stop for the pin, substantially as described.

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

ELIPHAZ W. ARNOLD.

Witnesses:

BERNICE J. NOYES,
A. S. WIEGAND.