

S. M. HAMBLIN.

LAST.

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929,849.

Patented Aug. 3, 1909.

Fig. 1.

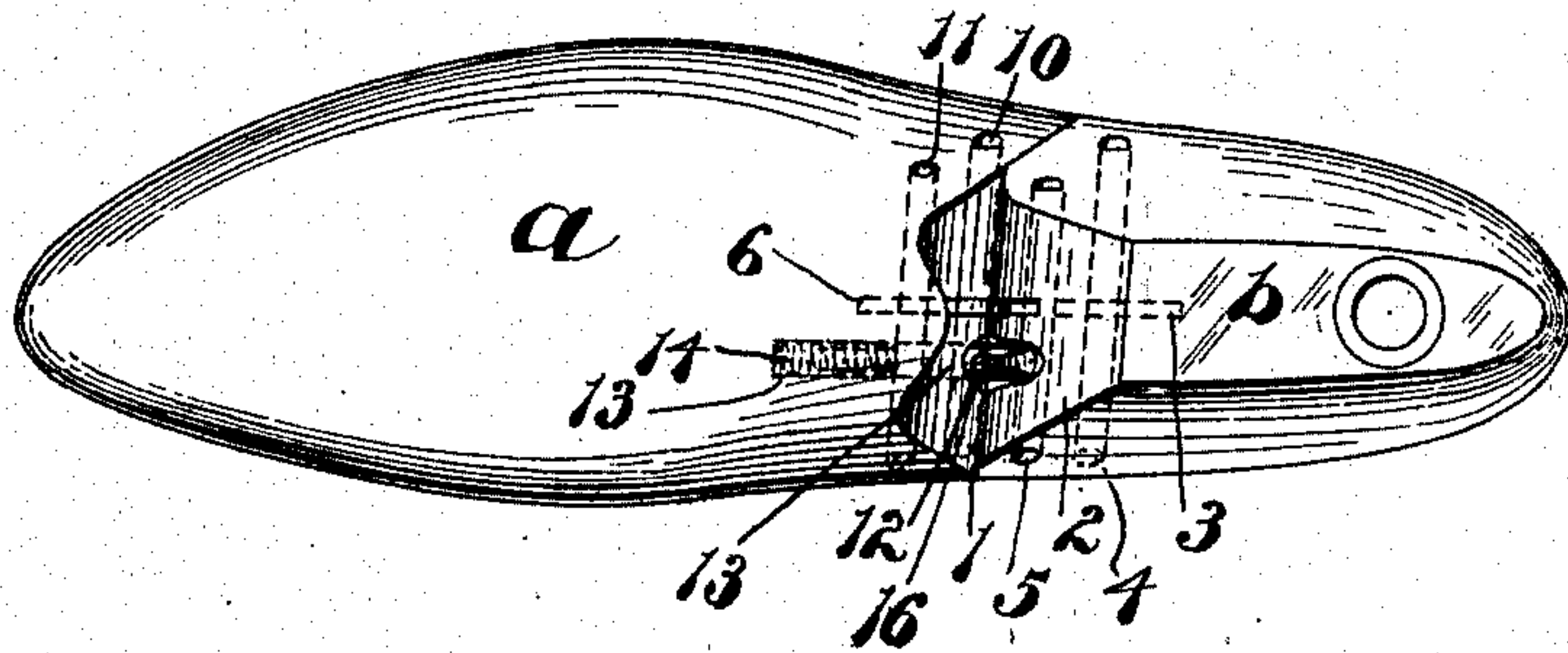


Fig. 2.

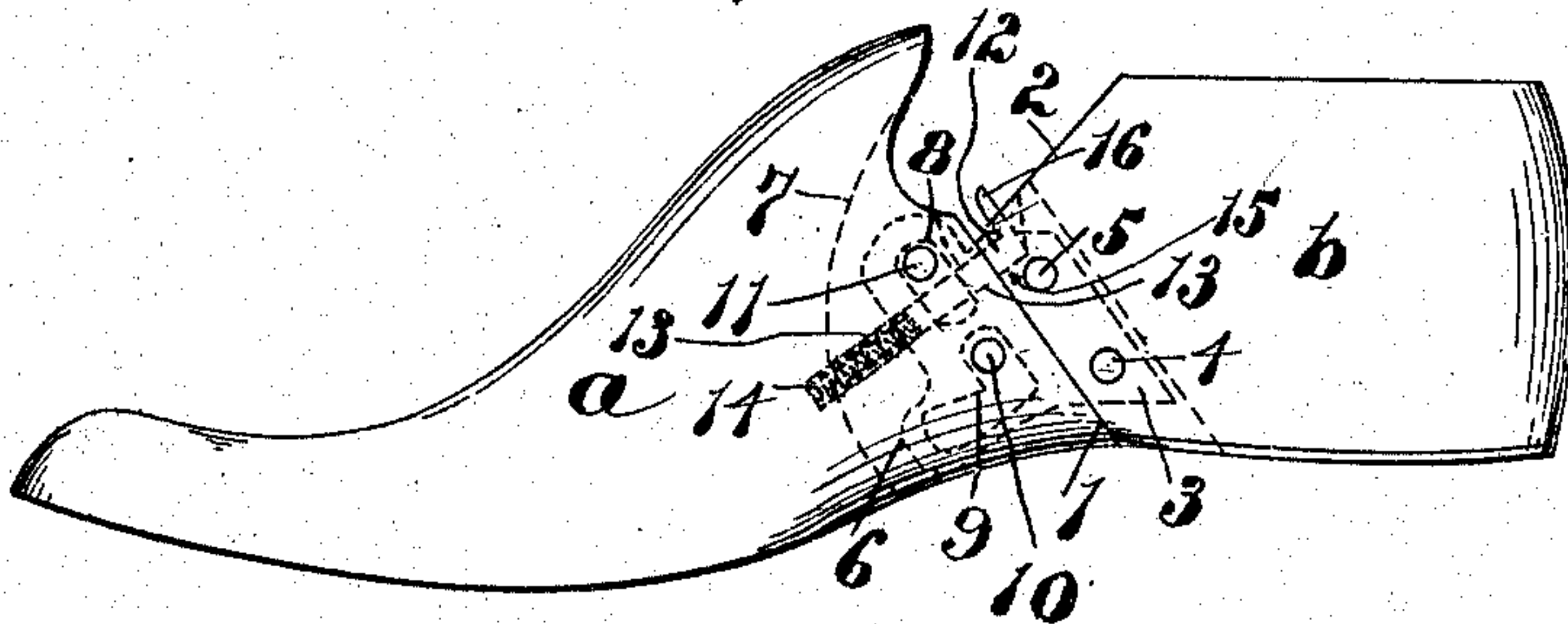
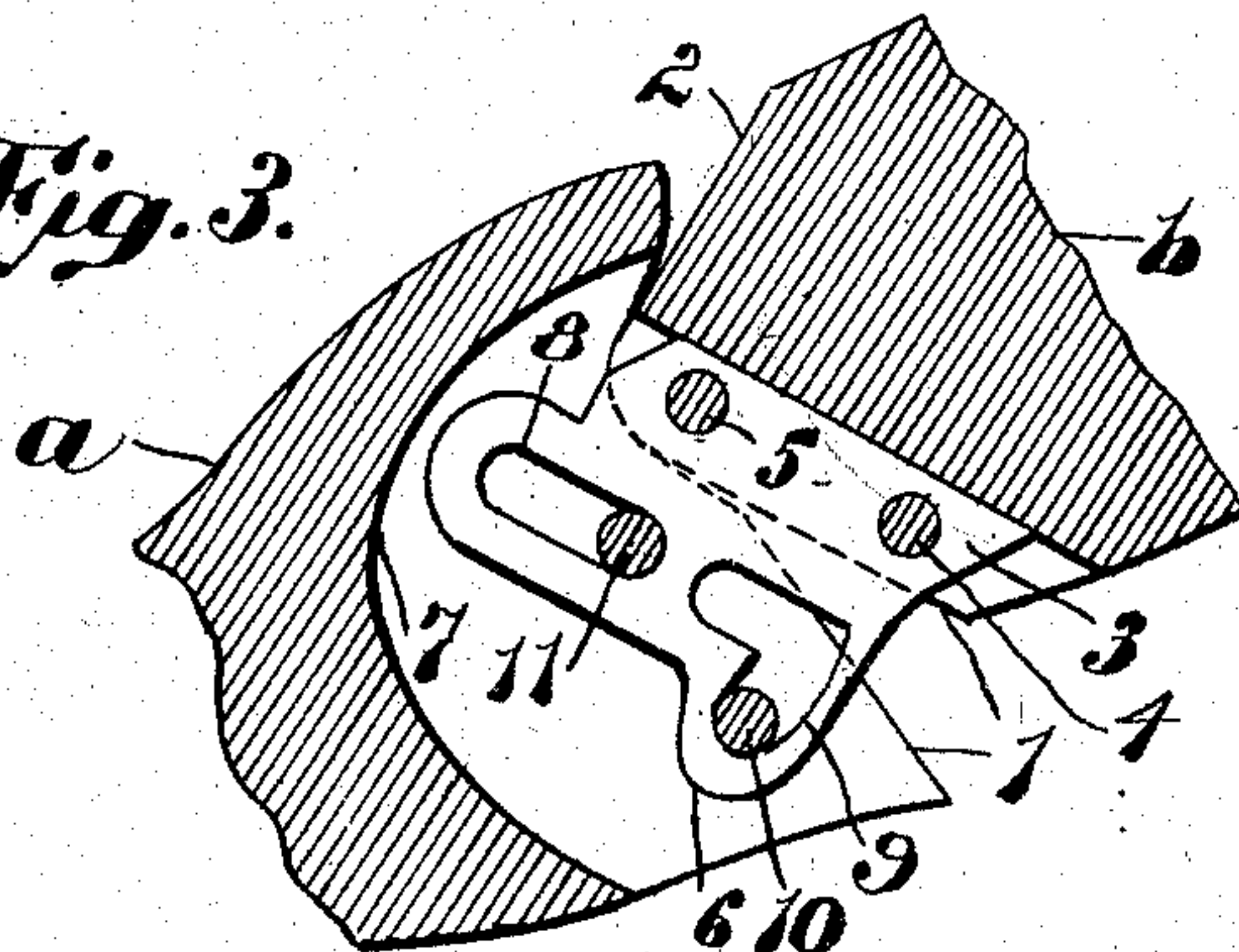


Fig. 3.



Witnesses:
Walter H. Taylor
M. A. Jones.

Inventor:
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by Geo. S. Maxwell,
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UNITED STATES PATENT OFFICE.

STEPHEN M. HAMBLIN, OF STOUGHTON, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO KRENTLER-ARNOLD HINGE LAST COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

LAST.

No. 929,849.

Specification of Letters Patent.

Patented Aug. 3, 1909.

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To all whom it may concern:

Be it known that I, STEPHEN M. HAMBLIN, a citizen of the United States, residing at Stoughton, in the county of Norfolk and State of Massachusetts, have invented an Improvement in Lasts, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

My invention is an improvement in hinged lasts of the kind whose fore part and heel part are separated by a transverse cut and a gap or opening adjacent the cone, my present last being capable of a combined sliding and tipping movement.

In the accompanying drawings, in which I have shown one embodiment of my invention, Figure 1 represents the same in top plan; Fig. 2 is a view thereof in side elevation; and Fig. 3 is a fragmentary, longitudinal sectional view showing the hinge connection in full lines.

As herein shown, the fore part *a* is severed from the heel part *b* along an oblique line of cut 1 extending downwardly and rearwardly through the waist of the last, and the upper, forward end of the heel part *b* is cut away along the diagonal line 2. Secured in the heel part is a vertical hinge-plate 3 held rigidly by bolts 4, 5 and projecting forwardly at 6 beyond the front face of the heel part into a kerf 7 formed therefor in the rear end of the fore part. The projecting forward end of the plate 3 is provided with slots 8, 9 cooperating with fixed pins 10, 11, so shaped and located as to permit the heel part to slide upwardly along the line 1 for a short distance until loosened from the heel of the shoe and thereupon to turn upwardly and forwardly on the pin 11 as a pivot. When the last is in lengthened position, the adjacent or meeting ends of the fore part and heel part are locked immovably together by a pin or bolt 12 seated in an opening 13 in the fore part and impelled outwardly by a spring 14 to occupy a recess 15 in the heel part and brace against the bolt or rivet-pin 5 to hold the last absolutely rigid. At its upper end, the bolt 12 has a releasing finger 16 extending laterally beyond the inclined wall 2 in position to be engaged externally and pushed inwardly to release the heel part.

I make no claim to a spring-impelled fas-

tening bolt broadly, but I regard the location thereof with relation to the hinged heel part as novel and important, as it gives great firmness and strength of parts when in lengthened position, and also the external unlocking feature is new and of value.

In operation, the releasing device or finger 16 is pushed inwardly until the bolt 12 clears the front face of the heel part, whereupon the latter is caused to slide along the diagonal wall or end 1 of the fore part a short distance until the cooperating pins and slots of the hinge device permit the heel part to be rocked or turned forwardly, thereby instantly collapsing the last into proper position for removal from the shoe. It will thus be seen that the last begins to shorten with its initial movement and the shortening takes place with comparative quickness. Also, by combining the swinging and sliding movement, I cause the heel to approach the lining of the shoe without tendency to disturb the latter.

I do not intend to restrict myself to the precise details of construction, as many changes may be made within the spirit and scope of my invention.

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

1. A divided last, having its fore part and heel part severed along an oblique plane extending rearwardly toward the bottom of the last, means pivotally connecting said fore part and heel part constructed also to permit relative sliding movement thereof along said plane, and a spring-impelled locking bolt retained in the fore part and arranged to project into the heel part when the last is in lengthened position, for rigidly locking said two parts in lengthened relation.

2. A divided last, having its heel part permanently secured to and constructed to slide on the fore part, a locking bolt carried by one part to engage the other part, and operating means extending laterally from said bolt externally between said two last-parts for manually unlocking the last.

3. A divided last, having its heel part permanently secured to and constructed to slide on the fore part, a locking bolt carried by one part to engage the other part at the upper meeting ends of the contacting sliding secant surfaces of the two last parts, and operating

means extending laterally from the end of said bolt externally between said two last parts for manually unlocking the last.

4. A divided last, having its fore part and
5 heel part severed along an oblique plane extending rearwardly from the crown of the last to the bottom of the last, means permanently securing said two parts to slide on each other along said secant plane, and a
10 locking bolt extending into the fore part along an oblique line extending forwardly from the top of the last toward the bottom of the last at substantially right-angles to said oblique plane, the opposite contacting front

wall of the heel part being cut away at its upper end to receive said locking bolt for locking the two parts in lengthened position, said locking bolt being provided with integral operating means extending laterally externally between said two last parts for manually operating the bolt. 15 20

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

STEPHEN M. HAMBLIN.

Witnesses:

GEO. H. MAXWELL,
M. A. JONES.