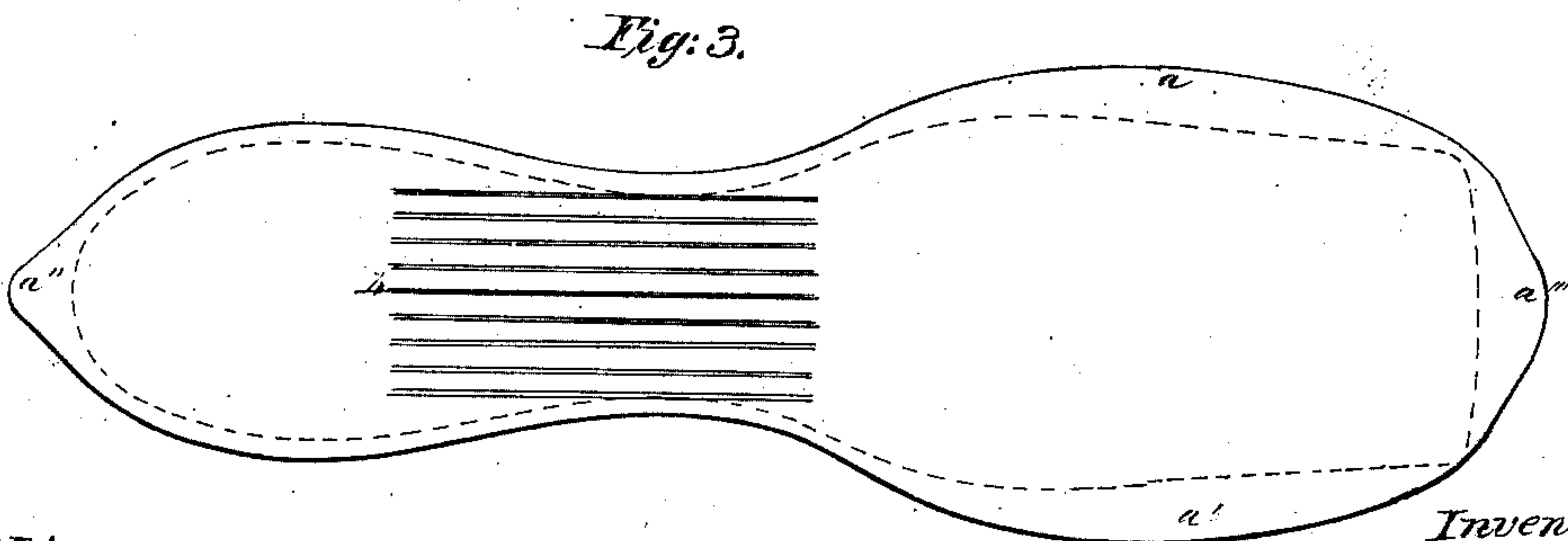
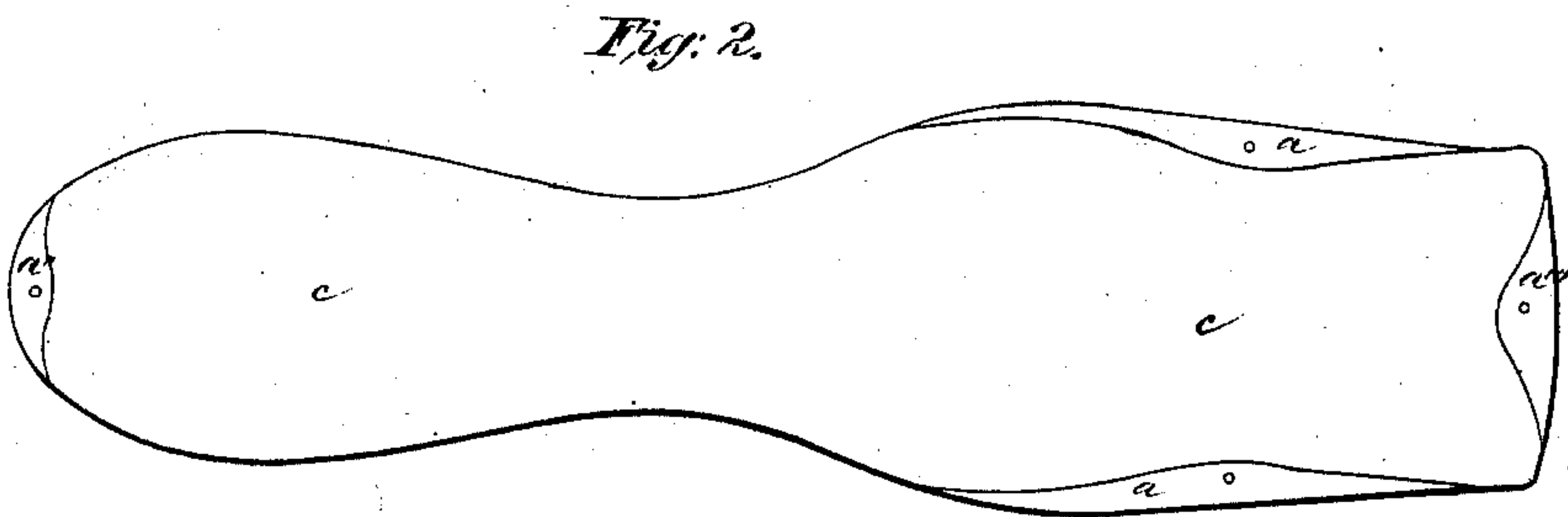
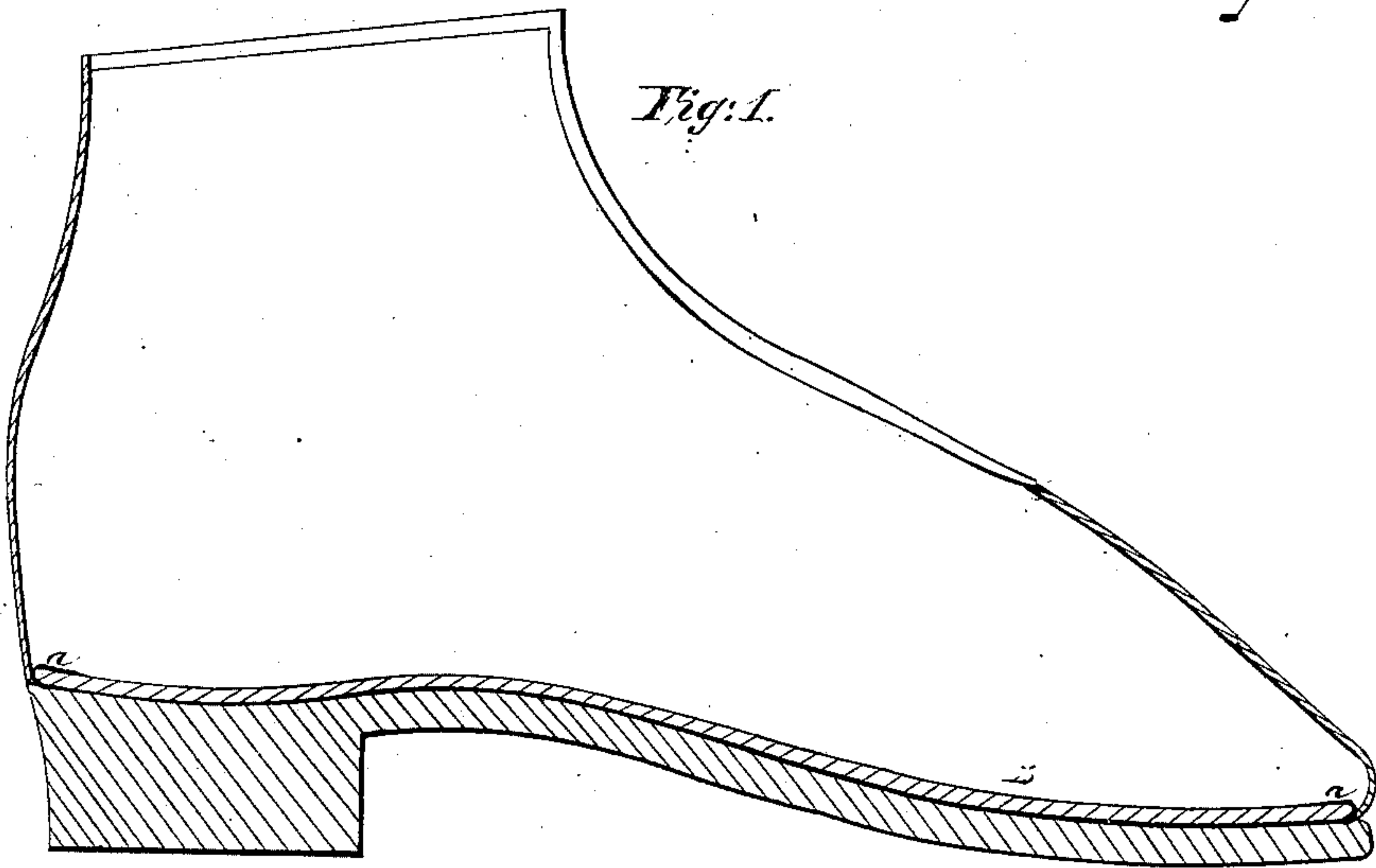


*S. J. Seely,*

*Shoe Sole,*

*N<sup>o</sup> 1,9795.*

*Patented Sep. 5, 1865.*



*Witnesses:*

*O. Hase  
J. P. Peyton.*

*Inventor,*

*Saml J. Seely  
by his attys  
Baldwin & Co.*

# UNITED STATES PATENT OFFICE.

SAML. J. SEELY, OF NEW YORK, N. Y.

## IMPROVEMENT IN SOLES FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. 49,795, dated September 5, 1865.

*To all whom it may concern:*

Be it known that I, SAMUEL J. SEELY, of the city, county, and State of New York, have invented a new and useful Improvement in Soles for Boots and Shoes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a central longitudinal section of a shoe to which my invention is applied. Fig. 2 is a plan view of my invention covered by the insole of the shoe; and Fig. 3 is a plan view of my thin corrugated metallic insole for boots and shoes.

It is the object of my invention to not only render the soles of boots and shoes impervious to moisture, even when made of the thinnest or lightest leather, but also to so strengthen them at the instep that they shall be elastic and at the same time preserve their proper shape; to which end my invention consists in securing a thin metallic sole between the outer and inner soles of boots or shoes and corrugating the metal sole at the instep, either transversely or longitudinally, to render the sole elastic and make it strong, so that it will yield to the motions of the foot without getting out of shape, and at the same time prevent moisture from penetrating to the foot of the wearer.

Taking any suitable thin metal, I cut out a piece of the form of the insole and large enough to fold over its edges, as shown in Fig. 3, where the size of the insole is indicated by dotted lines. I then corrugate the metallic sole by stamping or otherwise, as at *b* in Fig. 3, using, by preference, sheet brass or copper, on account of their freedom from liability to corrosion. The insole, being properly formed, is now laid

upon the thin metal sole thus prepared, and the latter is turned over at the edges *a* and *a'*, heel *a''*, and toe *a'''*, and pressed or hammered down upon the former, as in Fig. 2, when both are lasted together, and then the outer sole and heel are placed in position, and the whole sewed or pegged through the welt and upper, and when the sole is finished and the last removed, as shown in Fig. 1, the protection against the entrance of moisture will be perfect, however thin the outer sole may be, and the instep will be found sufficiently stiff to keep the shoe or boot always in a graceful form, and yet so elastic as to yield easily to the movements of the foot.

It is obvious that the corrugations can be arranged in any direction, and that they can be formed by a single blow from the drop-die; and it is also manifest that by sewing through the metal and leather the leather will protect the thread from cutting against the metal, for the opening made by the awl through the metal sole will remain rigid, while that through the leather will close upon the thread.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

The combination of a thin metallic sole, corrugated at its shank, with the sole and insole of boots or shoes, when turned over upon and sewed or pegged into the insole and arranged between them, substantially in the manner and for the purpose described.

In testimony whereof I have hereunto subscribed my name.

SAML. J. SEELY.

Witnesses:

GEO. J. PENCHARD,  
P. SCHOEN.