

No. 652,417.

Patented June 26, 1900.

F. L. ALLEY.

INSOLE.

(Application filed Sept. 3, 1897.)

(No Model.)

FIG. 1

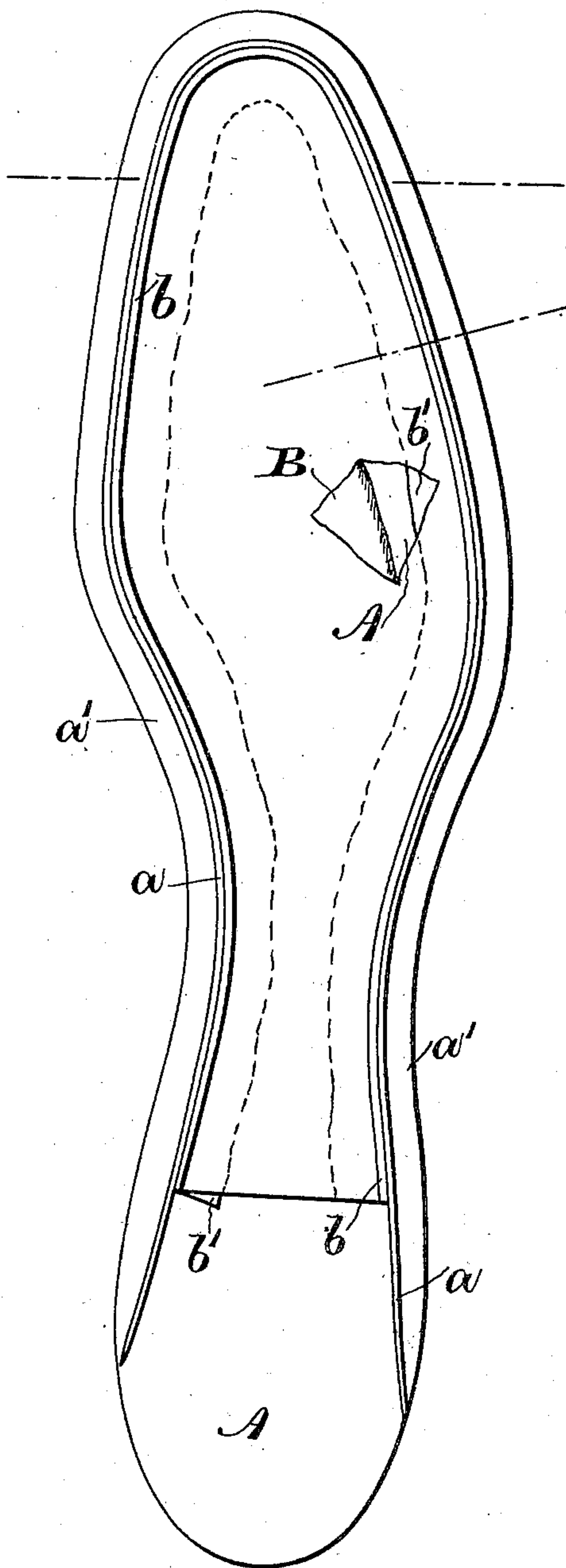


FIG. 3

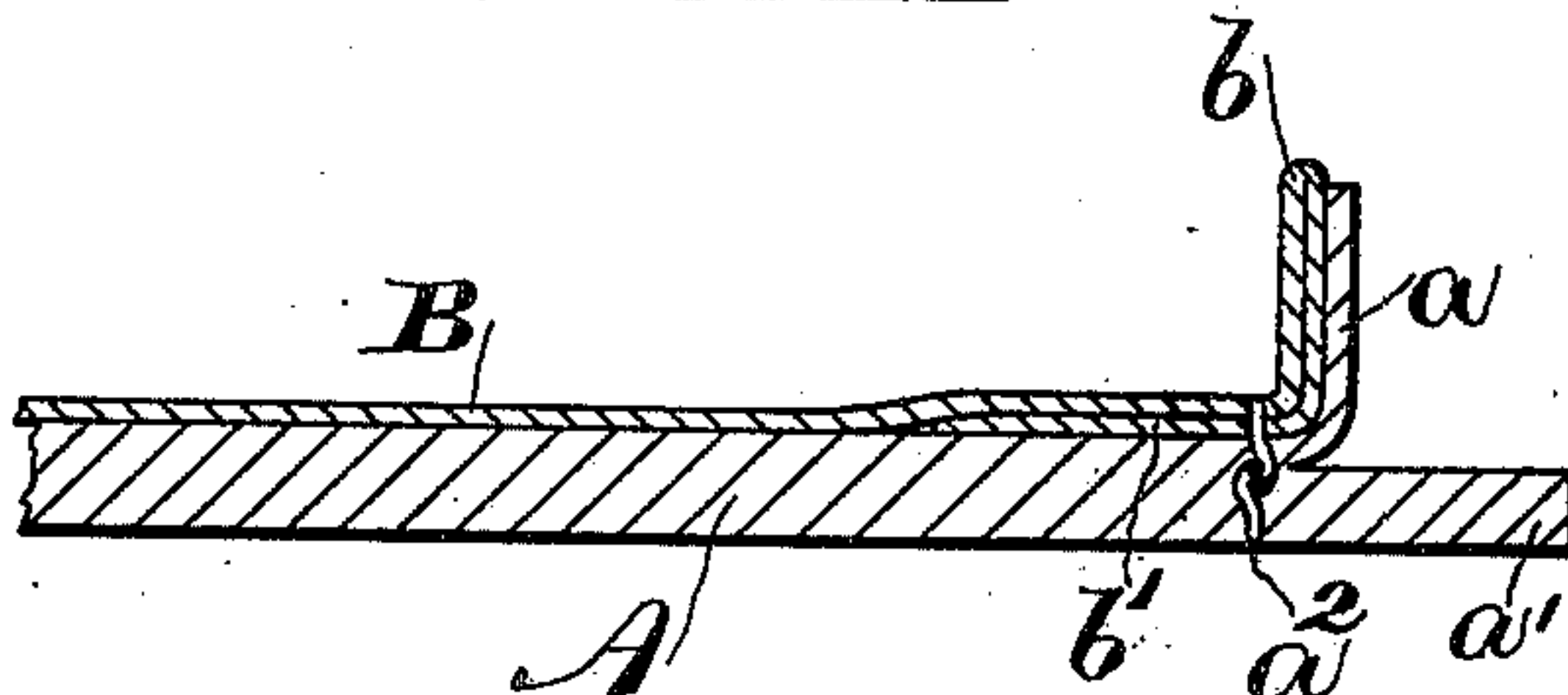
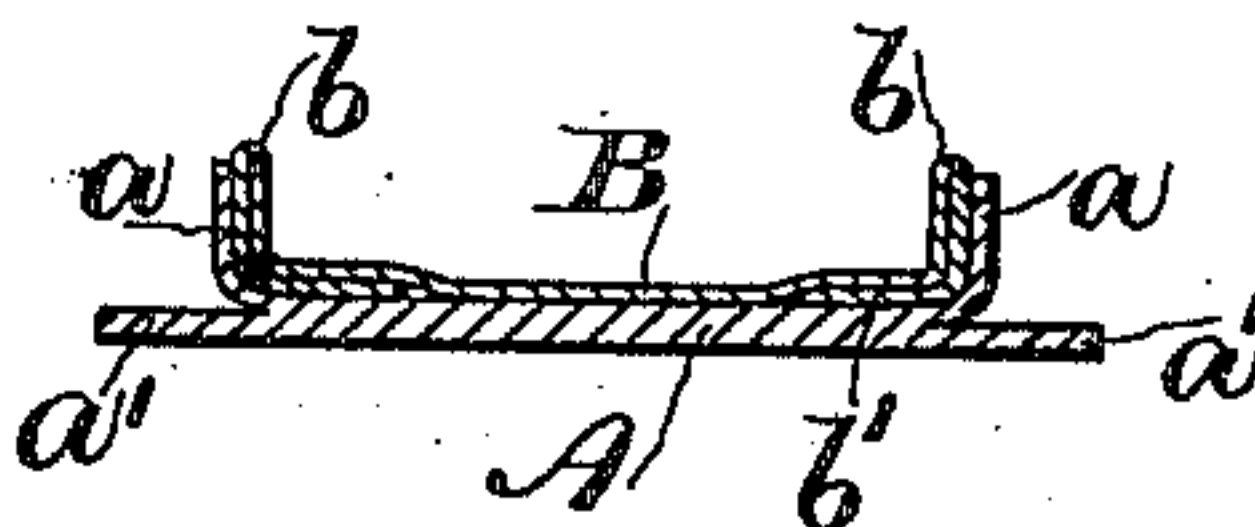


FIG. 2



WITNESSES

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INVENTOR

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# UNITED STATES PATENT OFFICE.

FREDERICK L. ALLEY, OF LYNN, MASSACHUSETTS, ASSIGNOR TO THE  
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## INSOLE.

SPECIFICATION forming part of Letters Patent No. 652,417, dated June 26, 1900.

Application filed September 3, 1897. Serial No. 650,464. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK L. ALLEY, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Insoles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to insoles for boots and shoes, and more particularly to that type of insoles known as "reinforced" insoles, which comprise a main or body portion of leather, usually provided with an upturned lip, and a reinforcing-lining, usually of canvas or other strong textile material, cemented to the under face of the insole and to the lip for the purpose of strengthening the same. As heretofore constructed such insoles have been made by splitting the edge of the leather or main body portion of the insole around the edge midway between the top and bottom of the sole and turning up one portion formed by splitting to form the lip, leaving the other portion extended to form the feather, which body portion has then been covered by the textile reinforcing material which has been cemented to the surface within the lip and against the inner face of the lip, it being trimmed off even with the top of the lip or indented over the lip and cemented to both sides thereof and to the feather of the insole for the purpose of stiffening and strengthening the feather to prevent the feather from "curling up" after said insole has been incorporated in a shoe. While these insoles have been found generally satisfactory in use and to be much cheaper and stronger than an all-leather insole, it has been found in practice that when the reinforcing material has been applied in the manner first mentioned and trimmed off even with the upper edge of the lip a raw edge is left on the reinforcing material, which will fray and ravel out and is liable to pull out under the strain of the stitches which pass through the lip and that portion of the reinforcing material lying against the inner face of the lip, and when

the reinforcing material has been applied as in the second manner above referred to by being indented over the lip and secured to the feather and trimmed off even with the edge of the feather the edges of the reinforcing material will in time become frayed out and present a nappy and frayed appearance along the edge of the insole, which when the insole is in the shoe appears along the edge of the insole, presenting an unsightly appearance within the shoe. Again, it has been found in practice that by the above construction, wherein the lip and feather have been made by slitting the edge of the leather body portion along a line which is centrally disposed between the upper and lower surface of the insole, making the leather portion of the lip and feather of equal thickness, when the reinforcing material is applied to the upper surface of the insole and the inner face of the lip the lip is rendered thicker than is necessary, and the feather will be so thin that it is liable to curl up when placed in the shoe, rendering the shoe uncomfortable to the wearer. In order that the textile reinforcing material shall be hidden from view when the sole is in a shoe, it is preferred that the reinforcing material shall extend only to and along the inside of the lip, and it is also desirable that said lip when reinforced shall be no thicker than is necessary to properly hold the stitches of the inseam.

The object of the present invention is to produce a reinforced insole in which the lip will be properly reinforced by the textile material in such manner that a strong foundation for the stitches of the inseam will be formed and at the same time form the lip and feather of the insole in such manner that the feather will have sufficient thickness and body to maintain itself in proper position against the sides of the upper.

To the above end the present invention consists of the insole which will be hereinafter described and claimed.

The present invention is illustrated in the accompanying drawings, in which—

Figure 1 shows a plan view looking at the bottom of the sole. Fig. 2 shows a trans-



verse section of the insole. Fig. 3 shows a section of a portion of the insole enlarged to clearly show the construction.

Similar letters of reference represent corresponding parts throughout the several views.

A represents the main body or leather portion of the insole, which, as shown in the drawings, is split around the edge, usually at the shank and around the fore part, and one portion of such split edge turned up to form the lip *a* and its other portion left extended in the plane of the sole to form the feather *a'*.

In order that the feather *a'* shall have sufficient body or stock to retain its position without the necessity of reinforcing it, the edge of the body portion A is preferably split nearer one surface than the other, the thinner portion formed by thus splitting the body portion A being turned up to form the lip *a* and the thicker portion forming the feather *a'*.

B represents the reinforcing material, of some suitable textile fabric, which is cemented to the lipped surface of the body portion A and against the lip *a*, or said reinforcing material may be secured to the body portion A by a line of stitches *a*<sup>2</sup>, which pass through the reinforcing material B and its body portion A at a point adjacent the turned-up edge of the reinforcing material, as shown in Fig. 3.

In order that the reinforcing of the lip *a* shall be strong and durable and such as to afford a strong foundation for the stitches of the inseam and shall present no raw edge which will be liable to fray and ravel and pull

out, the edge of the reinforcing material B is doubled upon itself, as at *b*, and the free edge *b'* turned inwardly beneath the main body B and cemented to the surface of the body portion A of the insole, thus forming a finished edge to the reinforcing material. By this construction it will be noted that the reinforcing material which lies against the lip is of double thickness and has a doubled edge, which will effectually hold the stitches of the inseam. It will further be noted that the reinforcement of the lip is doubly secured to the main body A and that the lip *a* can be made much thinner than in the prior constructions, thus producing a thick feather which will maintain its proper position when in the shoe.

Having fully described my invention and the manner of constructing the same, I claim as new and desire to protect by Letters Patent of the United States—

An insole comprising a main body portion provided with a relatively-thin lip and a relatively-thick feather, a covering of reinforcing textile material doubled under at its edge and cemented to the face of the main body portion within the lip, with the folded edge projected at right angles to the body portion and cemented to the inner face of the lip, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK L. ALLEY.

Witnesses:

A. O. ORNE,

WILLIAM N. SARGENT.