

No. 862,353.

PATENTED AUG. 6, 1907.

C. S. SMITH.

INSOLE.

APPLICATION FILED JAN. 25, 1897.

FIG. 1.

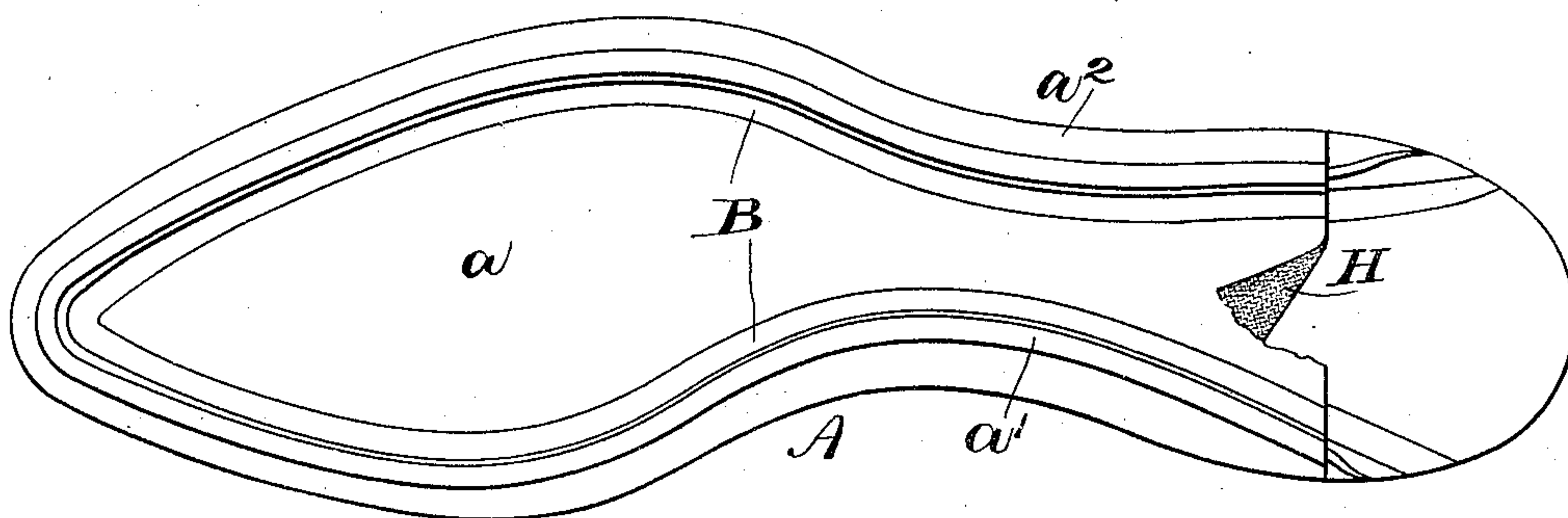


FIG. 2.

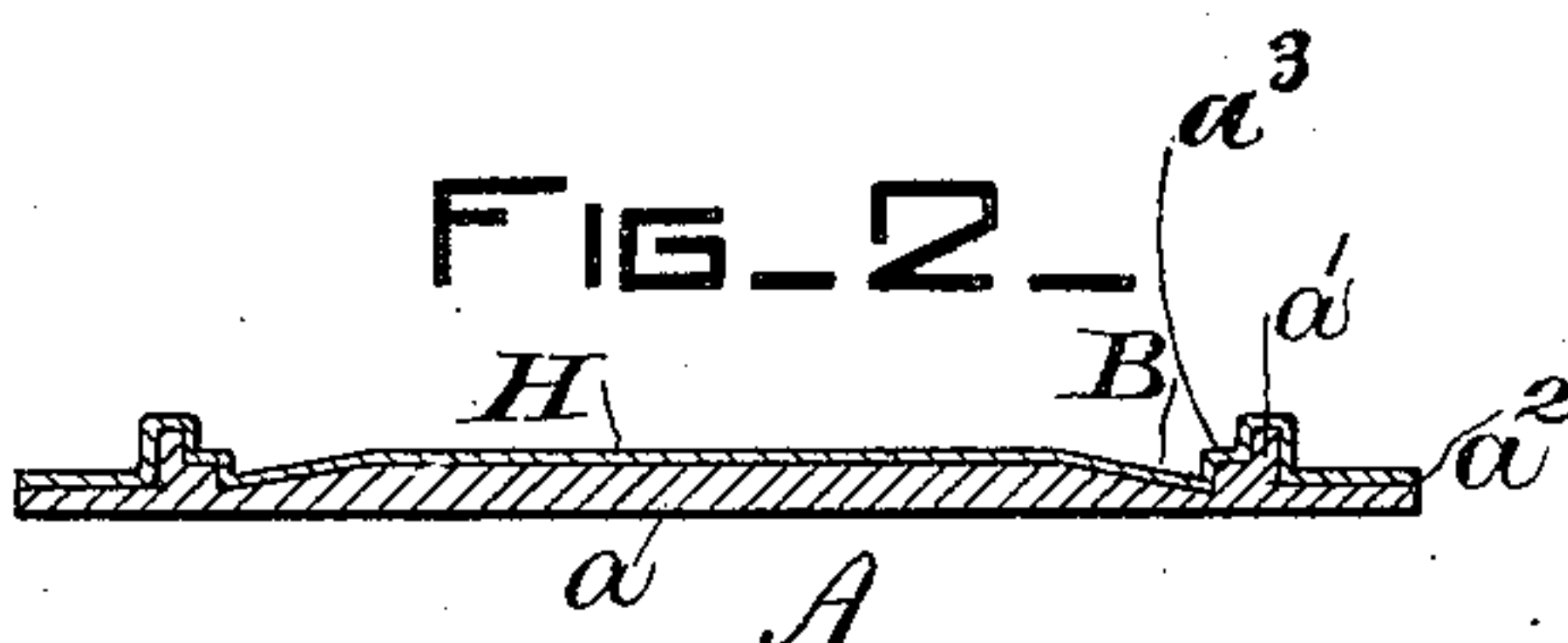
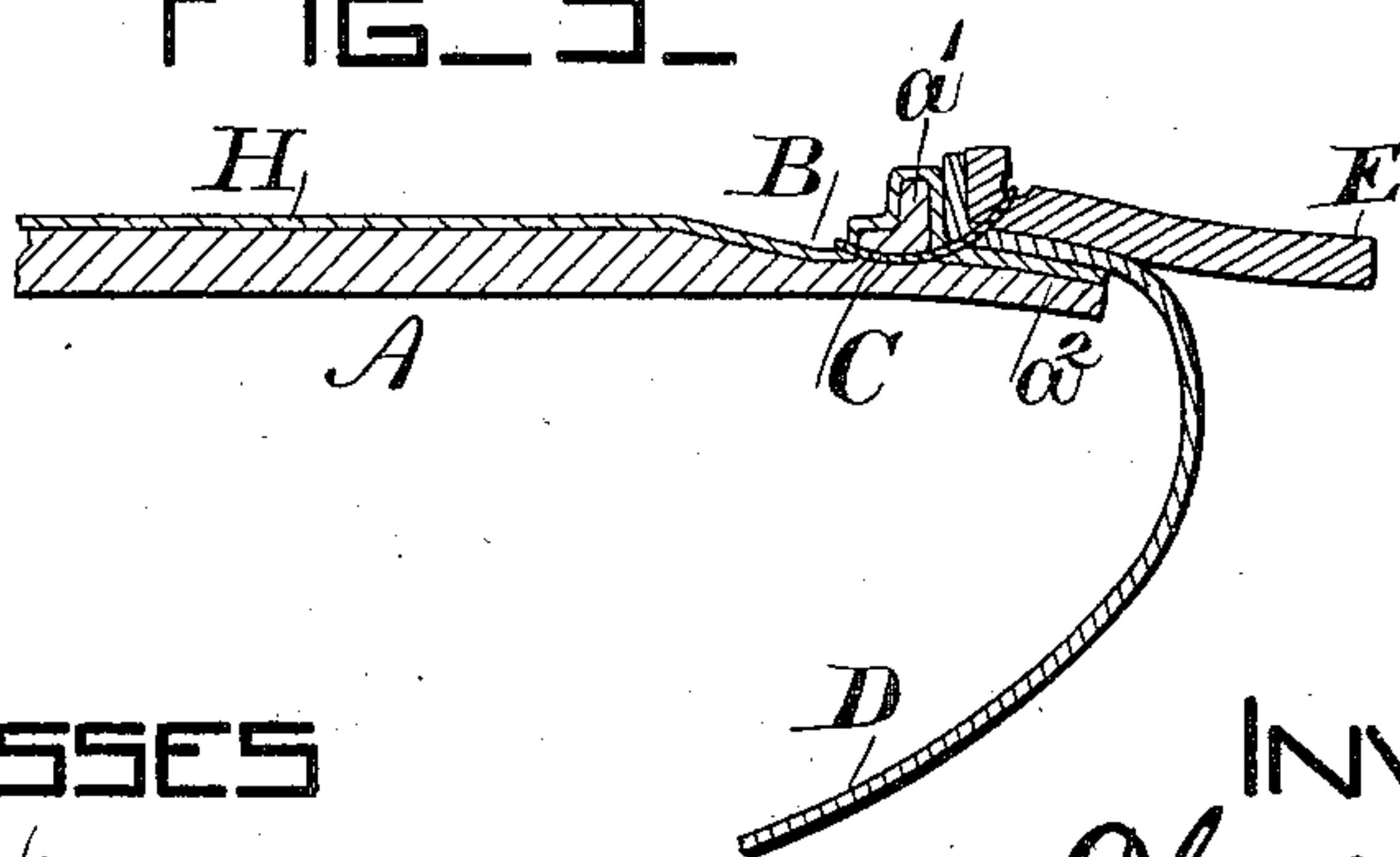


FIG. 3.



WITNESSES

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# UNITED STATES PATENT OFFICE.

CHARLES S. SMITH, OF BROCKTON, MASSACHUSETTS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO UNITED SHOE MACHINERY COMPANY, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## INSOLE.

No. 862,353.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed January 25, 1897. Serial No. 620,533.

*To all whom it may concern:*

Be it known that I, CHARLES S. SMITH, a citizen of the United States, residing at Brockton, in the county of Plymouth and State of Massachusetts, (whose post-office address is Brockton, 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.

It is common in the prior art to provide an insole with a projection to receive the in-seam, by splitting the outer edge of the sole along the shank and forepart and turning down the lower portion to form the "lip" so called through which the stitches of the in-seam pass, the upper portion being left projecting to form what is commonly termed the "feather". It has also been proposed to reinforce an insole of the type above defined by a continuous reinforcing covering of canvas or other suitable textile fabric, which is secured to the central portion of the sole, indented over the lip and secured to and terminates upon the feather. The insole above described has been found to be defective in that the needle must enter or emerge from the work at the base of the lip substantially at the level of the surface of the insole within the lip, which is below (in the finished shoe) the surface of the feather, so that the upper and welt are not drawn into the proper position by the in-seam, and the construction is impractical for those types of shoe sewing machines, such for example as the Goodyear welt machines, which locate the stitches of the in-seam in the shoulder below the face of the body of insole and close to the feather.

The object of the present invention is to retain all the advantages of the former construction, and at the same time to remove the objections thereto as above noted.

To the above end the present invention consists of an insole for boots or shoes having a lip or projection to receive the in-seam adjacent to its edge, a feather outside the lip, a groove within and adjacent to said lip, and a reinforcing covering of canvas or other suitable textile material secured to the central portion of the insole indented into the groove and over the lip and secured to the feather outside of the lip.

The present invention is illustrated in the accompanying drawings in which

Figure 1 is a plan view of insole embodying the same, Fig. 2 is a transverse section, Fig. 3 is a partial section of the insole attached to the shoe, showing the position of the in-seam.

Similar letters of reference indicate like parts in the several views.

In the drawing A represents an insole having the central or body portion  $a$ , the lip or projection to receive the in-seam  $a^1$ , and the feather  $a^2$ . The lip and feather as shown are formed in the usual manner, by splitting the sole at its outer edge and turning down the portion below the cut to form the lip  $a^1$ , and leaving the portion above the cut projecting to form the feather  $a^2$ . It is to be noted however that in the sole of the drawing a portion of the lip has been cut away, leaving the lip  $a^1$  considerably shorter than the feather  $a^2$ , a construction which I am enabled to adopt owing to the improved form of my insole as hereinafter described, and which, though not essential to the present invention, is of importance as securing a flat in-seam.

In accordance with the present invention I provide in the sole A, within and adjacent to the lip  $a^1$ , a groove B. The function of the groove B is to allow the needle to enter or emerge from the sole below the surface of the body portion  $a$  to position the in-seam close to the feather. The position of the in-seam in my improved insole is clearly illustrated in Fig. 3, in which the in-seam is shown at C, D representing the upper and E the welt secured to the insole thereby: The groove B is formed in a manner similar to the usual channel except that the channel flap or "channel lip" as it is sometimes termed in the patented art is removed, the groove B being located adjacent to and parallel with the lip  $a$  and so positioned with relation to such lip that a shoulder  $a^3$  will be formed between the bottom of the groove B and the lip. By thus forming the groove and lip I provide at the base of said lip a wide or thick between substance to receive and hold the stitches and at the same time do not increase the thickness of the lip above the shoulder which would be objectionable in the finished shoe. I consider the removal of the channel flap to be a marked advantage in my construction, since its presence would render the sole difficult to construct, and would make a fold in the reinforcing material where a fold is worse than useless.

My improved insole is completed by a reinforcing covering H of canvas or other suitable textile fabric. The reinforcing covering H is continuous, and is secured to the central portion  $a$  of the sole A, indented into the groove B, and over the lip  $a^1$ , and is secured to the sole on both sides of the lip, its outer edge being secured to the feather  $a^2$ .

The advantage of the former construction hereinbefore described as a part of the prior art, is that the in-



seam passes through two thicknesses of reinforcing material, which form the sides of a continuous fold, and it is important to note that in my present construction I retain that feature, (see Fig. 3) while providing for  
5 the proper positioning of the inseam, by means of the groove B.

I would say that I am aware that it has been proposed to provide an ordinary channeled insole with a reinforcing covering of textile fabric, tucked into the  
10 channel and covering the channel flap, and secured to the body of the sole on top of the channel flap, but such construction is clearly distinguished from the present construction which has no channel flap and in which the reinforcing covering is extended onto the feather.

15 Having thus described my invention I claim as novel

and desire to secure by Letters Patent of the United States:

An insole for boots and shoes, having a lip formed by splitting and turning up the edge of the sole, a feather lying outside the lip, a groove within the lip, the base of  
20 the groove being in substantially the same horizontal plane as the surface of the feather, a shoulder between the groove and the lip at the base of the lip, and a continuous reinforcing covering cemented to the central portion of  
25 the sole, indented into the groove and into the shoulder and lip, and cemented to the feather outside the lip, substantially as described.

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

CHARLES S. SMITH.

Witnesses:

A. O. ORNE,

A. E. WHYTE.