

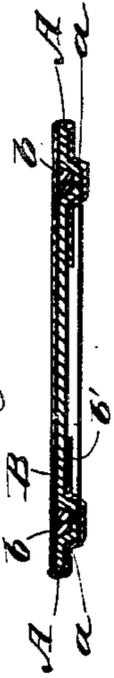
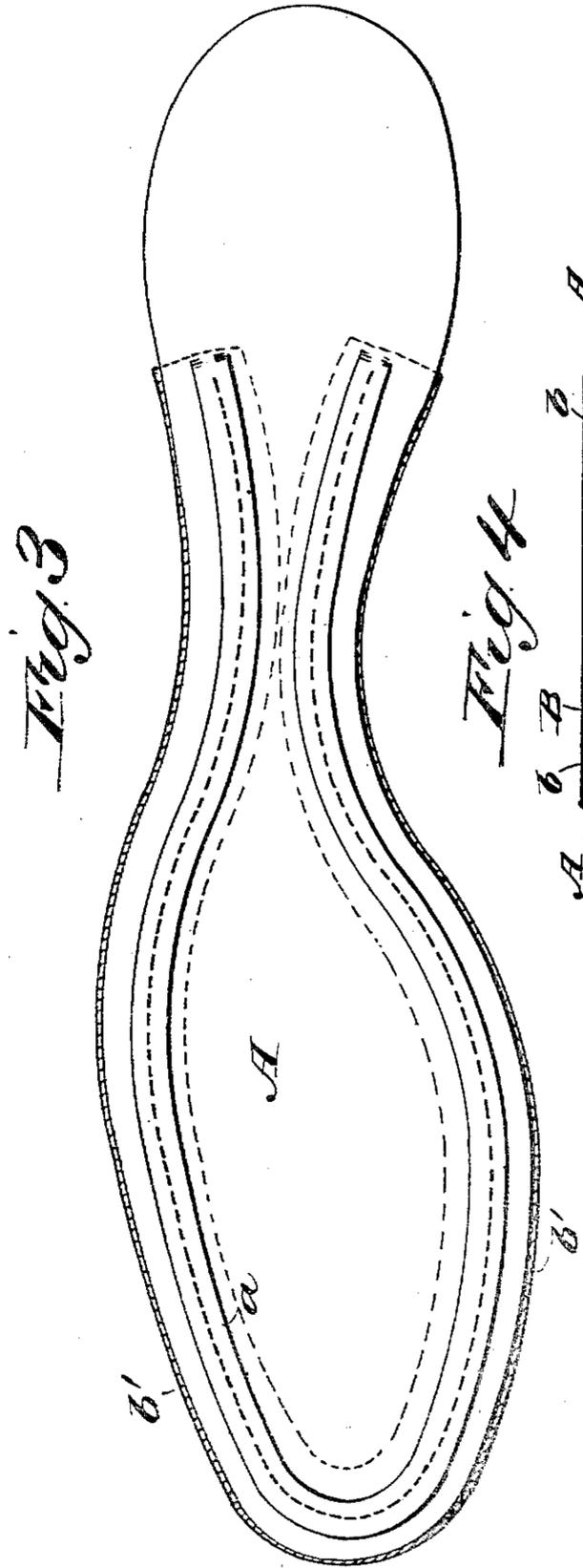
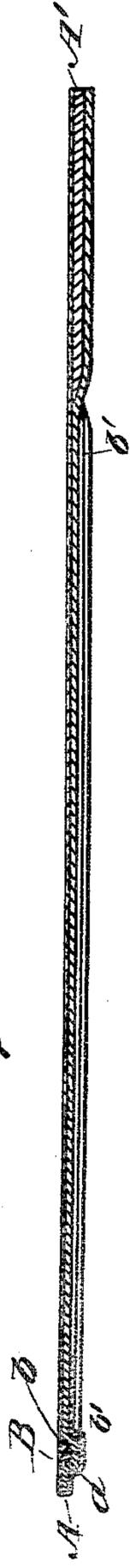
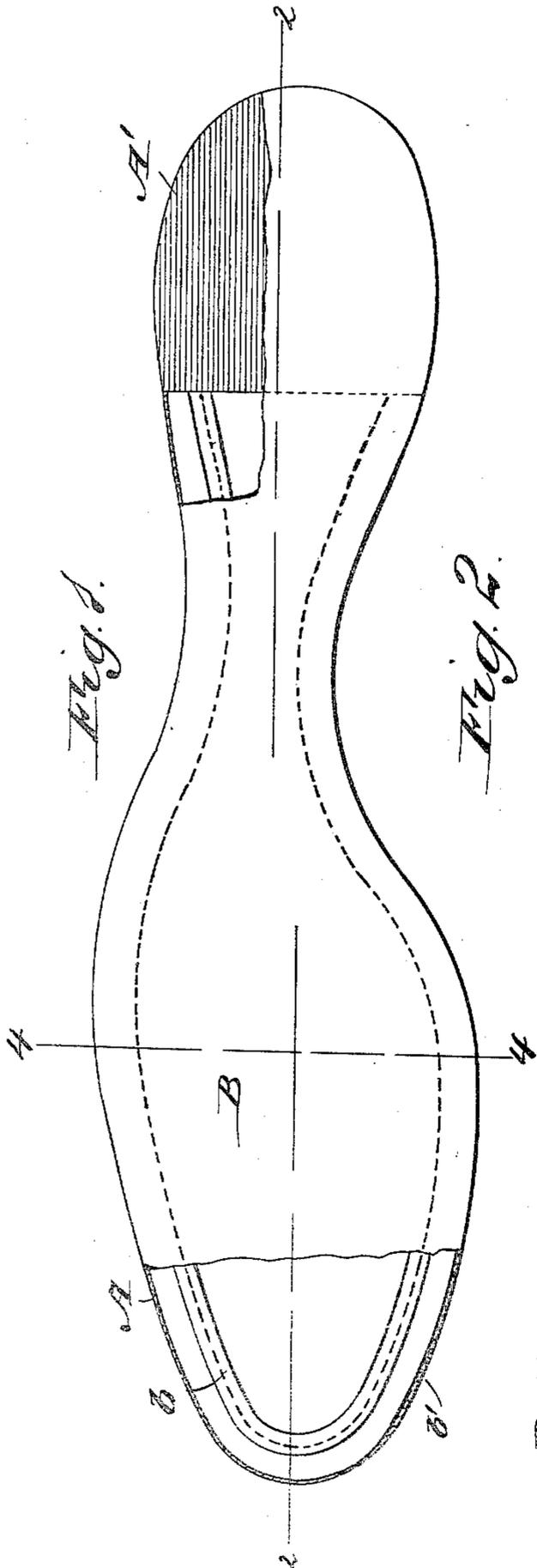
(No Model.)

A. F. LITTLEFIELD.

INNER SOLE.

No. 462,442.

Patented Nov. 3, 1891.



WITNESSES:

F. M. Ordle
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INVENTOR:

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UNITED STATES PATENT OFFICE.

AUGUSTINE F. LITTLEFIELD, OF LYNN, MASSACHUSETTS.

INNER SOLE.

SPECIFICATION forming part of Letters Patent No. 462,442, dated November 3, 1891.

Application filed February 12, 1891. Serial No. 381,189. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTINE F. LITTLEFIELD, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and Improved Inner Sole, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of inner soles which are used in the manufacture of hand-sewed boots and shoes; and the object of my invention is to produce an inner sole which will be light and flexible, but which will have the necessary strength, and which may be formed from lighter stock than the inner soles in ordinary use.

To this end my invention consists in an inner sole having a channel molded or pressed therein and a suitable strengthening material adapted to be inserted in the channel.

This construction will be hereinafter fully described, and specifically pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a broken plan view of an inner sole embodying my invention. Fig. 2 is a vertical longitudinal section of the same on the line 2 2 of Fig. 1. Fig. 3 is an inverted plan of the inner sole, and Fig. 4 is a transverse section on the line 4 4 of Fig. 1.

It is well known that in hand-sewed work the inner soles are usually provided with a channel, which is cut therein near the edge of the sole and which adapts the inner sole for attachment to the shoe-upper, and in forming an inner sole in this manner it is necessary that the stock should have sufficient thickness for a channel to be cut therein; but by molding or pressing a channel in the inner sole very much lighter stock may be used.

The inner sole A is provided with a channel *a*, which extends around the inner sole, near the edge thereof, in the usual manner;

but instead of being cut therein the channel is pressed in the inner sole, the inner sole being placed in a suitable mold for the purpose and the channel being formed so as to project from the lower surface of the inner sole. To give additional strength to the channel *a* it may be provided with a filling *b*, of leather, rubber, or of any suitable material, and said filling may be glued, stitched, or otherwise fastened in the channel. The inner sole is provided with the usual heel-piece *A'* to give the necessary thickness to the heel portion, and with the veneer or lining B, which may be pasted or stitched thereto, and when the veneer is stitched to the inner sole the thread may be passed through the veneer and through the filling *b*, thus confining the veneer and filling at one operation.

The veneer B is doubled over the edge of the inner sole, as shown in *b'* in Figs. 3 and 4, and extends inward on the inner-sole bottom, so as to cover the channel, and it serves to strengthen the inner sole, and if made of suitable material renders the inner-sole water-proof.

The inner sole is applied to the shoe in the usual manner, and as the application is so well understood by the trade it has not been shown in the accompanying drawings. The inner sole may be used either with or without the filling *b*; but it will be found desirable in most cases to use the filling.

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

As an improved article of manufacture, an inner sole having a channel therein, a filling secured in the channel, and a veneer secured to its top surface and doubled over the edge, so as to cover the channel, substantially as described.

AUGUSTINE F. LITTLEFIELD.

Witnesses:

WARREN B. HUTCHINSON,
C. SEDGWICK.