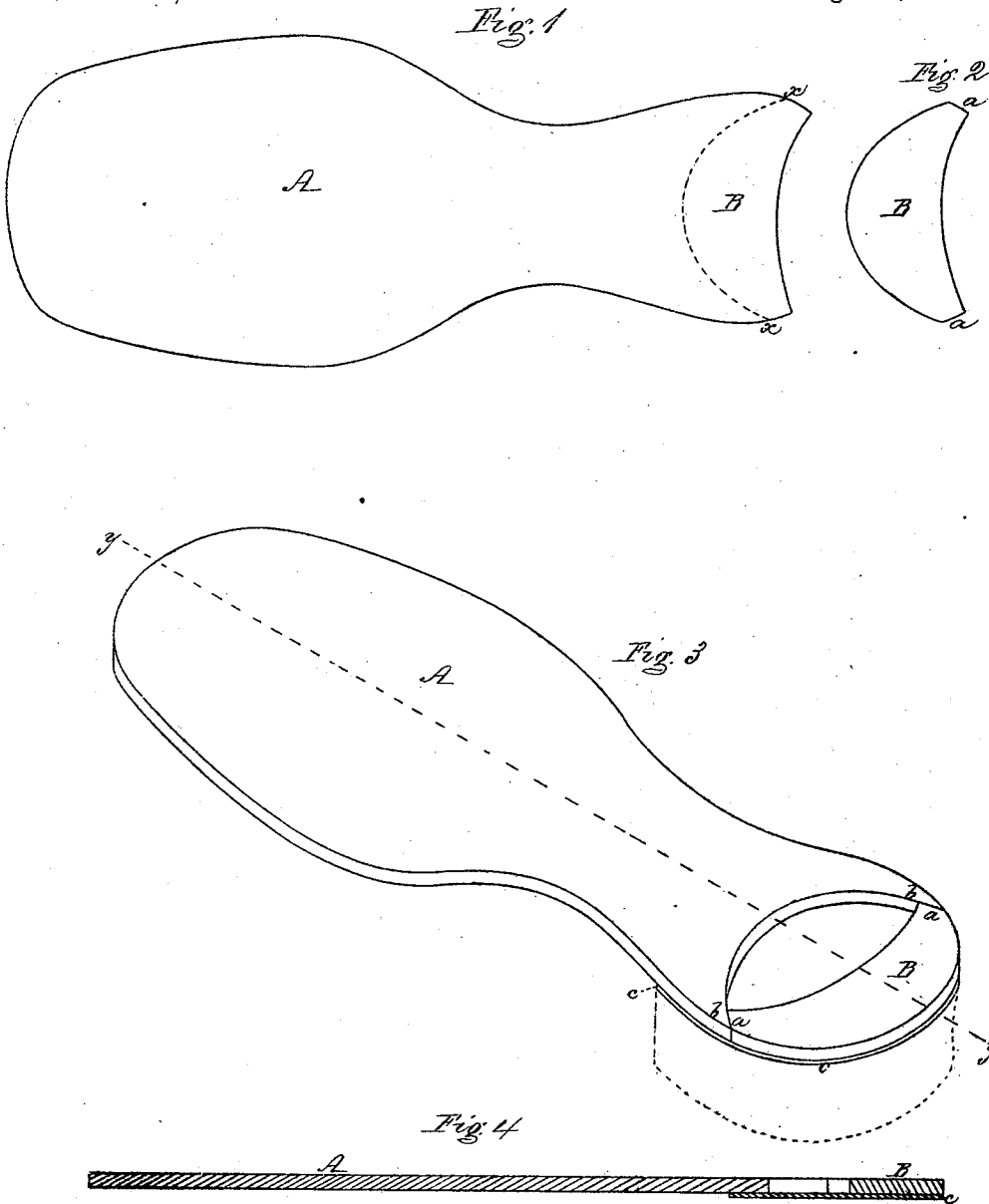


S. J. SHAW.

Improvement in Soles for Boots and Shoes.

No. 130,947.

Patented Aug. 27, 1872.



Witnesses,
W. J. Cambridge
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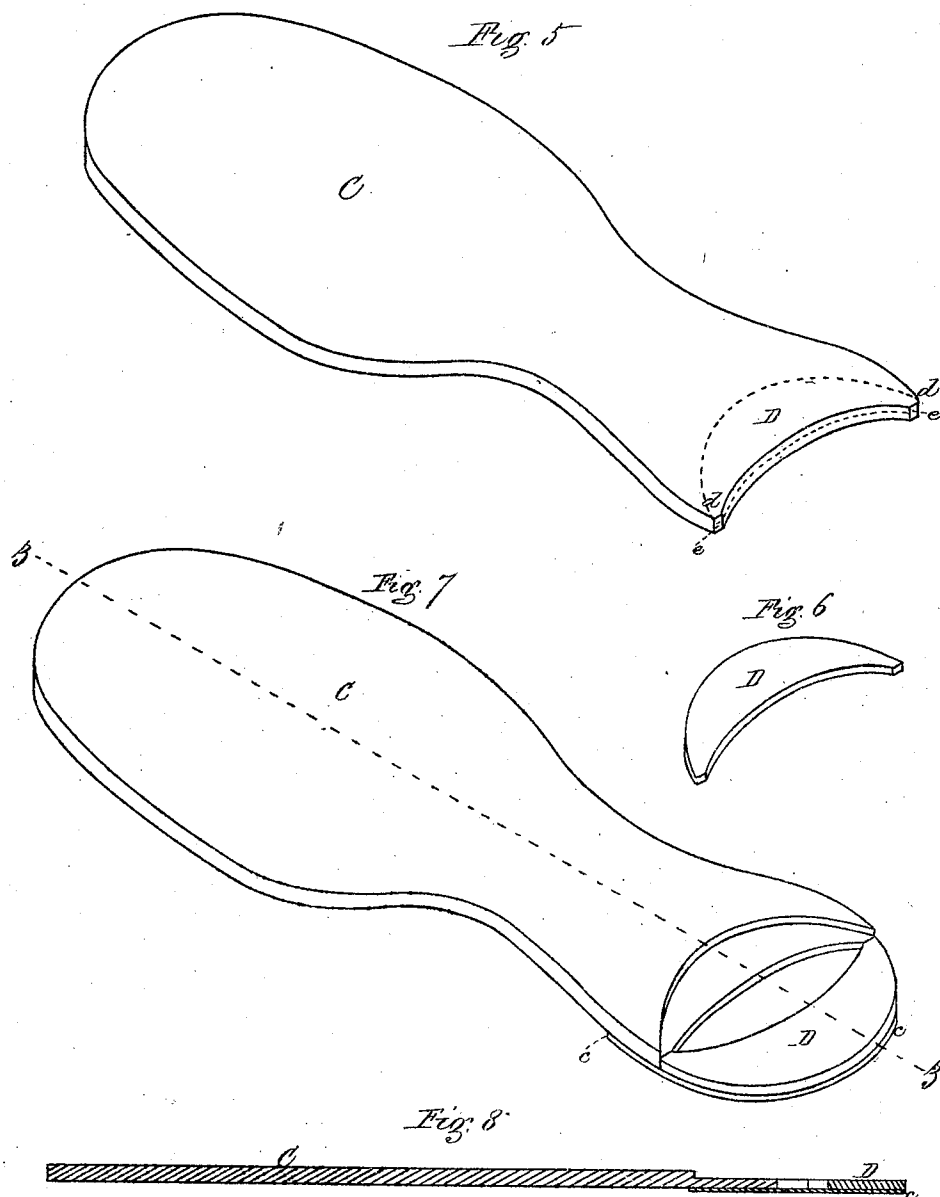
Inventor,
Samuel J. Shaw
per *Charles Mackay & Stearns*
Attys

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UNITED STATES PATENT OFFICE.

SAMUEL J. SHAW, OF MARLBOROUGH, MASSACHUSETTS.

IMPROVEMENT IN SOLES FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. 130,947, dated August 27, 1872.

To all whom it may concern:

Be it known that I, SAMUEL J. SHAW, of Marlborough, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Soles for Boots and Shoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a plan of a "shortened sole." Fig. 2 is a plan of a piece cut therefrom on the curved dotted line *xx*. Fig. 3 is a perspective view of a complete sole formed in accordance with my invention, by reversing the position of the piece shown in Fig. 2 and again uniting it with the "shortened sole" from which it was cut. Fig. 4 is a section on the line *yy* of Fig. 3. Fig. 5 is a perspective view of a "shortened sole" illustrating a modification of my invention. Fig. 6 is a perspective view of a piece cut from the sole shown in Fig. 5. Fig. 7 is a perspective view of a complete sole formed by reversing and uniting the piece shown in Fig. 6 with the sole shown in Fig. 5 in a manner similar to that shown in Fig. 3. Fig. 8 is a section on the line *zz* of Fig. 7.

Where "shortened soles" are employed in the manufacture of boots and shoes the deficiency at the heel of each sole is made up by the addition of a small piece of stock of the required size and shape. My invention has for its object to save the cost of this additional piece of stock; and consists in cutting from a "shortened sole" a piece of such shape that, when it is reversed and placed against the sole from which it was cut, it will make up the deficiency at the heel and complete the sole as required. My invention also consists in fitting the ends of the additional piece, which makes up the deficiency at the heel, within the curved rear end of the "shortened sole," so as to form a beveled joint, which will not open or separate in the process of manufacturing the boot or shoe like a straight joint. My invention also consists in uniting the two portions of the complete sole by a piece of leather or other suitable material cemented or otherwise secured thereto, by which means the two portions of the sole are prevented from breaking away from each other or opening at the joint during the process of manufacturing the boot or shoe.

To enable others skilled in the art to under-

stand and use my invention, I will proceed to describe the manner in which I have carried it out.

In Fig. 1 of the said drawing, A represents a "shortened sole," from the rear end of which, on the curved dotted line *xx*, is cut a piece, B, Figs. 1 and 2. After the piece B has been cut from the sole A its position is reversed and it is placed with its two ends, *a*, just within the pointed ends *b* of the sole A; and it will be seen that the piece B when in this position makes up the deficiency at the heel and completes the sole as required; and as no additional piece of stock is used, except that, B, taken out of the sole A, a material saving is effected. By placing the ends *a* of the piece B within the points *b* of the sole A, so that the latter will overlap the former, a beveled joint is formed which will not open or separate in the process of manufacturing the boot or shoe like a straight joint, and consequently it admits of a better finish on the outside. I do not, therefore, wish to confine myself to the use of this beveled joint only when the additional piece B is cut out of the sole A, as it is evident that it may be used with the same advantages if the piece B is cut from a separate piece of stock; and in the latter case it also avoids the necessity of clipping off the points *b* of the "shortened sole," as is now done in making the ordinary straight joint. *c* is a piece of leather or other suitable material, which is cemented or otherwise secured to the sole A and piece B, which are thus held firmly together, so that in the process of manufacturing the boot or shoe they will not separate or break away from each other at the joint, as would otherwise be the case, but will have a tendency to hug closer together; while, in using a pegging-machine, the rows of pegs can be driven around the entire sole without stopping, whereas when the additional piece required to make up the deficiency at the heel of the sole has been separate therefrom, and not united thereto as heretofore, after pegging the main portion of the sole it was necessary to stop and tack on the additional piece before completing the operation. Instead of a thin piece, *c*, of leather, a piece of the required size, shape, and thickness to form the first lift of the heel may be employed, if preferred.

Figs. 5, 6, 7, and 8 illustrate a modification

of my invention. In this case a cut is made in the sole C on the curved dotted line *d d*, Fig. 5; but instead of the cut extending entirely through the sole, as is the case where the piece B is taken out of the sole A, Fig. 1, it extends only about half-way through the thickness of the sole. A cut is then made on the dotted line *e e* through the center of the thickness of the sole, and in a plane parallel with its surface, to meet the first cut on the line *d d*, when a piece, D, Fig. 6, is taken out similar to the piece B, but of about one-half the thickness. This piece D is now reversed and fitted against the rear end of the sole, as seen in Fig. 7, which completes it and gives it the required shape, a piece, *c*, similar to the piece *c*, Fig. 3, being afterward cemented or otherwise secured to the sole C and piece D, to hold them firmly together.

Claim.

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

1. A sole for boots and shoes formed of a "shortened sole," A or C, and a piece, B or D, cut therefrom and reversed, substantially in the manner and for the purpose set forth.

2. I also claim the within-described beveled joint, formed by fitting the ends *a* of the piece B, whether cut from the sole A or from a separate piece of stock, within the points *b* of the sole A, substantially in the manner and for the purpose described.

3. I also claim, in combination with a complete sole formed as above described, the piece *c* for uniting the two portions of the sole and holding them together, substantially as set forth.

Witness my hand this 29th day of July, A. D. 1872.

SAMUEL J. SHAW.

In presence of—

P. E. TESCHEMACHER,
W. J. CAMBRIDGE.