

H. G. FARR.
Heel-Stiffeners.

No. 218,006.

Patented July 29, 1879.

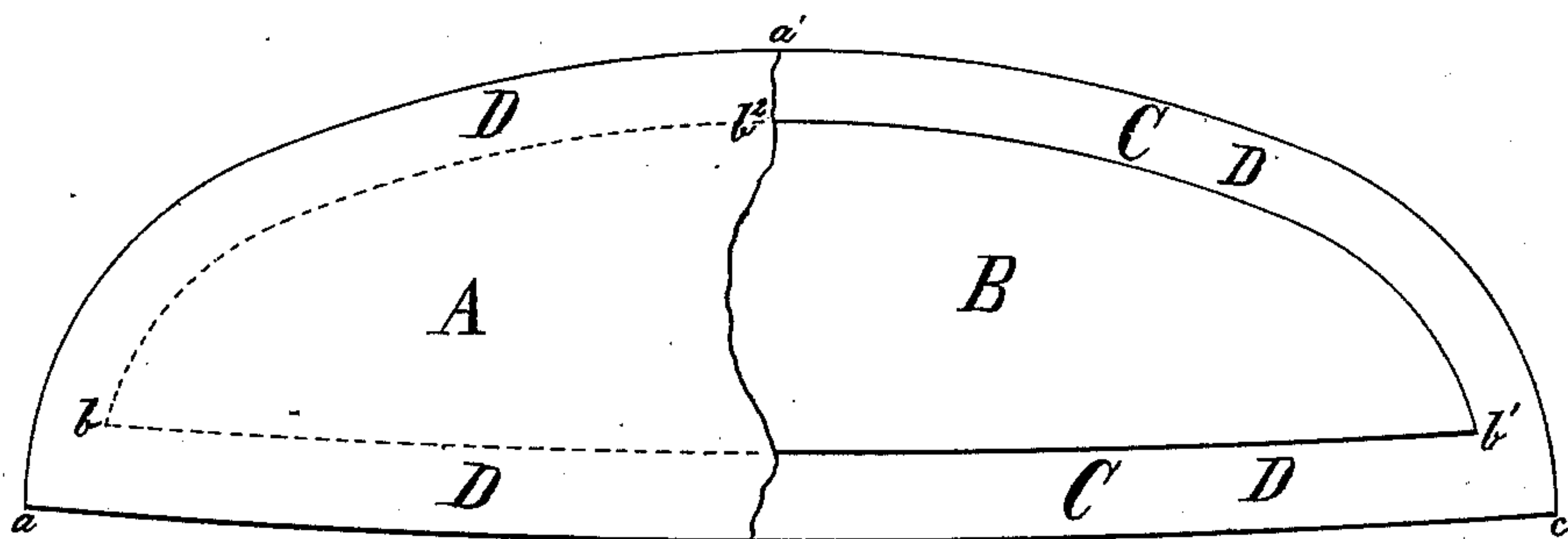


Fig. 1.

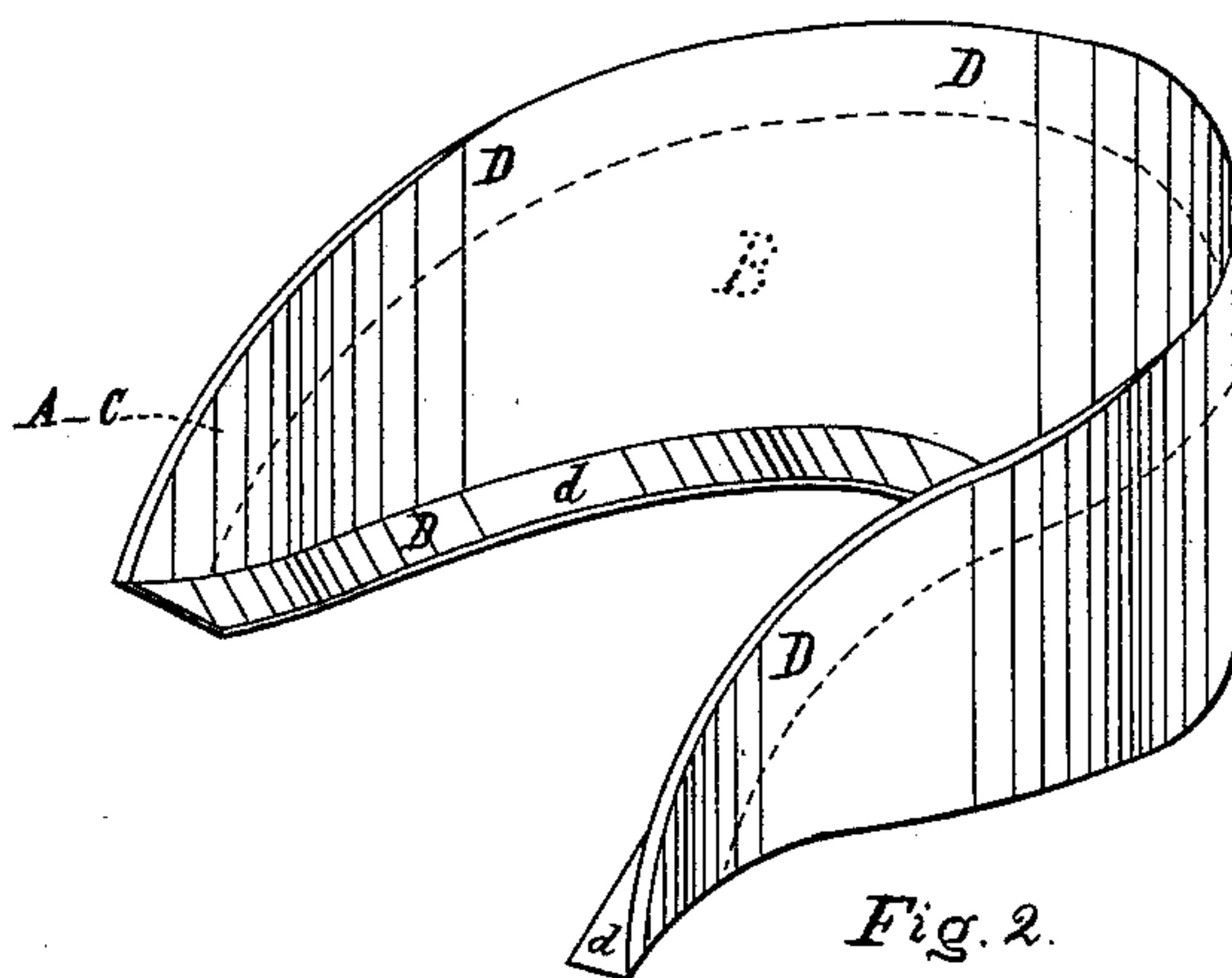


Fig. 2.

Witnesses.

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IMPROVEMENT IN HEEL-STIFFENERS.

Specification forming part of Letters Patent No. **218,006**, dated July 29, 1879; application filed March 31, 1879.

To all whom it may concern:

Be it known that I, HIRAM G. FARR, of the city, county, and State of New York, have invented a new and useful Improvement in Heel-Stiffeners, of which the following is a specification.

This invention has for its object the fabrication of a heel-stiffener for boots and shoes in which the stiffener is composed of wood, so shaped that the grain thereof shall run longitudinally of the stiffener, thereby avoiding the stretching out of shape of the stiffening-piece which is so common when the grain of the wood runs vertically.

The invention will be readily understood by reference to the accompanying drawings, of which—

Figure 1 is a general plan of the improved heel-stiffener, the outside or covering piece being partly broken away so as to disclose the stiffening-piece, which is pasted or glued within two covering-pieces. Fig. 2 shows the improved heel-stiffener crimped over at the bottom as it would appear in use.

For the fabrication of these improved heel-stiffeners I use three pieces, A, B, and C, the two outer pieces, A and C, being sheets of leather, cloth, or other suitable material, between which the stiffening-piece B is firmly pasted or cemented fast.

The contour of the pieces A and C when first cut out will be as shown in Fig. 1, and will be described by the straight, or nearly straight, line *a c*, forming the bottom edge of the said pieces when glued together, while the curved line *a' c* will show the top edge of the said pieces, and inclose between it and the line *a c* the whole surface of the stiffener.

The piece B, which forms the stiffener proper, is described by the lines *b b¹ b²*, so as to leave a margin, D, of unstiffened surface all around its outer edge, and between it and the contour-lines *a a' c*.

The width of the marginal space D should be about from one to three eighths of an inch (more or less) around the upper side, and from three to five eighths of an inch at the bottom.

The piece B is of wood. This piece of wood I use with its grain running longitudinally—*i. e.*, around the heel portion—when it is inserted in the boot or shoe.

The marginal space D at the bottom part of the stiffener is left without the intervening stiffening-piece B, so that at the bottom it may be easily turned over into a flange-like lip, *d*, as shown in Fig. 2, without breakage of the stiffening-piece, as would be the case if the said stiffening-piece extended down to the line *a c*.

Leaving the piece B out of the covers throughout the marginal space D permits the outer sides of the pieces A and C, near the entire edge, to be chamfered off to a feather-edge, so as not to cause any unpleasant ridge or set-off in the inside of a boot or shoe at the point where this stiffener begins or terminates.

The pieces A C will, preferably, be formed of leather, though canvas or other suitable material may be used for the purpose.

I am aware that heel-stiffeners formed of wood surfaced with cloth or other material have heretofore been used, notably those described in Patent No. 130,089; but in those the wood stiffening-piece is made to extend to the full perimeter of the covering-pieces, and is placed with the grain of the wood running up and down. This construction is objectionable, as it prevents the proper chamfering off of the edges of the covering-pieces, renders it difficult to properly crimp and bend over the bottom edge, and the wooden filling-piece is liable to split, owing to the fibers being placed up and down, and the bending of the pieces being necessarily in a transverse direction.

I am also aware that other stiffeners have been formed with a marginal flange, and having the stiffening material in the center. I therefore lay no claim to such features, broadly considered; but

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

An improved heel-stiffener, composed of the parts A B C D, the part B being intermediate and of wood, arranged with its fiber running longitudinally of the stiffener, all cemented together substantially as set forth.

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Witnesses:

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