

J. Kimball,

Shoe Sole,

No 55,671,

Patented June 19, 1866.

Fig. 3.

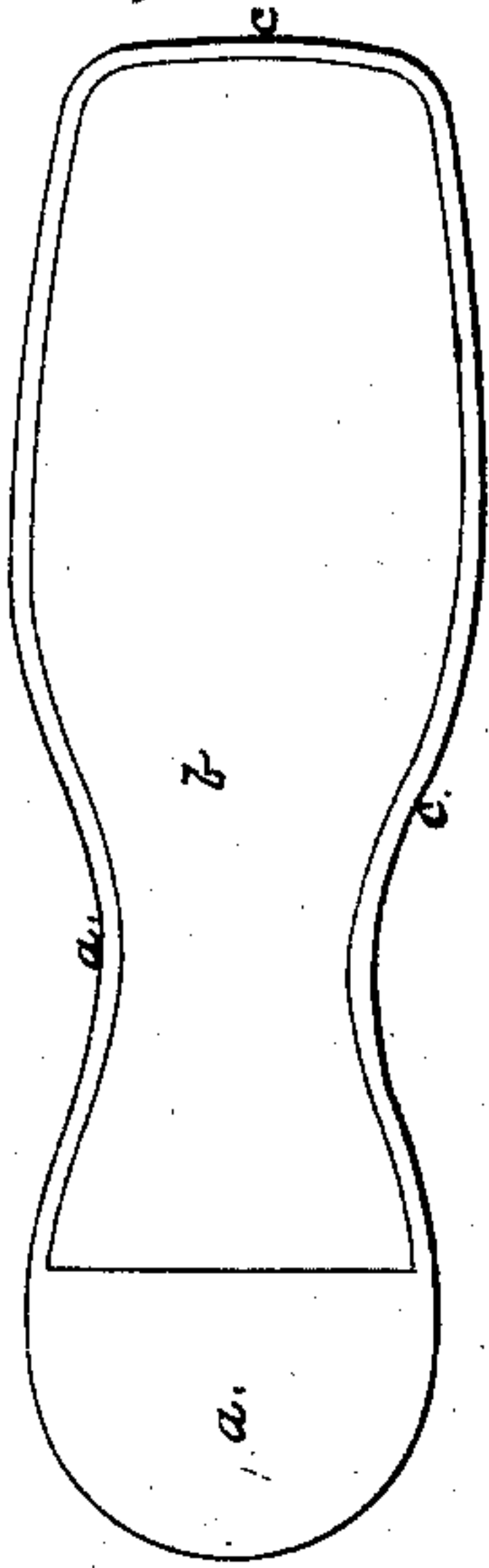


Fig. 4.

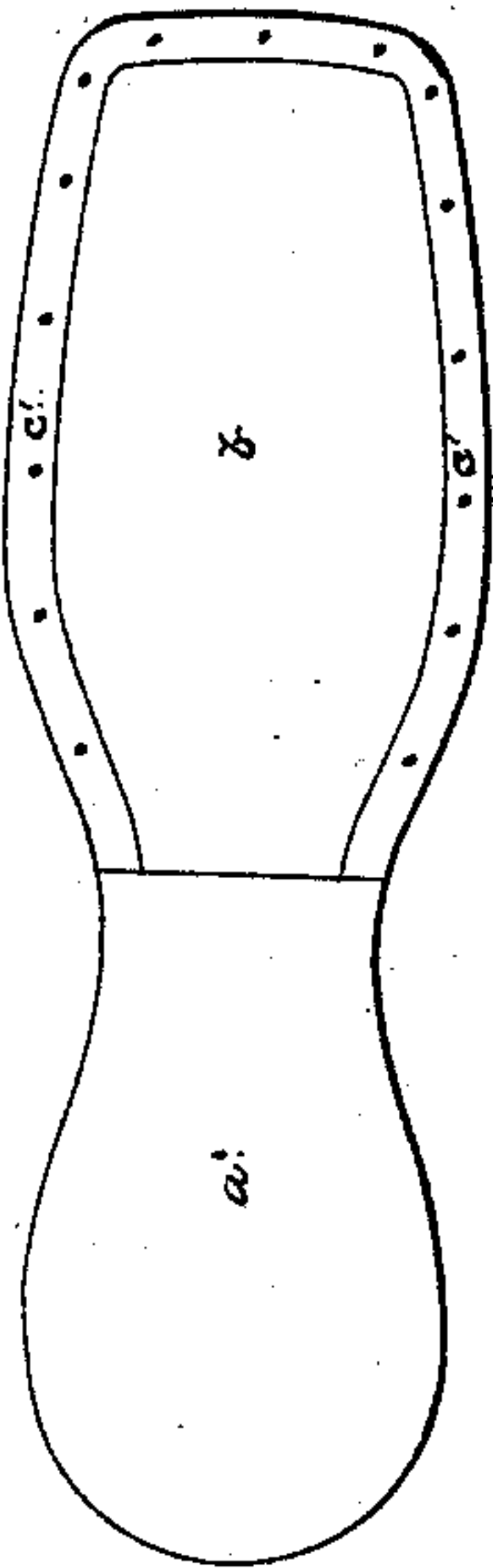


Fig. 5.

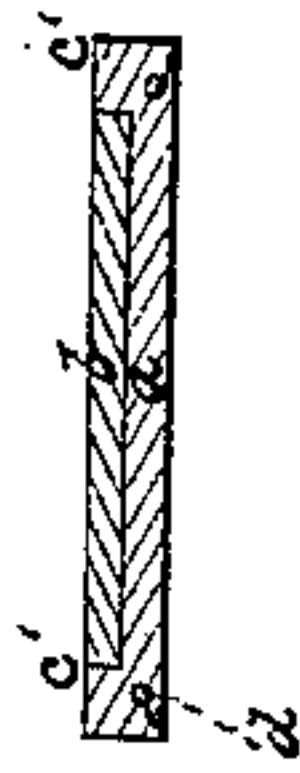


Fig. 6.

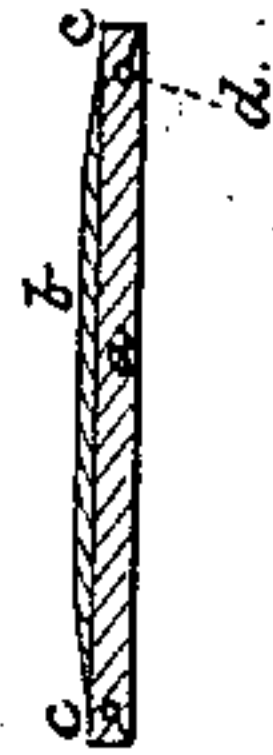


Fig. 1.

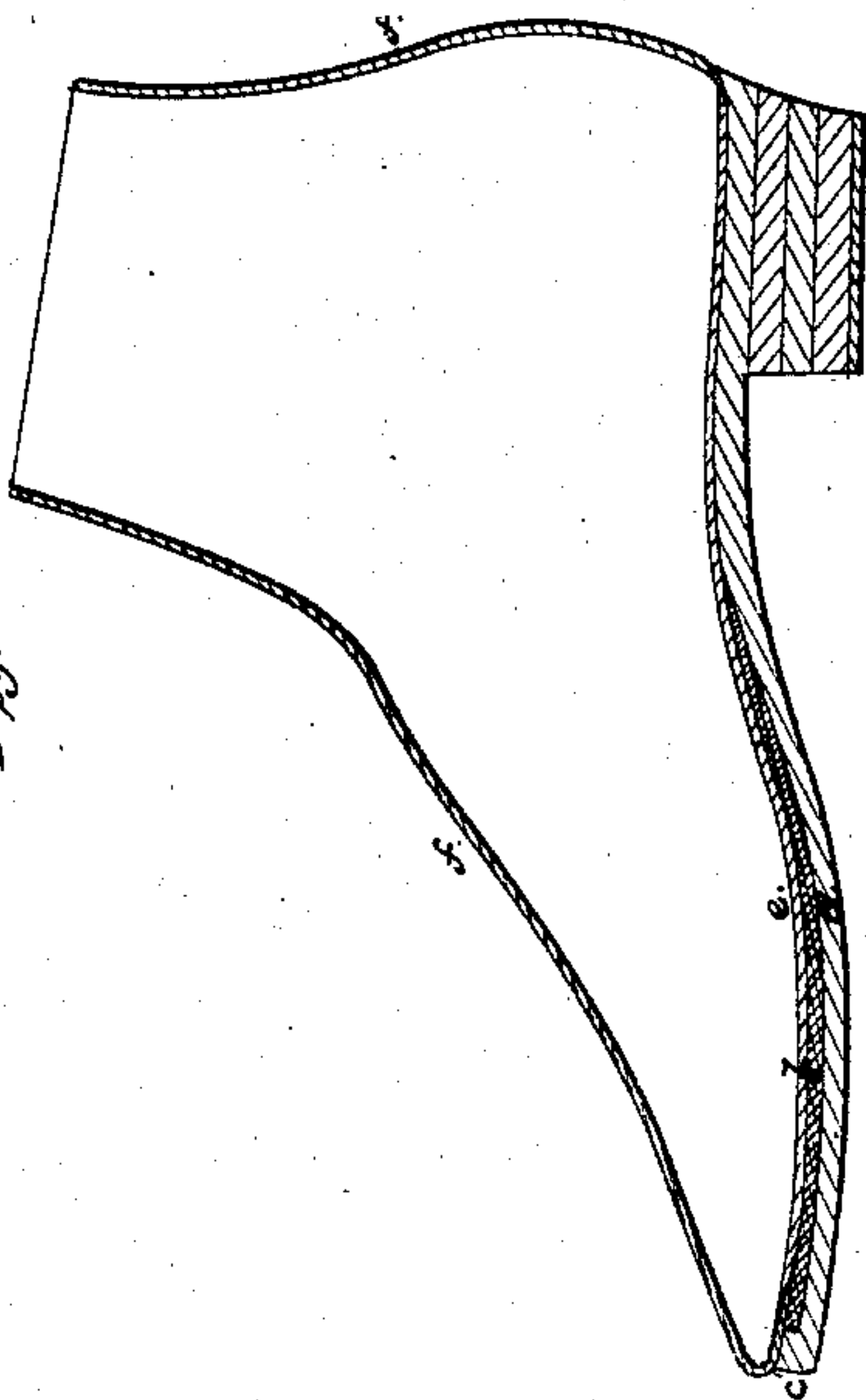
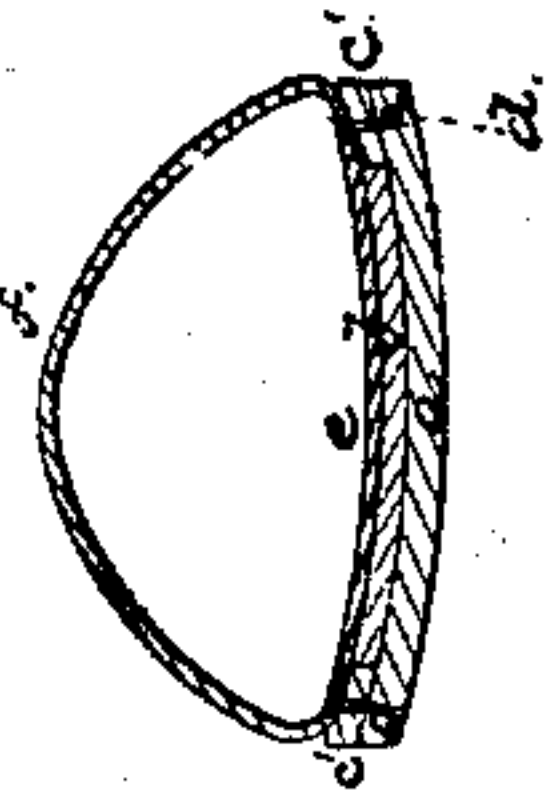


Fig. 2.



Witnesses:
Samuel St. Oliver
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UNITED STATES PATENT OFFICE.

JOHN KIMBALL, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN BOOTS AND SHOES.

Specification forming part of Letters Patent No. 55,671, dated June 19, 1866.

To all whom it may concern:

Be it known that I, JOHN KIMBALL, of Boston, in the county of Suffolk and State of Massachusetts, have made a new and useful Invention having reference to Shoes and the Soles thereof; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a longitudinal section of a shoe made in accordance with my invention. Fig. 2 is a transverse section of it. Figs. 3 and 4 represent outer soles of such a shoe with a layer of cork applied thereto and arranged thereon in accordance with my invention. Fig. 5 is a transverse section of the combination represented in Fig. 4. Fig. 6 is a transverse section of the combination as exhibited in Fig. 3.

My object in making my invention has been to construct a cork-soled shoe or boot without the ordinary binding of leather, which, in the common way of making such a shoe, is stitched to the upper and turned around the edges of the stratum of cork, and which not only renders the shoe or boot very expensive in its fabrication, but liable, when in use, to become worn, so as to expose the cork at its edges.

With my improvement there can be no such exposure of the cork, as I employ no binding of leather stitched to the inner sole and bent around the edge of the cork and over and upon that surface of it which comes next to the outer sole.

In carrying out my improvement I so combine or arrange a leather sole and a stratum of cork that there may be a narrow border of the leather or sole circumscribing the edge of the stratum of cork.

In Figs. 3 and 6 the outer sole is shown at *a* and the stratum of cork at *b*. The border or space of the outer sole which circumscribes the edge of the cork is shown at *c*. In this case the cork is to be chamfered down at its edge, so as to enable the border to lay upon and in contact with the upper when stitched to the inner sole.

The construction indicated by Figs. 3 and 6 will suffice for thin-soled shoes; but whenever it may be desirable to make what is usually termed a thick or double soled shoe an additional strip, *c'*, of sole-leather may encompass

the edge of the cork *b*, and be fastened to the leather sole *a* by means of tacks, so as to thicken the outersole at its edge. The surface of this addition-piece *c'* will come in contact with the upper when the cork is applied to the insole of a shoe. When the leather is of sufficient thickness it may be plowed out to receive the cork; but as this would be an expensive procedure, I prefer to increase the thickness of the edge of the sole by an addition such as is represented at *c'* in Figs. 4 and 5.

In each instance the outer sole, in case it is to be sewed to the shoe, is to be provided with a crease, *d*, to receive the sewing. A shoe as made with cork applied between its inner and outer soles and arranged with respect to their edges, as hereinbefore explained, is shown in Figs. 1 and 2, in which *a* is the outer sole, *b* the layer of cork, *c* the inner sole, and *f* the upper or upper-leather. The sewing is shown at *g*. It goes through the soles, the cork, and the upper, and thus they are held together by it. There is a great advantage in carrying the sewing through the cork, as it is better held in place by it and prevented from becoming cracked while in use. When cracked it loses its water-proof quality in a measure, if not entirely. Nails may be substituted for the sewing, but they are not so useful. Its appearance is like that of a common shoe without any cork sole, and thus has a finish neater than that of a cork-soled shoe as heretofore made.

I claim as my invention—

1. The improved manufacture of shoe, as made with a layer of cork so arranged between its inner and outer soles that the leather of the outer sole may come in contact with the leather of the upper where it laps over the inner sole, (the same being so as to hide the edges of the cork,) and the soles, cork, and upper be united by sewing or nails, as specified.

2. The improved manufacture of water-proof sole for boots or shoes, it being composed of leather and cork arranged with a border or a piece of leather circumscribing the cork, as and for the purpose set forth.

JOHN KIMBALL.

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