

A. A. MOSS.

Improvement in Soles of Boots and Shoes.

No. 115,631.

Patented June 6, 1871.

Fig: 1.

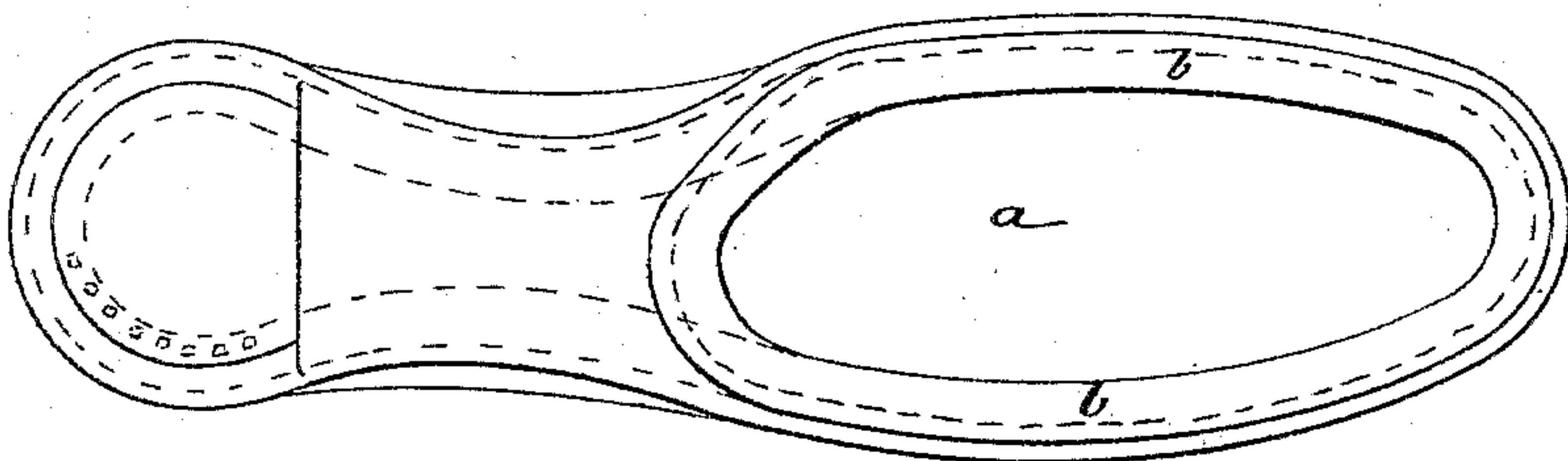
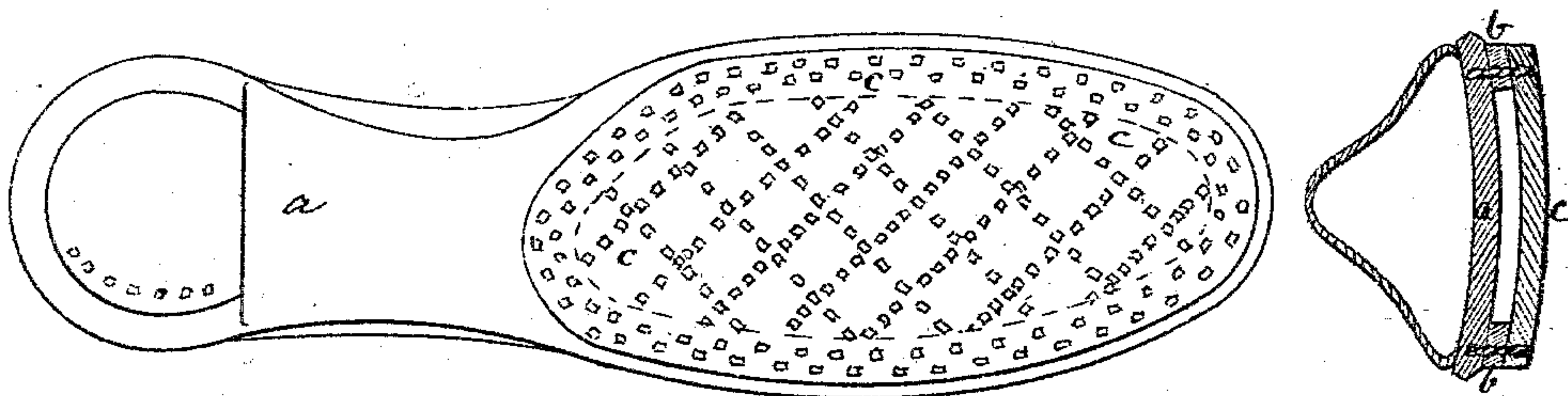


Fig: 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALFRED A. MOSS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SOLES OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. 115,631, dated June 6, 1871.

To all whom it may concern:

Be it known that I, ALFRED A. MOSS, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in the Construction of the Soles of Boots and Shoes; and that the following is a full and exact description of my said improvement, a drawing of which accompanies this my specification.

My improvement consists in the construction of boots and shoes with soles having a recess or air space formed by the ordinary sole, and a supplemental convex sole secured to a raised welt or rand around the edge, and braced or stiffened with rivets, nails, or pins so as to require no support except at the welt or edges, and to preserve the desired hollow space or chamber while in use.

Figure I of the drawing represents the sole of an ordinary shoe or boot having upon it an exterior welt or border raised upon the edge of the ordinary sole, and extending around it, and upon which the exterior additional sole is to be fastened so as to leave the hollow space or chamber within. Fig. II represents in plan and cross-section the additional sole fastened in its proper place upon the border so as to form and inclose the hollow space or chamber within.

In Fig. I, *a* represents the ordinary sole; *b*, the raised edge or border, secured to the sole. *c*, in Fig. II, represents in plan and cross-section the exterior additional sole fixed and secured in its place, and provided with copper or steel nails or rivets, except at its edges, where it is united to the border and the inner sole. In the construction of the hollow space or chamber it may be made suitably by means of an exterior welt or raised border of sole-leather extending all around the edge of the ordinary sole, before the heel, and by securing the exterior sole to the raised border either by sewing or by nails or pegs, or by any suitable fastening. The thickness of the space between the ordinary sole and the inner surface of the exterior sole will vary according to the size of

the shoe; but it should, in general, be of sufficient depth to allow the play of the external sole without its resting upon the interior sole, except at its bearings on the edge. The nails or rivets in the external sole contribute to keep the external sole in its proper shape so as not to come in contact with the interior sole, and it should, for this purpose, be made slightly concave on the inner surface and convex on the outer surface. The ordinary and the exterior sole should be so put together as to keep out wet, and to that extent the air in the chamber will be confined, though it is not necessary that the chamber or hollow space should be air-tight.

By this construction the soles of boots and shoes may be made to keep the feet dry and warm in winter, and light, cool, and easy for summer, furnishing a pleasant elastic cushion, yet sufficiently firm and solid, for the feet while walking, and the general durability of the sole and its imperviousness to wet greatly promoted. The exterior sole may be shaped so as to form the hollow chamber by being put into suitable molds and pressed into the requisite form, and the exterior sole may be composed of any other suitable material besides sole-leather; but I believe good sole-leather, protected by the nails or rivets, to be the best material.

Having thus described my improvement and the manner of constructing the same, what I claim therein as my invention, and for which I desire Letters Patent, is—

The construction of boots and shoes with an unobstructed and durable air space or chamber, formed by a convex exterior supplemental sole, strengthened, braced, or stiffened by a sufficient number of rivets, nails, or pegs, and secured to a raised welt or rand running around the edge of the sole, substantially in the manner described.

ALFRED A. MOSS.

Witnesses:

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