

No. 682,940.

Patented Sept. 17, 1901.

C. E. KELLER.

BOOT HEEL.

(Application filed Dec. 5, 1900.)

(No Model.)

Fig. 1

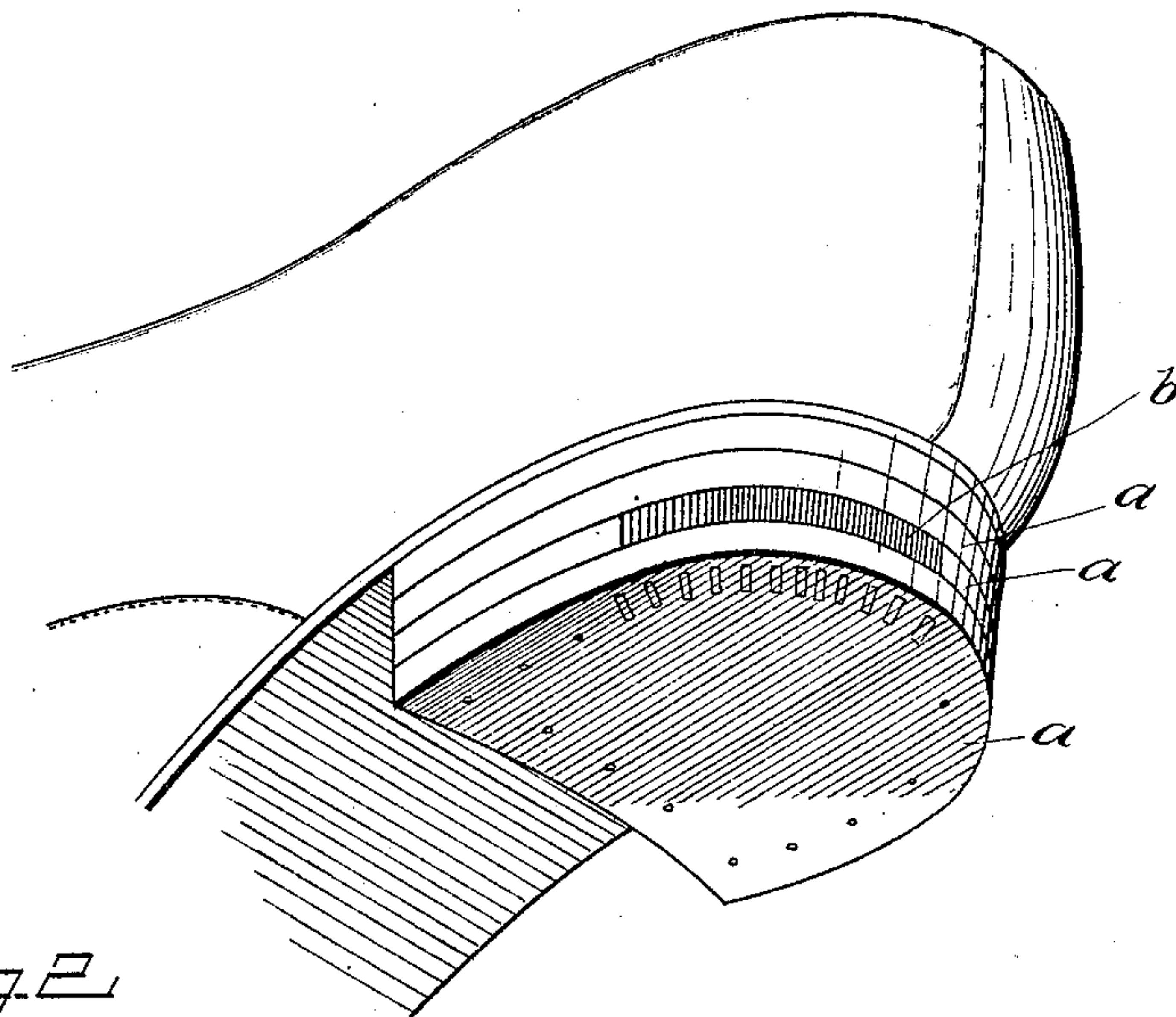


Fig. 2

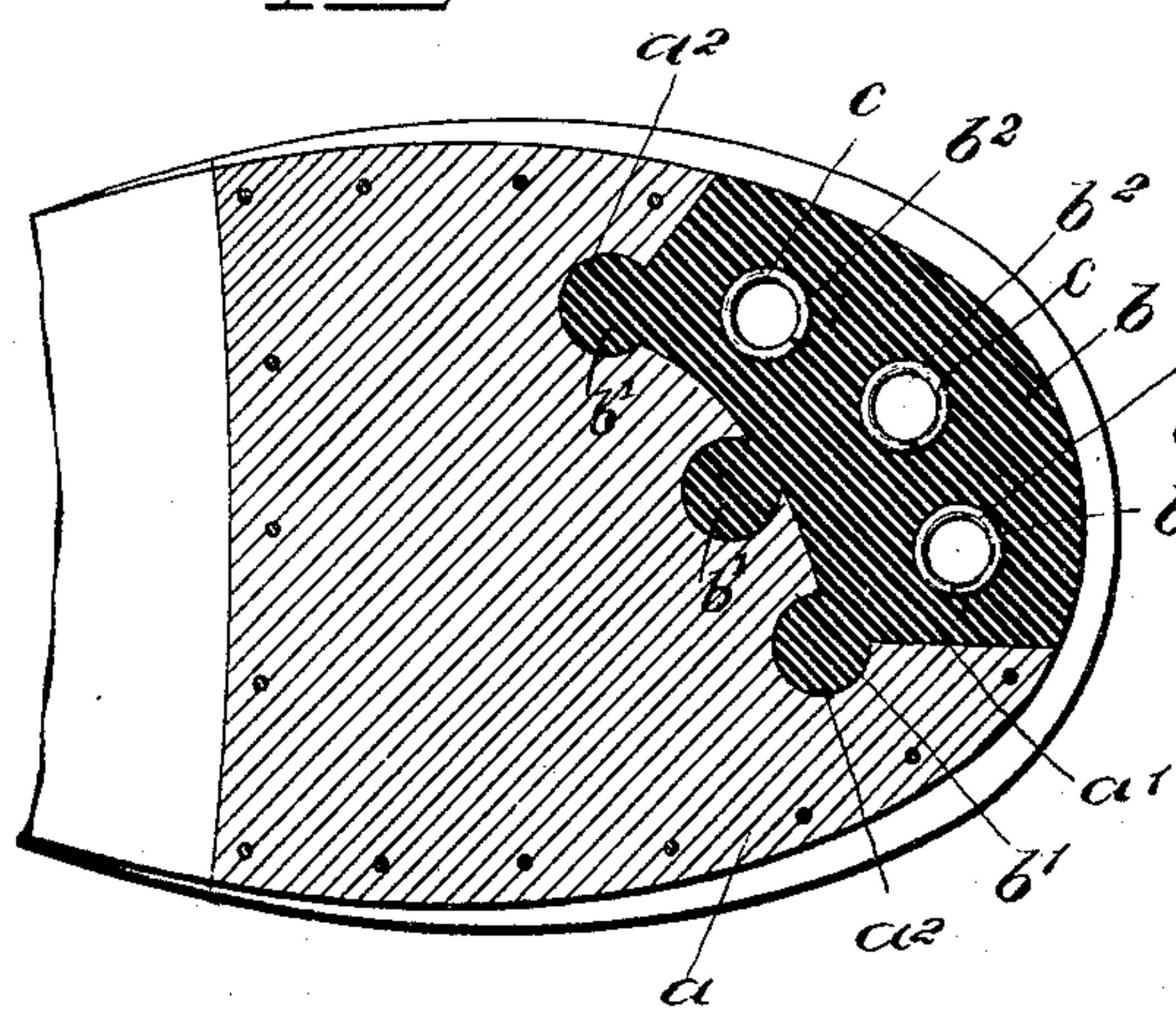
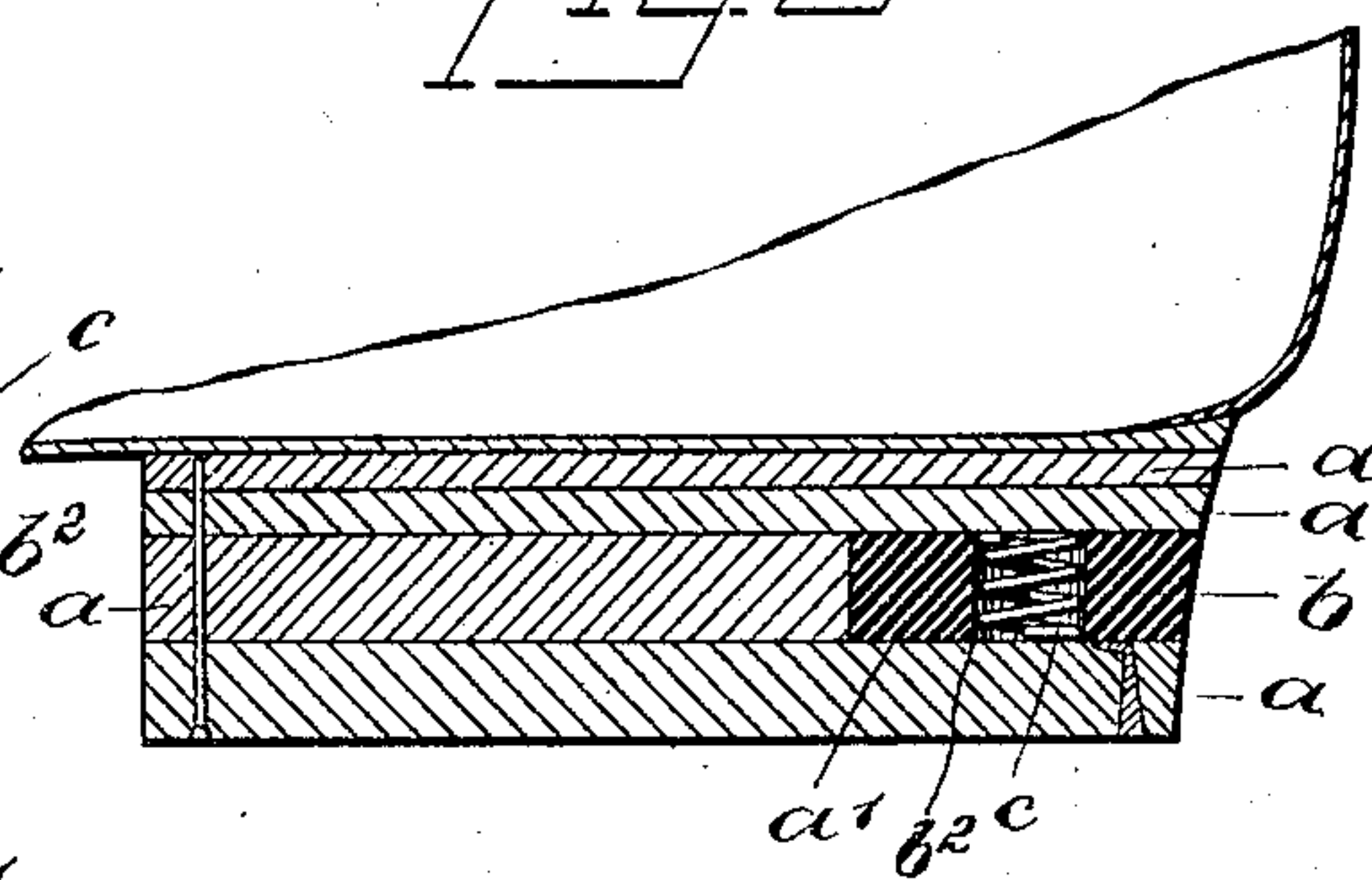


Fig. 3



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## BOOT-HEEL.

SPECIFICATION forming part of Letters Patent No. 682,940, dated September 17, 1901.

Application filed December 5, 1900. Serial No. 38,762. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES EDWIN KELLER, a citizen of the United States, and a resident of Los Angeles, in the county of Los Angeles and State of California, have invented a new and Improved Boot-Heel, of which the following is a full, clear, and exact description.

This invention relates to a heel for boots, shoes, and like foot-gear which is provided with a rubber cushion arranged in such a manner that the full benefit of the cushioning effect is derived and at the same time the rubber is protected from contact with the earth and is securely held in place, forming a compact and durable heel.

This specification is the specific description of one form of the invention, while the claim is a definition of the actual scope thereof.

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

Figure 1 is a perspective view of the invention in use. Fig. 2 is a horizontal section. Fig. 3 is a vertical section.

The heel of the shoe is made up of a number of layers of leather *a* in essentially the usual manner. The lowermost layer is of an area equal to the whole area of the heel, as shown best in Fig. 1; but the layer just above the bottom layer has a portion cut out, as indicated at *a'*, thus forming a recess in the heel in which is placed the rubber cushion *b*. The bottom layer *a* of leather is not fastened through the rubber cushion, but is made simply to bear thereon, so that the elasticity of the cushion is communicated to the bottom layer of leather forming the heel. It will therefore be seen that the heel does not present a rubber surface to the earth, and therefore the shoe does not tend to slip in wet weather, and, further, the cushion is protect-

ed from constant abrasion produced by the act of walking. The recess *a'* is formed with a number of branches *a<sup>2</sup>*, connected with the main recess by contracted portions, and these branches *a<sup>2</sup>* are adapted to receive projections *b'*, formed on the cushion and conforming in shape to the shape of the branches of the recess. This has the effect of locking the cushion to the heel and preventing the displacement of the cushion. It also avoids the necessity of cementing the cushion in place, which cementing not only is a very insecure way of fastening the cushion, but also detracts to some extent from the elasticity thereof. The cushion has vertical openings *b<sup>2</sup>* therein, in which openings are fitted expansive springs *c*, disposed vertically and bearing against the top and bottom walls of the recess in which the cushion is placed. These springs add further to the elasticity of the cushion.

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

A heel for articles of footwear, formed of a number of layers of material, an intermediate one of which is of composite structure, comprising a main section with a portion cut out to form a recess, and a relatively elastic section forming a cushion set into the recess in the main section, the said elastic section further having an opening extending vertically through it, and a metallic spring fitted in the opening and bearing against the top and bottom walls of said recess in which the elastic section is placed.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES EDWIN KELLER.

Witnesses:

JAMES E. RILEY,  
IRA C. WHITE.