

(No Model.)

R. McKAY.

CUSHIONED HEEL PLATE FOR BOOTS OR SHOES.

No. 598,714.

Patented Feb. 8, 1898.

Fig. 1.

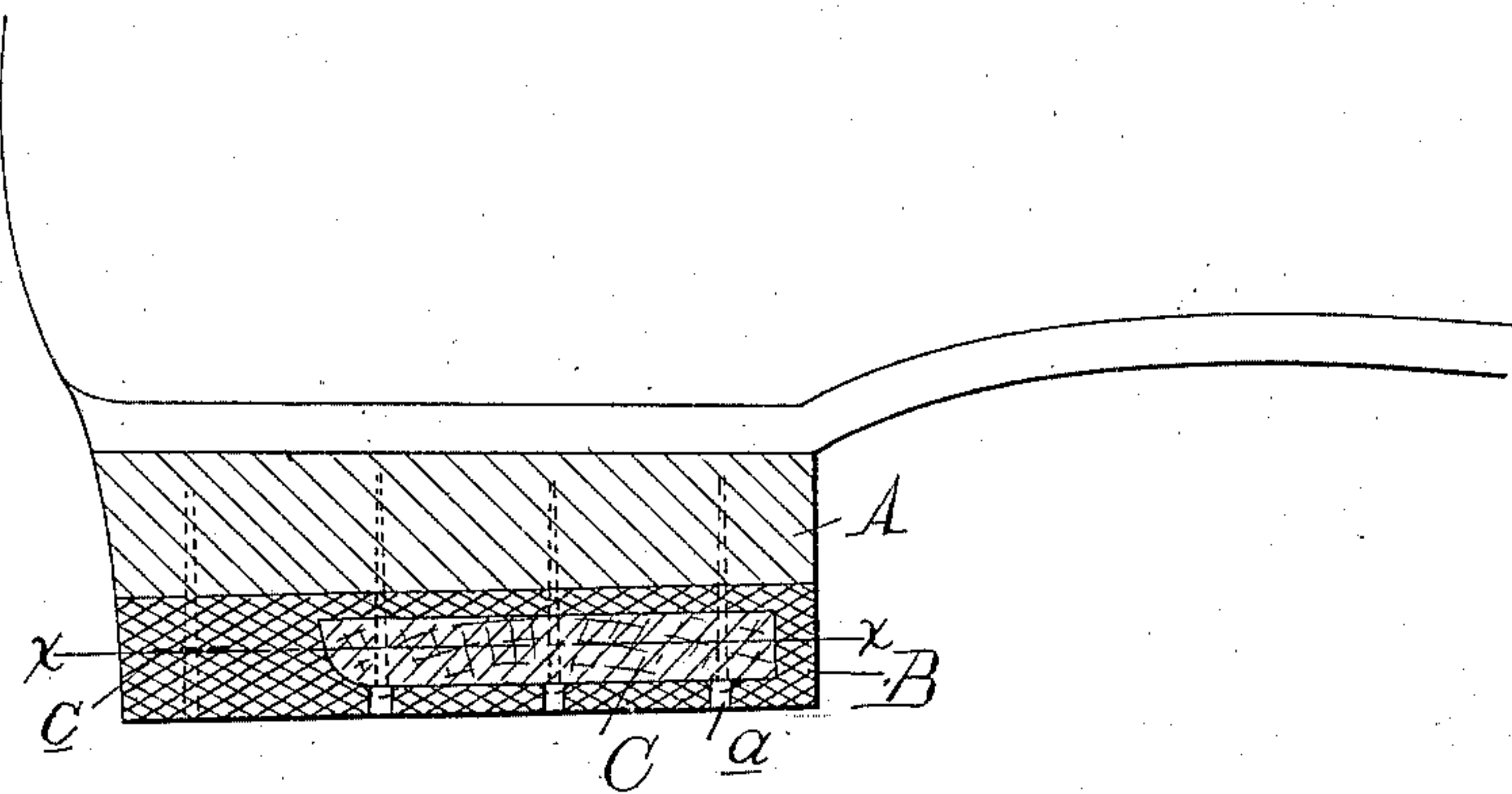


Fig. 3.

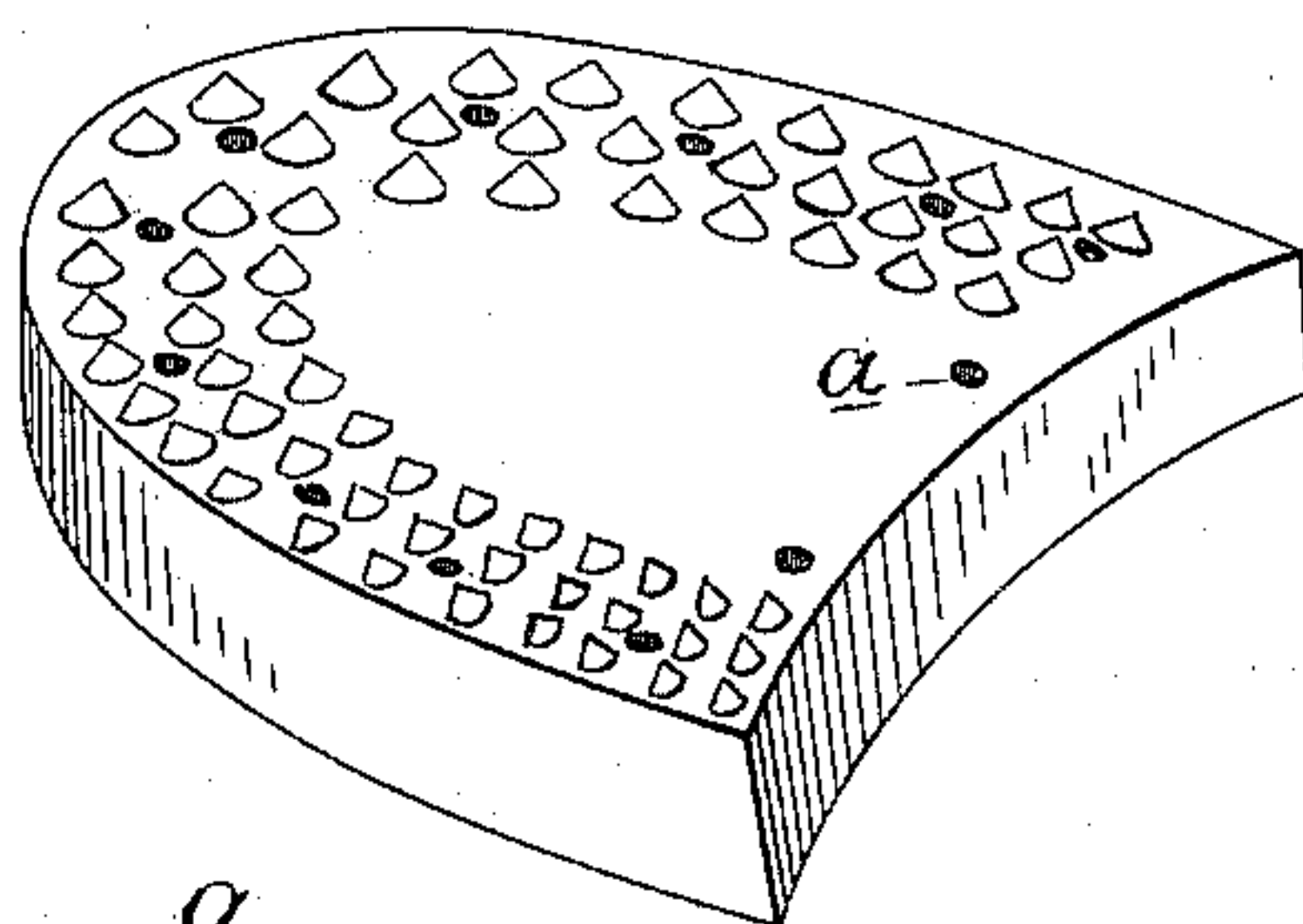
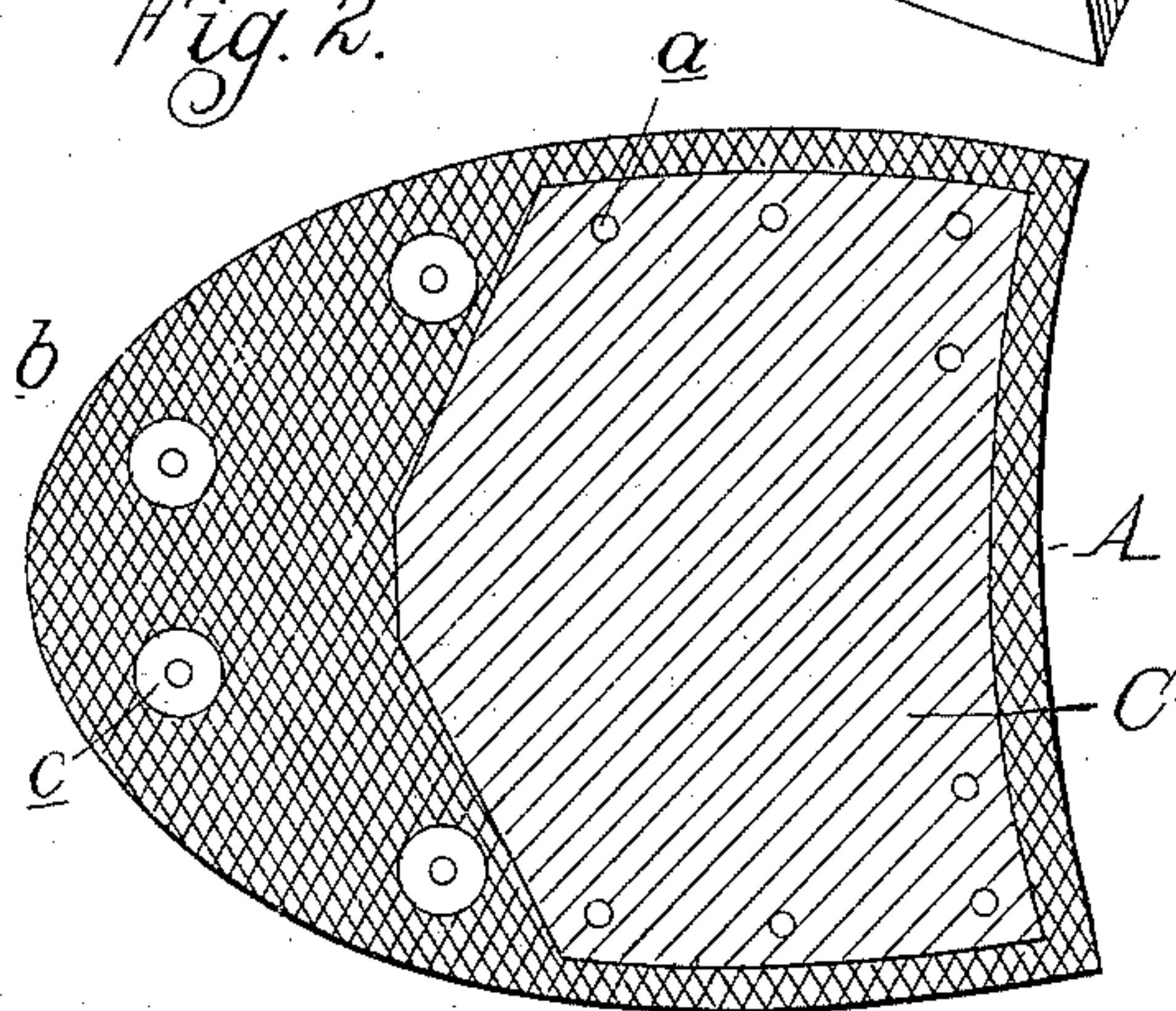


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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CUSHIONED HEEL-PLATE FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 598,714, dated February 8, 1898.

Application filed July 21, 1897. Serial No. 645,316. (No model.)

To all whom it may concern:

Be it known that I, ROBERT MCKAY, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Cushioned Heel-Plates for Boots or Shoes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention consists in the combination of rubber with a non-elastic light body or core of peculiar shape and embedded in the rubber in such manner that that portion of the heel-plate which receives the direct impact in walking is of solid rubber and thereby forms an effective cushion, while the remaining portion is combined with the non-elastic body in such manner as to form a better and surer footing than an all-rubber plate would do, all as more fully hereinafter set forth and shown in the drawings, in which—

Figure 1 is a vertical central section through a shoe-heel provided with my improved cushioned heel-plate. Fig. 2 is a horizontal section on line $x x$ in Fig. 1. Fig. 3 is a detached perspective view of the heel-plate reversed.

A is the leather heel of a shoe to which my heel-plate is applied and which leather forms a complementary portion of the heel and is composed of the rubber portion B and of the non-elastic body or core C, embedded in it. The non-elastic body C is truncated in such manner that it only forms a core in the forward portion of the heel-plate, with the rubber forming an even covering or skin around it, while the rear portion is constituted of solid rubber, substantially in the form of a segment or crescent.

The non-elastic body is preferably a block of well-seasoned wood of a light and tough character for the purpose of making the plate light and uniting it with the rubber by the usual process of vulcanizing it in a mold. Other materials which in the above respects are the equivalents of wood, however, may be used in lieu thereof.

The heel-plate is to be secured to the heel

by means of nails driven through the wooden core, and in order to properly mark the place at which they should be driven I mold a countersink a for each nail through the outer covering of rubber, so that the nail-heads may be sunk and concealed and will take a firm hold of the wood. I also form a few countersinks b in the solid-rubber portion of the heel-plate. These extend about half-way into the rubber, and the nails which are driven into these countersinks may be provided with large heads or washers; but preferably washers c are for this purpose embedded permanently in the rubber, as shown in Fig. 2. To make the heel antislipping, I also form it with a few marginal rows of protuberances d or with a roughened border.

My improved heel-plate is light, durable, and noiseless. It forms an effective cushion just where it is needed—that is, at the rear portion, where the impact is produced when the heel touches the ground first in walking—and a limited cushion at the remaining portion, where a greater cushion would produce an insecure footing and tire the ankle in walking. My construction is thus a decided improvement over such heel-plates in which a non-elastic body extends over the rounded portion of the heel and wherein it receives almost the full impact and is subjected to such a heavy strain that metal has to be used unless the entire heel is made with a core.

What I claim as my invention is—

In a cushion-heel for boots or shoes, the combination of a heel-plate of rubber conformable to the heel and adapted to form a complementary part thereof and a truncated heel-plate of non-elastic material embedded therein and forming a core for the forward portions of the rubber plate, the segmental rear portion being of solid rubber.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT MCKAY.

Witnesses:

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