

(No Model.)

2 Sheets—Sheet 1.

M. HALLANAN.
HORSESHOE PAD.

No. 586,030.

Patented July 6, 1897.

Fig. 1.

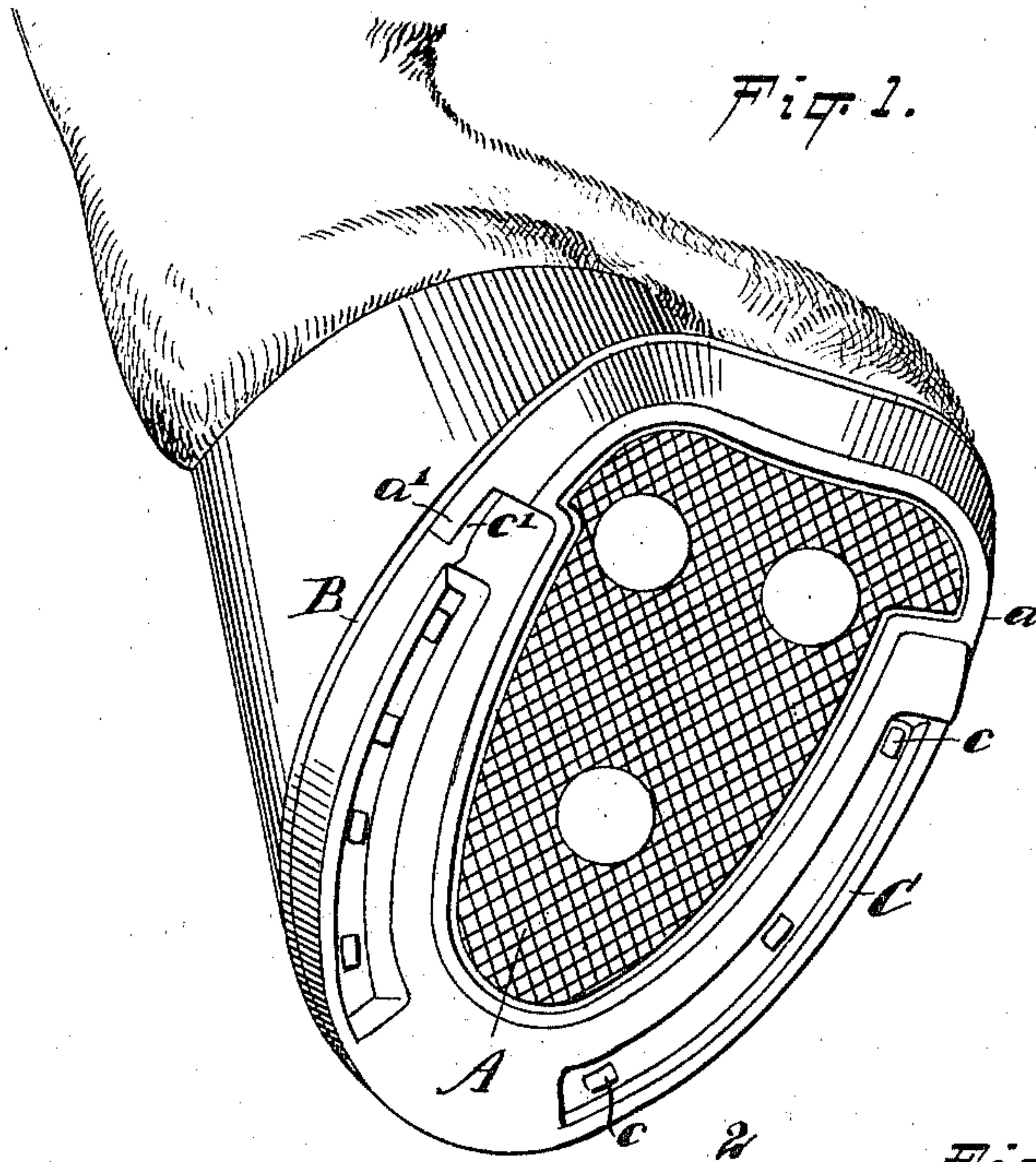


Fig. 2.

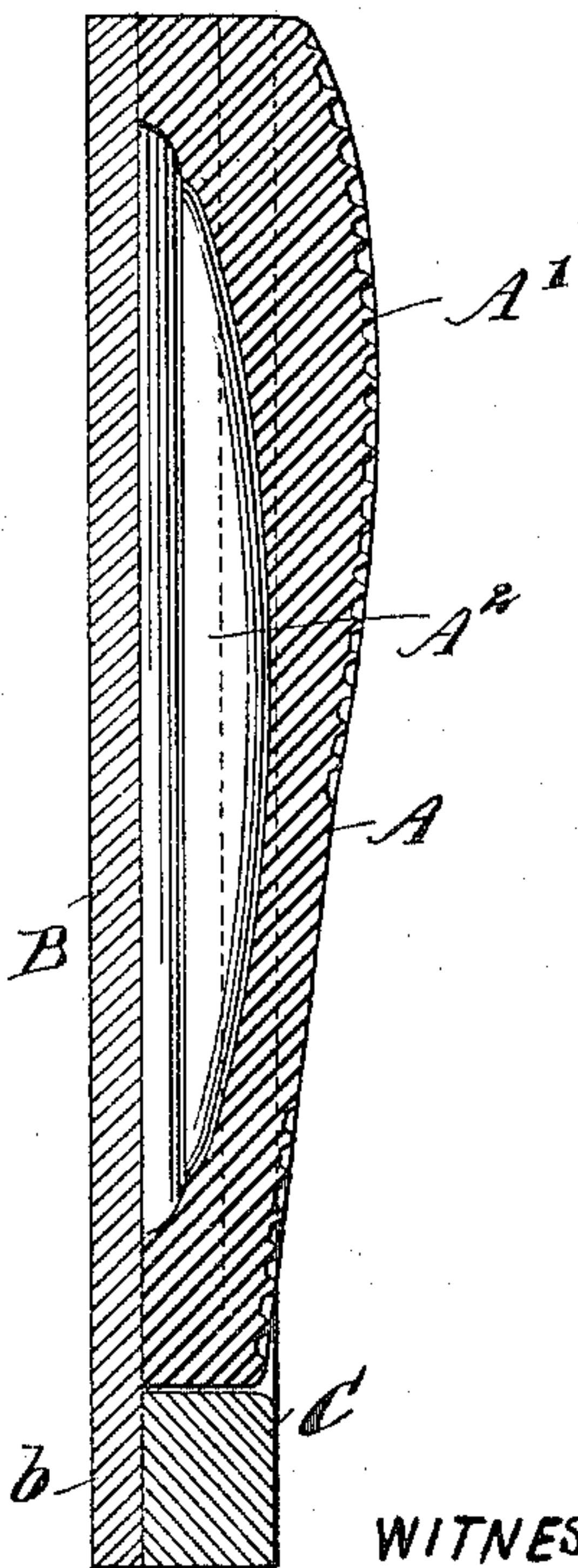
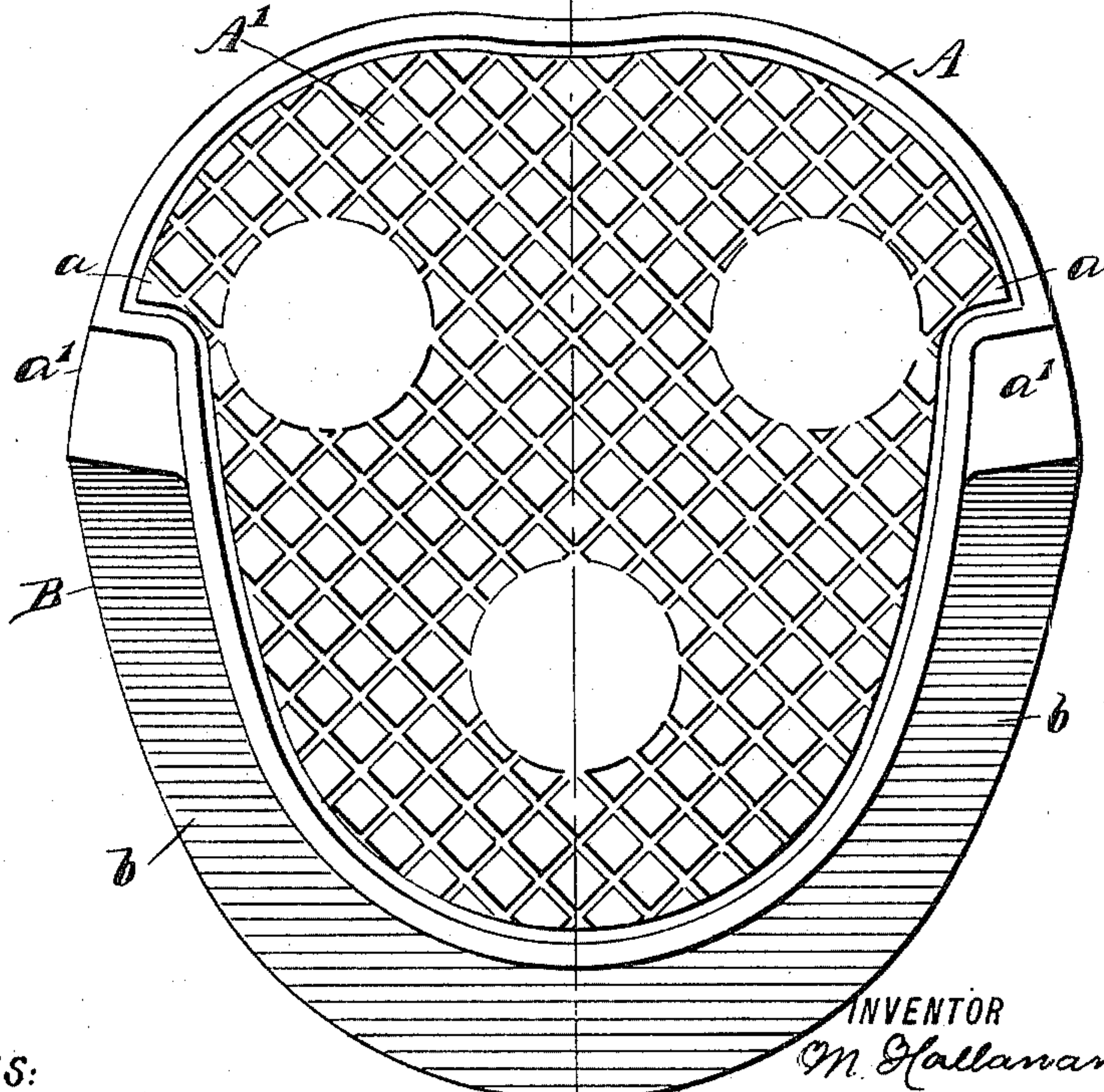


Fig. 3.



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Fig. 4.

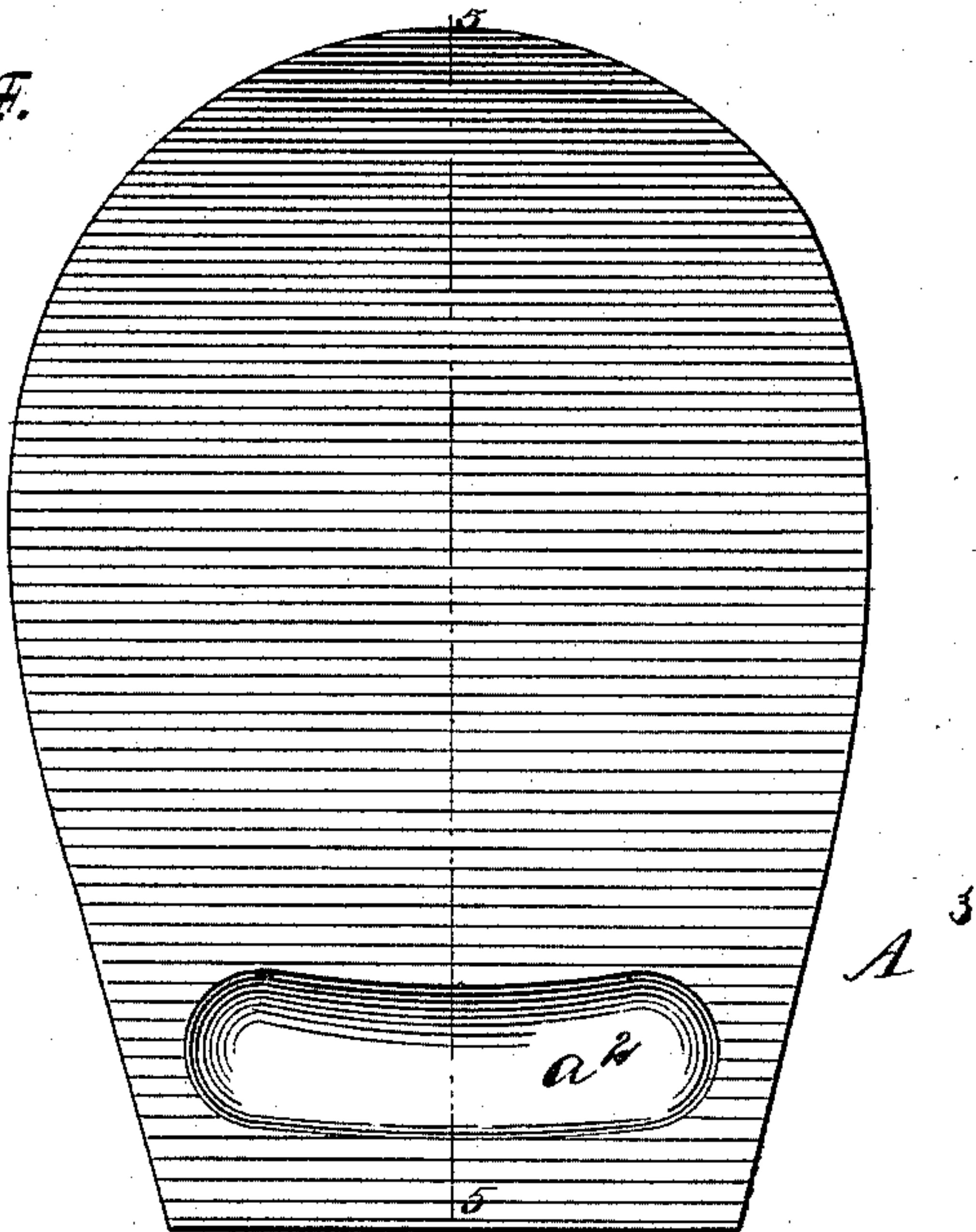


Fig. 5.

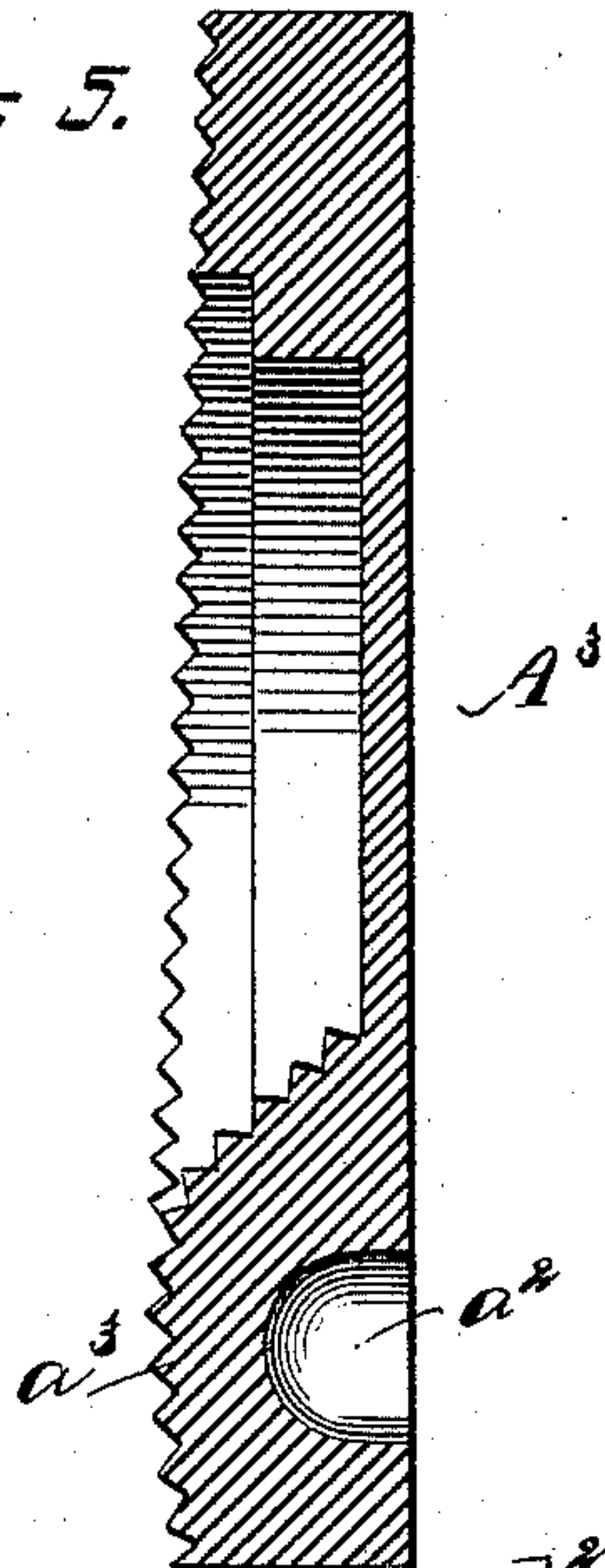


Fig. 6.

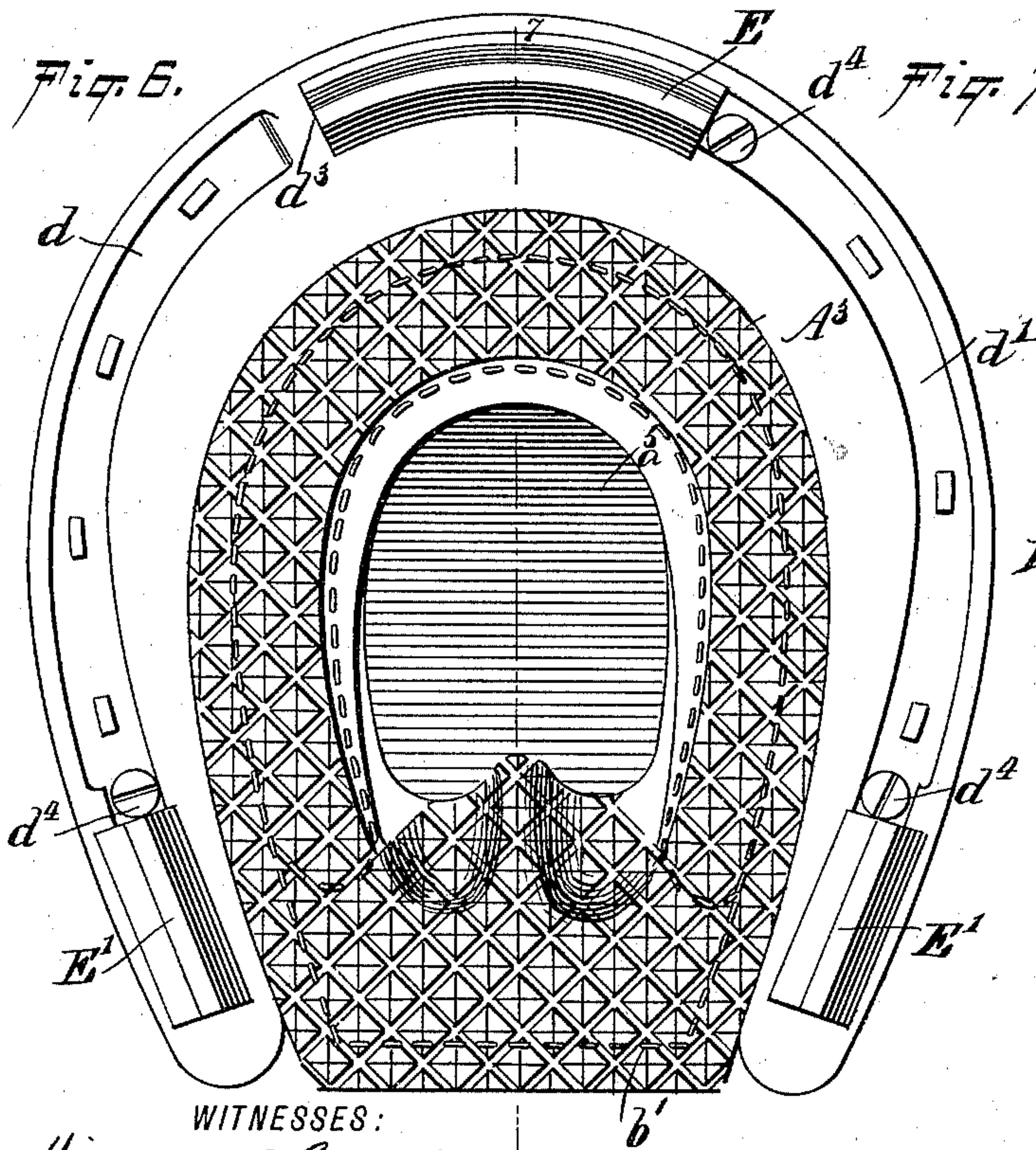
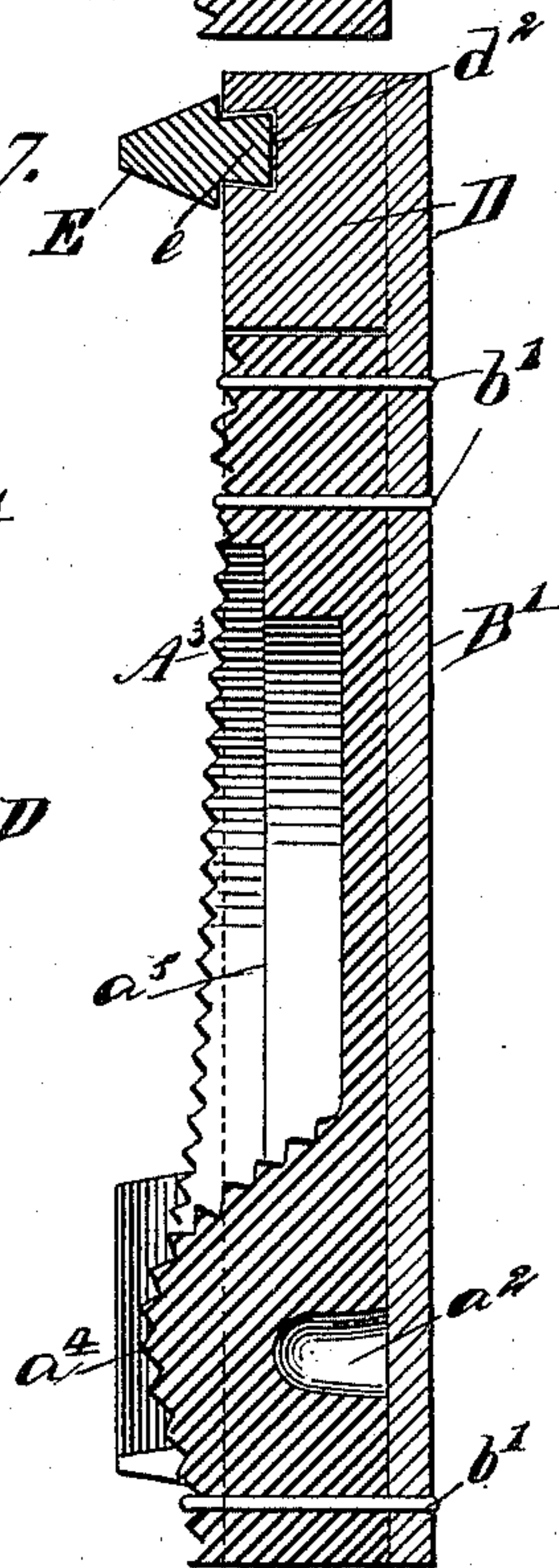


Fig. 7.



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UNITED STATES PATENT OFFICE.

MICHAEL HALLANAN, OF NEW YORK, N. Y.

HORSESHOE-PAD.

SPECIFICATION forming part of Letters Patent No. 586,030, dated July 6, 1897.

Application filed April 1, 1896. Serial No. 585,733. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL HALLANAN, of New York city, in the county and State of New York, have invented certain new and useful Improvements in Horseshoes and Horse-shoe-Pads, of which the following is a full, clear, and exact description.

The object of the invention is to provide an improved pad especially adapted for horses suffering from navicular disease and to provide a shoe having attachable calks and improved means for securing the calks to the shoe.

The invention consists in the novel features hereinafter described, and defined in the claims.

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 showing my improved pad applied. Fig. 2 is a central longitudinal section taken through the pad, as indicated by line 2 2, Fig. 3, the shoe being also shown in place. Fig. 3 is a face view of the pad, the shoe being omitted. Fig. 4 is a view of the inner side of the rubber face-block of the pad without the leather backing, illustrating a modification. Fig. 5 is a longitudinal section taken on line 5 5, Fig. 4. Fig. 6 is a face view of the pad shown in Figs. 4 and 5 and a shoe having my improved calks; and Fig. 7 is a sectional view of the pad and shoe, taken on line 7 7, Fig. 6.

The pad, as shown in Figs. 1, 2, and 3, consists of a face-block A, preferably of rubber, and a backing B, preferably of leather, the two being suitably united in practice by cement, by stitching, or otherwise, and the backing projects at the front and sides in the instance shown, as at *b*, to receive the shoe C and be secured in place by the nails *c*. The face-block A projects laterally at the heel, as at *a*, flush with the sides of the shoe, and the meeting ends of the shoe and the extensions *a* are rabbeted, as at *c' a'*, Fig. 1; but this feature forms no part of the present invention, as the shoe may continue entirely to the heel, the extensions *a* in this latter case being omitted.

In order to give relief to horses suffering from navicular disease, I form the pad shown

in Figs. 1 to 3 of a shape at the heel to cause the foot to rock forwardly when striking the ground. Thus the pad at the heel is given a form rounding from front to rear, as at A', the rounding surface being of considerable breadth—that is, extending entirely from side to side, or nearly so. With this form of pad the rounding heel will strike the ground, and the foot will then rock forwardly until it strikes squarely a firm footing. To further afford relief in the case of the disease mentioned, I form the face-block hollow on the inner side, as at A², Fig. 2, whereby when the backing B is secured in place a pneumatic cushion is formed in the pad, extending at all sides of the navicular bone. Thus the diseased bone is relieved of all shock, the shock being received by the surrounding solid parts of the pad, and the pad will go far toward effecting a cure, especially if the disease be in its incipency. The pad also will be found very desirable for horses foundered with a "drop-sole," as in this case the roll occasioned by the pad conforms to the usual movement of the horse's foot.

In the form of pad shown in Figs. 4 to 7 I have embodied in a modified form the feature of the rounding surface at the heel, but omitted the pneumatic cushion. In this pad the rubber face-block A³ originally is formed with a transverse groove *a*², as shown in Figs. 4 and 5, and preferably the outer surface of said block at the heel originally is slightly rounding, as at *a*³ in Fig. 5. The face-block is secured to the backing B', as by rows of stitching *b' b'*, and in applying the face-block its rear portion is compressed in the direction from front to rear, whereby the groove *a*² is contracted and an increased amount of material is brought to the outer surface of the pad at such grooved part, thus increasing the prominence of the rounding surface, as at *a*⁴, Fig. 7, in which condition the face-block is permanently secured by the stitching *b'* or other expedient. This pad is shown hollowed out at its outer side at the center, as at *a*⁵, but this is not essential, as the pad may have the pneumatic form shown in Figs. 1 to 3. The shoe D shown in Figs. 6 and 7 is channeled, as at *d d'*, for the nail-heads, as is customary, and I have continued the forward end of one of these channels *d'*, as at *d*², Fig.

7, the extreme end being closed. The continuation d^2 is given a dovetail or equivalent form with overhanging side walls, as shown in Fig. 7, and I secure therein the dovetail back edge or inner side e of the toe-calk E, sliding the same to a contact with the inner end or wall d^3 , in which position the calk is held by a screw d^4 or equivalent device, which is inserted in the shoe behind the calk. In a similar manner I form and secure the heel-calks E' of the shoe.

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

1. A horseshoe-pad, having a face-block with a groove in its inner side at the heel, and rounding at the outer surface at such heel portion, and a backing-plate secured to the face-block, substantially as described.

2. A horseshoe-pad, having a face-plate, with a concavity in its inner side, and a plane or flat back-plate secured over the inner side of the face-plate to close the concavity and form a pneumatic cushion for the pad, substantially as described.

3. A horseshoe-pad consisting of a rubber face-plate hollow on the inner side, and a leather backing-plate, thereby forming a pneumatic cushion, substantially as described.

4. A horseshoe-pad, having a rounded surface at the lower side of the heel, the said

surface being spread transversely for a distance equal to the width of the heel, and being stiff and firm to form a rolling support for the horse's foot when placed on the ground, substantially as described.

5. A horseshoe-pad, having a rounded surface at the lower side of the heel, the said surface being stiff and firm to form a rolling support for the horse's foot when placed on the ground, substantially as described.

6. A horseshoe-pad, having a rounded surface at the lower side of the heel, the said surface being spread transversely for a distance equal to the width of the heel, and the rounded surface forming a rolling support for the horse's foot when placed on the ground, substantially as described.

7. A horseshoe-pad, formed of flexible material and having a transversely-elongated recess at the inner side of the heel, and also having a rounded portion at the lower side of the heel, the recess extending into the rounded portion, and a back-plate arranged over the inner side of the pad and secured to the pad, the rounded portion of the pad being contracted to reduce the recess and enlarge the rounded portion, substantially as described.

MICHAEL HALLANAN.

Witnesses:

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JAMES M. HENLEY.