

(No Model.)

J. W. FANNING.
HOOF PAD.

No. 489,896.

Patented Jan. 10, 1893.

Fig. 1.

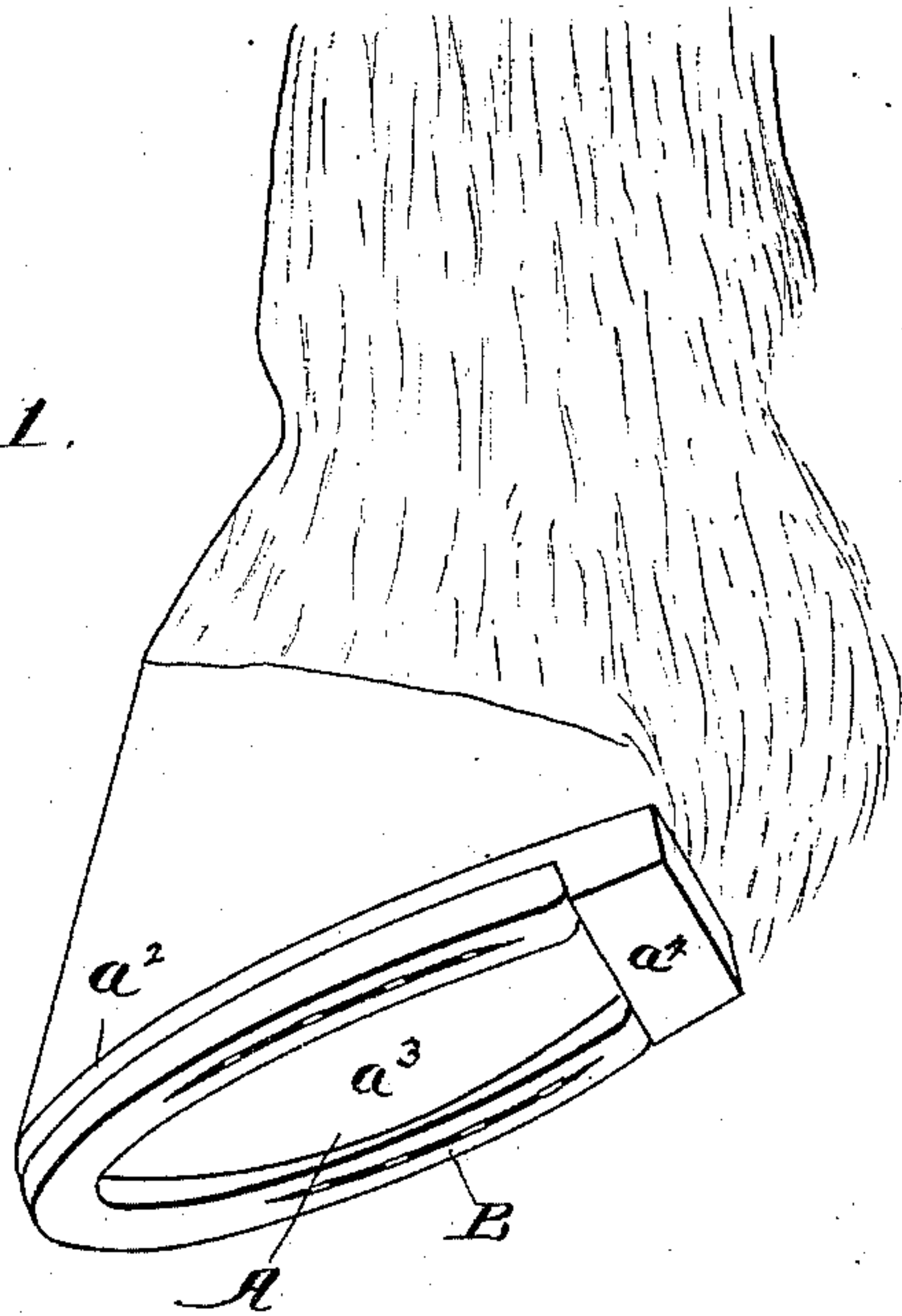


Fig. 2.

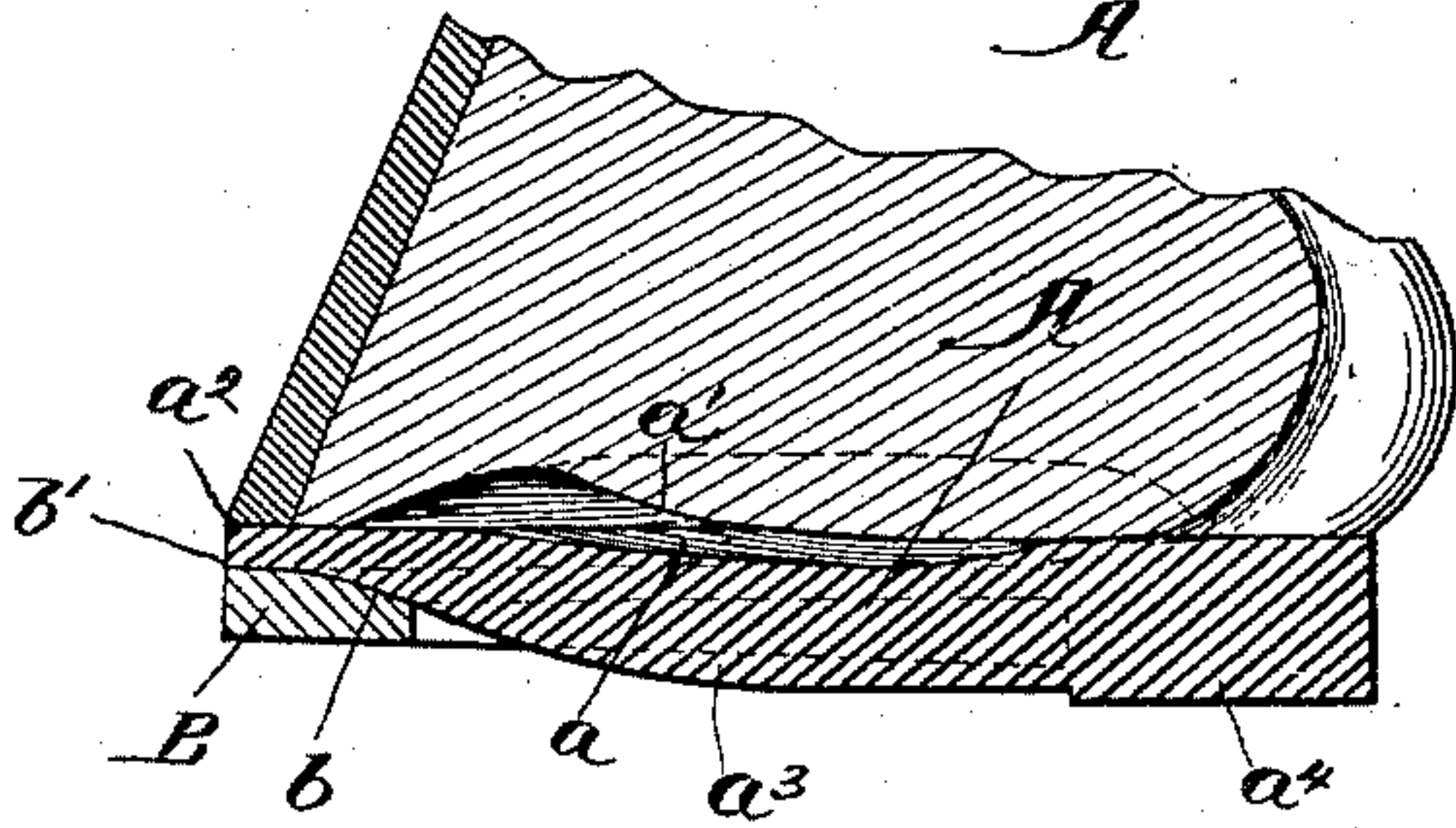


Fig. 4.

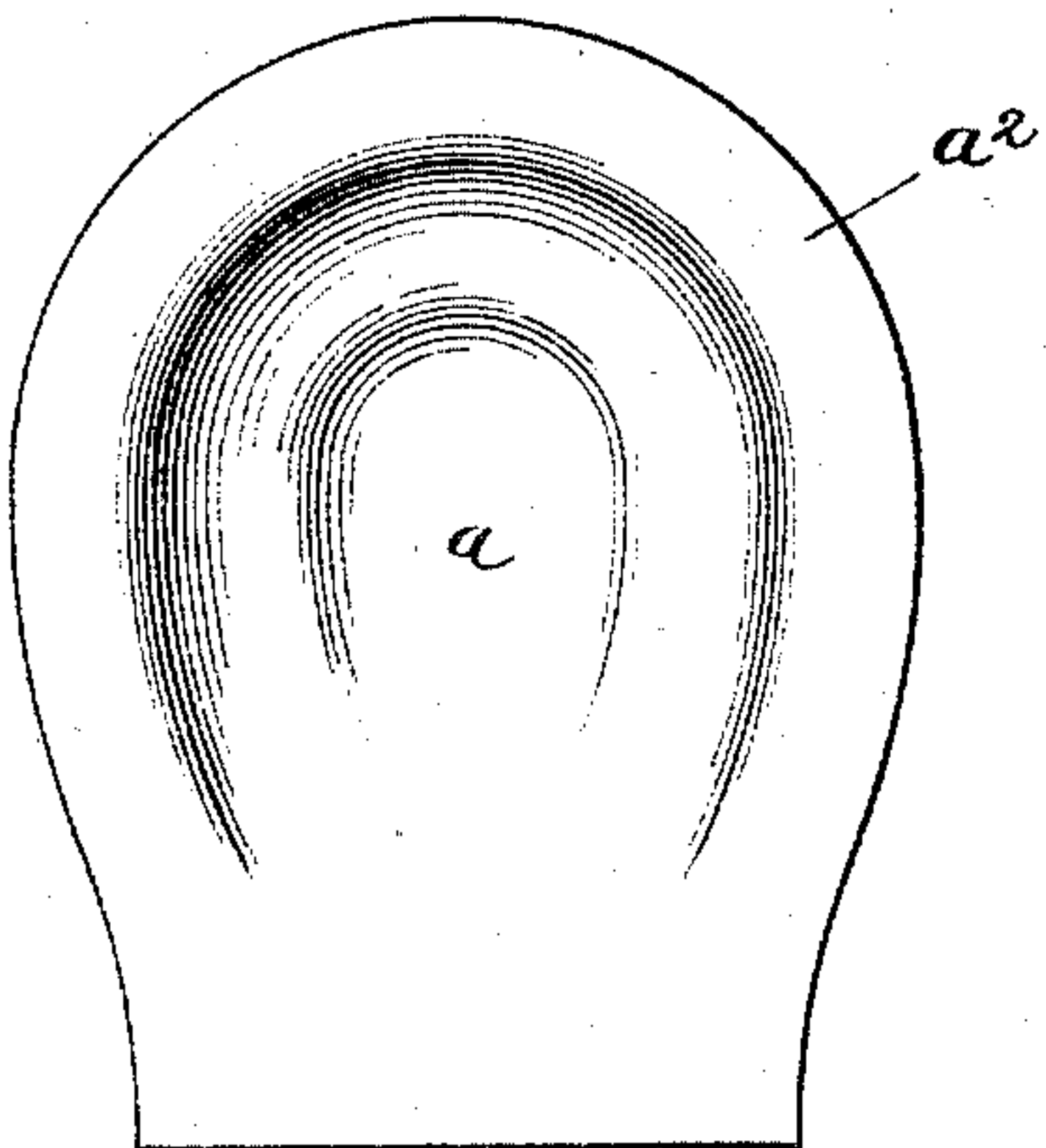
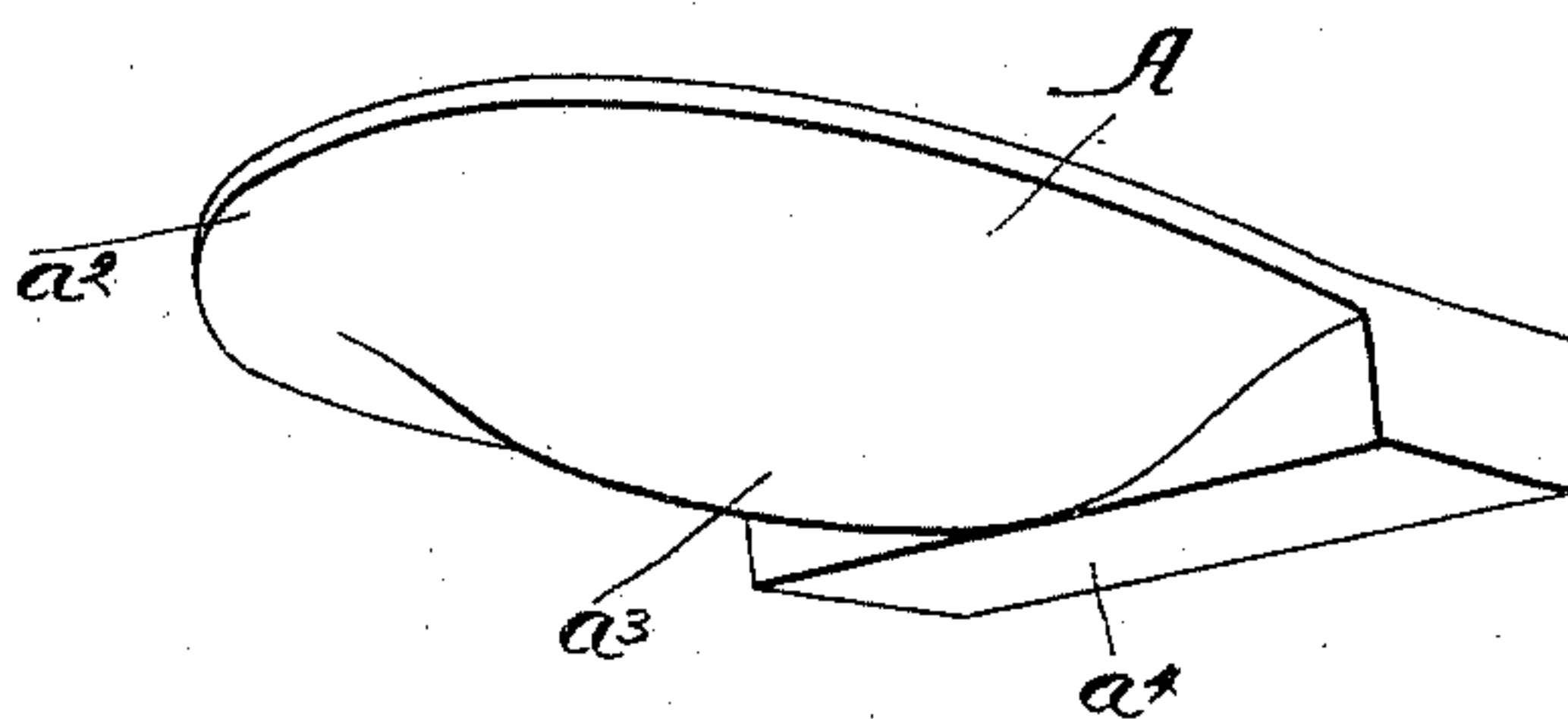


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES W. FANNING, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
GORDON H. QUINN AND WILLIAM H. QUINN, OF SAME PLACE.

HOOF-PAD.

SPECIFICATION forming part of Letters Patent No. 489,896, dated January 10, 1893.

Application filed January 25, 1892. Serial No. 419,120½. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. FANNING, of Chicago, in the State of Illinois, have invented certain new and useful Improvements in Hoof-Pads, of which the following is a specification.

My invention relates to elastic hoof pads which cover the entire bottom of the foot and are adapted to be worn in conjunction with a short metallic shoe extending over and a little behind the toe-quarters. Pads of this class has heretofore been made of an integral piece of rubber or elastic material having a flat upper surface continuous over the entire bottom of the foot or an irregular continuous upper surface made to conform to the irregularities of the bottom of the foot and having a bottom surface made mostly flat and on a level with the upper surface of the shoe so as to come between the shoe and the foot, there being a thicker part at the rear between the heel quarters and behind the shoe, adapted to cushion and elastically-sustain the heel quarters and frog, said thickened portion being provided with deep intersecting grooves extending obliquely from the rear edge toward the center so as to present the shape of the natural frog and to cause a slight lateral pressure of the foot at the heel. But such pads by reason of the flatness or irregularity of their upper surface are not adapted to use on feet which have unusual fullness of the soft part immediately inside the shell of the hoof in the toe-quarters; and they are also liable to bruise the front point of the frog which, when protected by a pad, is subject to rapid growth and becomes so tender that slight bruising by the pad will so crush it as to make it sore and lame the animal after a short use of a closely fitting pad. Moreover, pads having a flat surface extending over and immediately adjacent to the part covered by the shoe, are not adapted to use with the shoe when made in the ordinary form with a concave or reduction of thickness made in the top surface inside the nail holes so as to clear the adjacent soft part of the foot when the outer part is fitted to the shell of the hoof. On this account, the shoes to be used with such pads have to be specially made flat on top to fit the flat bottom of the pad and con-

cave on the bottom or in other words have their inner convexity reversed.

One of the objects of my improvements is to provide in pads of the class mentioned, such form as to obviate all of these defects and adapt them to use on any foot without regard to the fullness or scantiness of the soft part in the toe-quarters and with the ordinary upper concave form of shoe; the latter effect, in itself, affords a considerable saving in enabling the pad to be used with machine-made shoes which always have the concave upper surface.

Another of the objects of my improvements is to provide a pad of this class having such form of bottom surface inside the shoe as to prevent slipping and balling in winter.

I attain these objects by the pad having its top and bottom surfaces made in the form illustrated in the accompanying drawings, in which—

Figure 1 is a bottom perspective view of the foot showing the pad and the shoe applied thereon. Fig. 2 is a vertical section through the shoe and a fragment of the hoof. Fig. 3 is a bottom perspective view of the pad separate from the shoe. Fig. 4 is a plan or top view of the pad.

In the drawings, A is the pad and B the shoe. The pad extends over the entire bottom of the foot and is flat on top except that it is provided with a depression *a* in the central portion toward the front which is adapted to receive the front point *a'* of the frog so that the upper surface of the pad at this point will be clear of it. This depression gradually grows less, as shown by shade lines in Fig. 4, and vanishes near the margin so that the surface of the pad at the concavity, will clear the soft part of the foot inside the shell of the hoof, if unusually full, and also afford more space between this part of the foot and the pad when the foot has its normal or usual fullness, the concavity being beneficial in both cases. The concavity of the upper surface of the shoe, as ordinarily constructed, is inside the nail holes all around as shown at *b* and the shell of the hoof rests on the outer edge *b'*. The outer edge of the pad *a''* is reduced around and a little back of the toe-quarters, so as to come between the shoe and the shell of

the hoof, and the shape of the central part a^3 of the bottom surface of the pad corresponds with that of a section of the surface of a sphere, or ovoid, and projects slightly beyond the bottom surface of the shoe. The rear part a^4 of the pad is flat on the bottom extends across behind the ovoid section and shoe, is thickened so as to be level with the bottom of the shoe and form a cushion under the heel-
quarters and behind the shoe. The outer part of the ovoid section fills the concave inner edge b of the shoe so as to prevent snow from gathering between the pad and the shoe; and the central portion a^3 thereof by means of its ovoid shape is adapted to prevent snow from adhering to the bottom of the foot and hence, will prevent balling. This part is also sufficiently thick to give the required strength to protect the soft part of the foot, and is adapted to prevent slipping.

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

As an improved article of manufacture, a hoof pad made of a piece of elastic material having a flat top surface continuous over the entire bottom of the foot and provided with a depression a in the central portion toward the front and gradually lessening so as to vanish near the margin, a bottom surface reduced at the margin around and a little behind the toe-quarters so as to fit between a short metallic shoe and the outer shell of the hoof, a thickened central portion a^3 whose bottom surface is convex-shaped like a section of the surface of an ovoid and adapted to fill the concave inner edge of the shoe and project slightly beyond the plane of the bottom of the shoe, and a thickened heel piece a^4 extending across behind the ovoid section and short shoe and having its bottom surface flat on a level with the bottom of the shoe, as specified.

JAMES W. FANNING.

Witnesses:

GORDON H. QUINN,
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