No. 710,999. Patented Oct. 14, 1902.

E. W. POWERS.

HOOF PAD.

(Application filed Jan. 30, 1902.)

(No Model.)

Fig. 1.

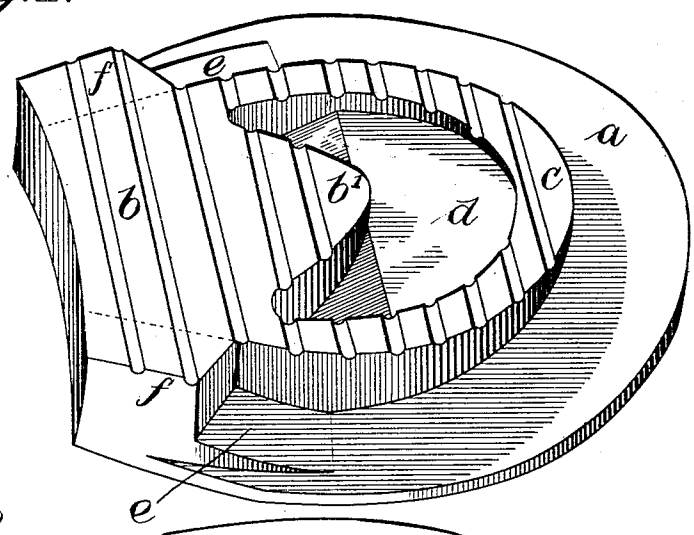


Fig. 2.

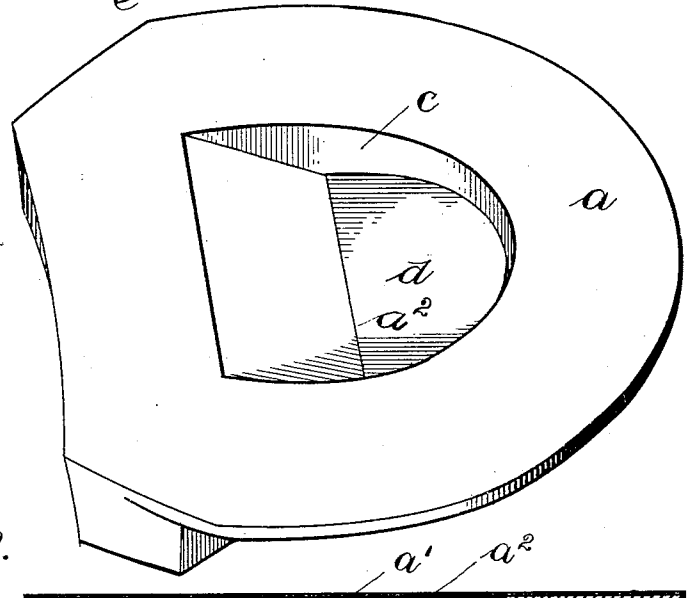
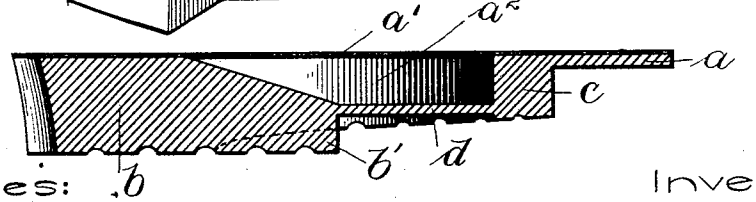


Fig. 3.



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UNITED STATES PATENT OFFICE.

ELIAS W. POWERS, OF CHICAGO, ILLINOIS.

HOOF-PAD.

SPECIFICATION forming part of Letters Patent No. 710,999, dated October 14, 1902.

Application filed January 30, 1902. Serial No. 91,831. (No model.)

To all whom it may concern:

Be it known that I, ELIAS W. POWERS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Hoof-Pads, (Case No. 3,) of which the following is a full, clear, concise, and exact description.

My invention relates to a hoof-pad, and has for its object to provide an improved resilient pad for use in connection with horseshoes to take up the jar and concussion and prevent slipping, to afford a firm bearing for the hoof, and to give adequate protection to the frog without undue pressure thereon.

I will describe my invention by reference to the accompanying drawings, and the features of construction which I regard as novel will be pointed out in the appended claim.

Figure 1 is a perspective view of the under side of my improved pad. Fig. 2 is a perspective view of the top; and Fig. 3 is a longitudinal section, this view also showing the section of the backing-plate with which the pad may be used.

Similar reference-letters denote the same parts wherever shown.

The body portion or face-block a is flat on top, except for a recess hereinafter to be described, and is of a shape to cover the sole of the hoof, the pad being interposed between the hoof and the horseshoe. In many cases a plain backing-piece a', of leather or canvas of the same outline as the pad, is interposed between the sole of the hoof and the top of the pad.

The body portion or face-block is quite thick at the rear, forming a high transverse heel-bar b, and gradually decreases in height toward the toe. The forward part of the face-block is formed into a rib c, having the characteristic shape of the horseshoe and adapted to fit the inner edge thereof. The heel-bar has a frog-shaped extension or tongue b', which projects downwardly some distance below the plane of the rib c—that is to say, the under face of the frog-shaped extension b', which is designed to come under and coincide with the frog of the hoof, is approximately parallel with the top face of the pad instead of sloping toward the toe like the rib c.

A recess a^2 is formed in the central portion of the top face of the pad, as shown in Fig. 2, said recess being rounded in shape at the toe, as formed by the rib c, and having a beveled rear wall sloping upward toward the heel from the point of the frog-shaped tongue b'.

The floor d of the recess a^2 is a thin diaphragm which fills the crescent-shaped space between the tongue b' and the rib c.

I prefer to make the pad of canvas and rubber vulcanized together, the thin portions—such, for instance, as the floor d—being made of canvas. The thick portions—such as the heel-bar, the tongue b', and the rib c—may be made of alternate layers of canvas and rubber built up and vulcanized together, or they can be made of solid rubber or any other similar resilient substance.

It will be seen that in the pad of my invention the tongue b', which extends well forward and substantially coincides in position with the frog of the hoof, forms a substantial protection for the point of the frog, while it projects downward, as shown most clearly in Fig. 3, so that the frog is relieved of pressure at the toe. When a canvas or leather back a' is used on top of the pad, a pneumatic cushion is formed by the central recess, which takes the jar from the sensitive parts of the hoof, a firm bearing being afforded by the thick transverse heel-bar, the rib c, and the thick resilient tongue b'.

In the summer-time the thin canvas portion d between the tongue b' and the rib c may be cut away, if desired, in which case the pneumatic feature of the pad will of course be destroyed.

It will be noticed that the forward edges $e\ e$ of the heel-bar are beveled off, so that the "three-quarter shoe" used with this style of pad may come well back to the heel and prevent the edges of the heel-bar from being torn away. It may be desired in some cases to cut away the lateral projections $f\ f$ of the heel-bar to use the pad with a full shoe, and this may be done without departing from my invention.

The feature to which I attach particular importance is the combination, with a shoe having the rib c, of the thick frog-shaped tongue b', which extends forward and downward from

the heel portion and forms a thick substantial protection for the frog without causing undue pressure thereon.

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

A horseshoe-pad comprising a flat body portion adapted to cover the sole of the hoof, a face-block on the under side of the pad forming a thick transverse heel-bar and decreasing in thickness toward the toe, the toe portion of said face-block being formed into a curved rib *c* adapted to fit the inner edge of a horseshoe, and a thick frog-shaped tongue extending forward and downward from the heel-bar to substantially the center of the space inclosed by said curved rib, the upper surface of the tongue sloping downward from the top face of the pad and the body of said tongue projecting below the plane of the under surface of the face-block.

In witness whereof I hereunto subscribe my name this 28th day of January, A. D. 1902.

ELIAS W. POWERS.

Witnesses:
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MATT S. THORNTON.