(No Model.) 2 Sheets—Sheet 1.

H. W. BILLINGTON.

HORSESHOE PAD.

No. 587,919. Patented Aug. 10, 1897.

Fig. 1.

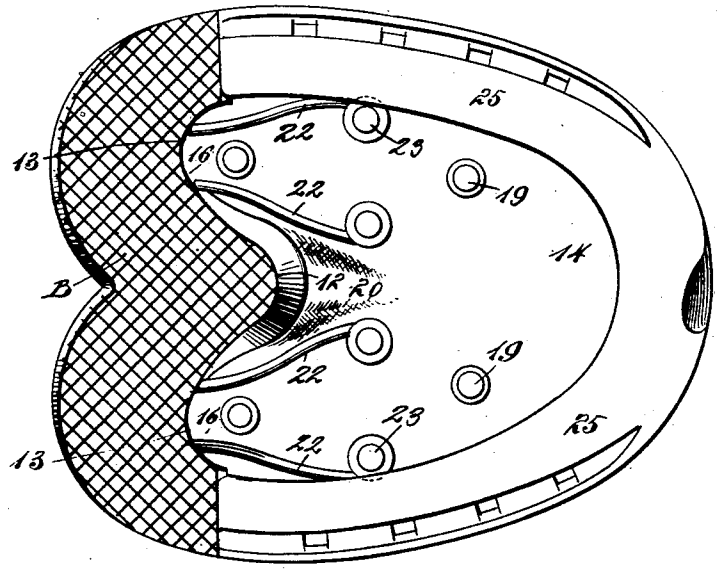


Fig. 2.

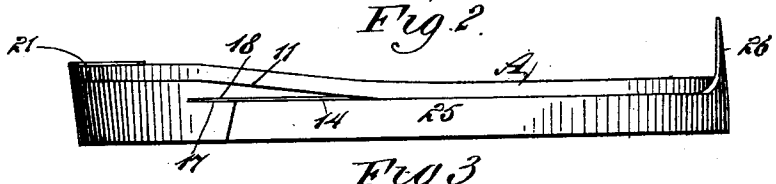
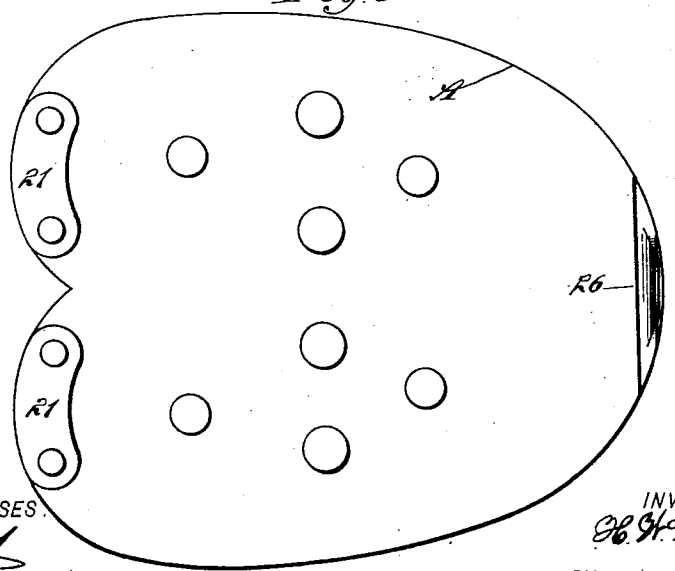


Fig. 3.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

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HORSESHOE PAD.

No. 587,919. Patented Aug. 10, 1897.

Fig. 4.

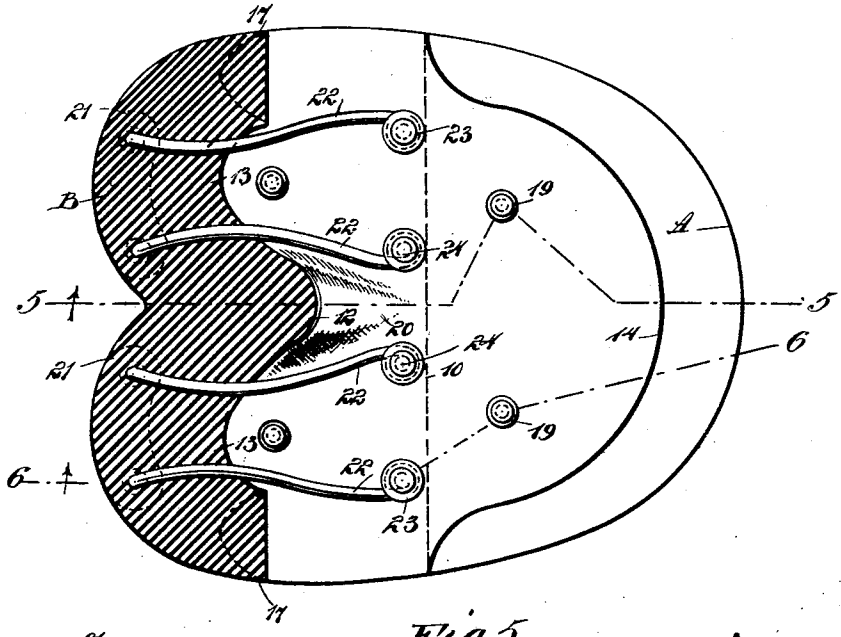


Fig 5.

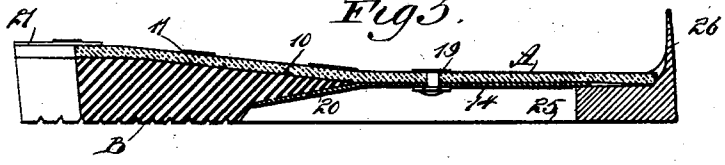


Fig 6.

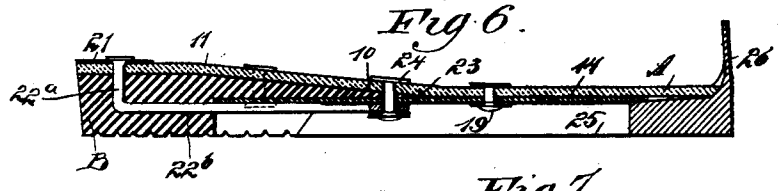
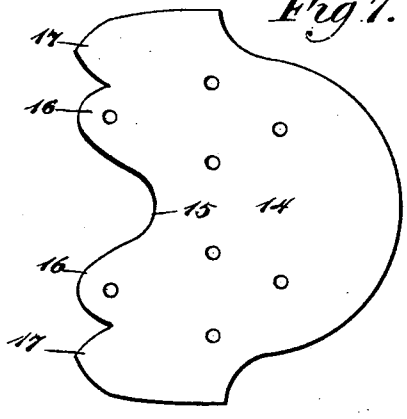


Fig 7.



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UNITED STATES PATENT OFFICE.

HORACE W. BILLINGTON, OF JERSEY CITY, NEW JERSEY.

HORSESHOE-PAD.

SPECIFICATION forming part of Letters Patent No. 587,919, dated August 10, 1897.

Application filed March 24, 1897. Serial No. 629,020. (No model.)

To all whom it may concern:

Be it known that I, HORACE W. BILLINGTON, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Horseshoe-Pads, of which the following is a full, clear, and exact description.

The object of my invention is to provide a pad for horseshoes which will ease the heel of the horse and tend to overcome tenderness in that part and likewise to overcome tenderness generally.

A further object of the invention is to so construct the pad that it will effectually prevent slipping upon smooth roads, balling of the snow under the foot, and injury to the foot by sharp objects encountered upon the road, likewise affording protection to the foot when traveling through snow.

Another object of the invention is to provide a horseshoe-pad which will extend over the entire bottom of the foot and which will not become loosened or liable to drop from the foot or become detached from the shoe.

The invention consists in the novel construction and combination of the several parts, as will be hereinafer fully set forth, and pointed out 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 figures.

Figure 1 is a bottom plan view of the pad and the shoe attached. Fig. 2 is a side elevation of the pad and shoe. Fig. 3 is a top plan view of the pad and shoe. Fig. 4 is a bottom plan view of the pad, the shoe being removed and the heel-cushion of the pad being in horizontal section. Fig. 5 is a section taken on the line 5 5 of Fig. 4. Fig. 6 is a section taken on the line 6 6 of Fig. 4, and Fig. 7 is a plan view of the protection-plate of the pad.

A sole A, preferably of leather, constitutes the top or upper portion of the pad, and is given such marginal shape and is of such dimensions as to cover the entire foot. Upon the bottom face of the heel-section of the sole A a cushion bearing-block B is secured, the main portion of which is shaped in accordance with the heel of a horse's hoof and the outer marginal wall of the cushion bearing-block follows the contour of the corresponding portion of the heel-section of the sole A. The cushion bearing-block is provided with an inclined extension 10 at its inner edge, being flush at its ends with the sides of the sole. The upper face of the bearing-block or cushion is somewhat beveled, as shown at 11 in Figs. 5 and 6, and the main or body portion of the cushion block or pad is provided with a central projection 12 at its inner edge, which is given a gradual taper and is convexed to a greater or less extent, while at each side of this projection 12 a concaved recess 13 is made in the inner end of the body of said bearing-block, as shown in Figs. 1 and 4.

A protection-plate 14, preferably of metal and shown in detail in Fig. 7, is used in connection with the sole and the cushion bearing-block. The said plate is provided with a convexed front edge and is widest at its rear, the rear edge being provided with a central depression 15 and two fins 16 and 17 at each side of said depression. The protection-plate is carried over the extension 10 of the cushion-block, and in each side of the cushion-block a longitudinal cut or opening 18 is made, into which the fins 16 and 17 of the protection-plate enter. The protection-plate is secured to the sole preferably through the medium of rivets 19, and sundry of these rivets are likewise passed through the extension from the cushion-block.

The central rear surface, or the surface adjacent to the recess 15 in the protection-plate, is embossed and made to conform to and closely hug the tapering surface of the projection 12 from the cushion-block, as illustrated at 20 in Figs. 1 and 4. A tie-plate 21 is located on the upper face of the sole at each side of its center, the rear edges of the tie-plates being flush with the adjacent edge of the sole, so that when the pad is placed in position on a hoof and the shoe is secured to the pad and the hoof when the hoof is trimmed the heel portion of the sole will be prevented from being cut away.

The tie-plates 21 likewise serve as anchorages for one end of two pairs of tie-rods 22. The tie-rods are headed at one of their extremities, the heads bearing against the tie-plates, and the tie-rods are then carried downward through the body of the cushion bear-

ing-block, forming a vertical member 22^a, as shown in Fig. 6. Each tie-rod is then bent upon itself to form a horizontal member 22^b, the horizontal members 22^b being carried forwardly through the cushion-block and out beyond the forward edge of the same, over upon the under face of the protection-plate, terminating at their forward ends in eyes 23, which receive rivets 24 or equivalent fastening devices. These rivets serve not only to hold the tie-rods in position, but likewise serve to assist in connecting the cushion-block, protection-plate, and sole. It will thus be observed that the cushion-block is held firmly in position on the pad without the use of cement or any adhesive compound and that no matter how wet the surface may be over which the horse is traveling the cushion-pad will not become loosened.

The shoe 25 is shorter than the ordinary shoe, and the ends of said shoe abut against the forward end faces of the cushion-block. Its under face is preferably roughened, as illustrated. The toe 26 of the shoe extends upward beyond the sole A, a portion of the front of the sole being cut away for that purpose. The shoe is nailed to the foot in the ordinary way, the nails serving to hold the pad, together with the shoe, securely on the foot, and two or more of the nails will pass through the fins 17 on the protection-plate, thereby serving to firmly tie the cushion-block to said plate.

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

1. A pad for horseshoes, consisting of a sole, a cushioned bearing-block at the heel of the sole, a protection-plate secured to the under face of said sole and extending over a portion of the cushioned block, and ties, substantially as described, arranged for connecting the cushioned bearing-block, protection-plate and sole, and for holding said parts in position, as set forth.

2. A pad for horseshoes, consisting of a sole, a cushion-block located at the heel portion of the sole, a protection-plate attached to the sole and engaging with the cushion-block, and tie devices secured to the sole and to the protection-plate, being carried through the cushion-block, as and for the purpose specified.

3. A pad for horseshoes, consisting of a sole, a cushion-block located at the heel portion of the sole, which cushion-block has an extension from its front edge, the body of the block being of greater thickness than the extension, a protection-plate attached to the sole and to the cushion-block and extending over the extension from the block, and means for securing the cushion-block to the sole, as and for the purpose specified.

4. A pad for horseshoes, consisting of a sole, a cushion-block located at the heel portion of the sole, which cushion-block has an extension from its front edge, the body of said block being of greater thickness than the extension, a protection-plate attached to the sole and to the cushion-block and extending over the extension from the block, and tie-rods secured to the sole and to the protection-plate, the said tie-rods being carried through the body portion of the cushion-block, as and for the purpose set forth.

5. A pad for horseshoes, consisting of a sole, a cushion-plate located at the heel portion of the sole, a protection-plate secured to the sole and being in engagement with the front portion of the cushion-block, the said protection-plate having fins which extend into the cushion-block, and tie devices substantially as described for holding the cushion-block firmly in position on the sole, as and for the purpose specified.

HORACE W. BILLINGTON.

Witnesses:
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JOHN S. O'CONNER.