No. 633,796. Patented Sept. 26, 1899.

A. H. BUSH.

HORSESHOE.

(Application filed May 26, 1899.)

(No Model.)

Fig. 1.

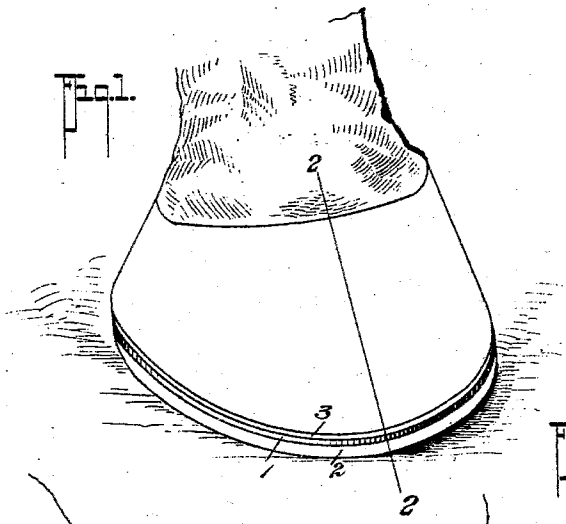


Fig. 2.

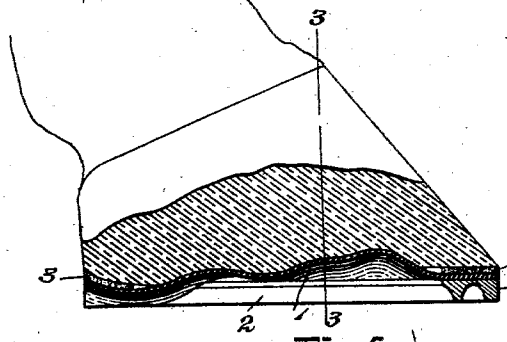


Fig. 3.

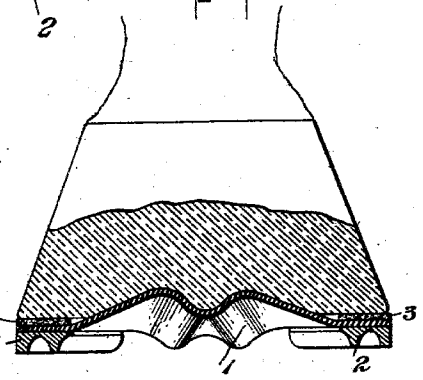


Fig. 4.

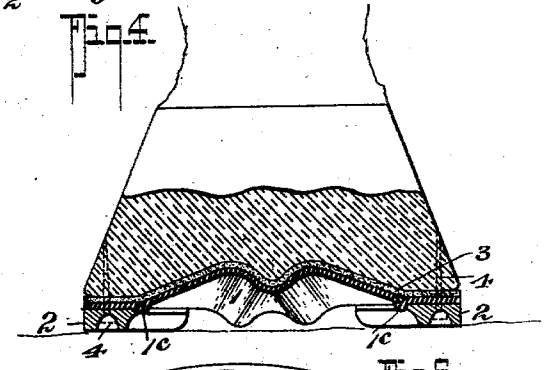
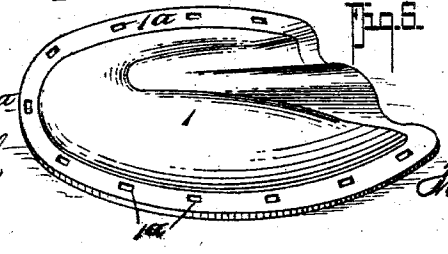


Fig. 5.



WITNESSES:

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ALBERT H. BUSH, OF LOUISVILLE, KENTUCKY.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 633,796, dated September 26, 1899.

Application filed May 26, 1899. Serial No. 718,399. (No model.)

To all whom it may concern:

Be it known that I, ALBERT H. BUSH, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a new and Improved Horseshoe, of which the following is a specification.

This invention relates to certain new and useful improvements in horseshoes, and it particularly seeks to provide an improved combined shoe and pad more especially adapted for use for race-horses, although the same may be also used for other horses.

My invention comprehends a novel form of shoe and pad in which the pad consists of a light metallic body, such as aluminium, shaped to snugly fit the frog of the foot and to form a perfect bearing therefor and have sufficient resiliency to avoid a too-great impact shock upon the foot during running and which will thoroughly protect the sole or frog of the foot when the animal is driven over stony or hard ground.

My invention also comprehends a metallic plate adapted to fit the frog of the foot, having a cushiony upper surface whereby to provide a soft bearing for tender feet and in which the metallic plate, together with its cushiony surface, can be readily detached from the hoof and used with a number of different shoes as they become worn.

With these objects in view my invention consists in certain details of construction and novel combination of parts, such as will be first described in detail and then specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a view illustrating my invention as applied to a horse's hoof. Fig. 2 is a longitudinal section taken practically on the line 2 2 of Fig. 1. Fig. 3 is a transverse section on the line 3 3 of Fig. 2. Fig. 4 is a similar view of a slightly-modified form of my invention, and Fig. 5 illustrates the hoof plate or pad detached.

Referring now to the accompanying drawings, in which like numerals indicate like parts in all the figures, 1 indicates the hoof-bearing plate, which is formed of a light metal, such as aluminium. This plate has a peripheral shape in the form of a horse's shoe and its body a counterpart of the sole or horse's foot, whereby to bear snugly thereagainst when fitted thereon, and the outer edge of the said plate has nail-apertures 1^a, adapted to register with the nail-holes of the shoe 2. The shoe 2, which may be of the ordinary form, is fixedly held with the plate 1 only when the two are fitted to the horse's foot, and it has no fixed connection with such plate, whereby when the shoe is removed from the foot after worn to be replaced by a new one the worn shoe and plate can be readily separated and the said plate 1 used with a second or third shoe.

So far as described it will be readily seen that to apply my combined shoe-plate the plate 1, the outer end of which has a flat bearing-rim to firmly seat against the hoof-rim, and the shoe are held up snugly against the frog of the foot as the shoe is being nailed to the hoof, it being understood that the nails, passing through the apertures in the plate, serve to hold the two parts firmly in position on the hoof.

By providing a shoe of the character stated the foot is amply protected from irritation or injury by contact with gravel, stone, or other hard substances. Furthermore, a snug and neat shoe and covering for the hoof is provided, which has sufficient resiliency to avoid undue shock on the hoof. Again, while the additional weight of the plate is comparatively little, yet it is sufficient to cause a racer to step and place his foot down more firmly than is the case when the hoof is not protected.

For horses having tender feet the plate 1 has a supplemental portion in the nature of a felt covering 3, held secure on the rim or flattened portion of the plate 1, as shown, or in case of very soft feet the covering 3 may be made to snugly fit the contour or frog of the foot and extend entirely over the top of the plate 1, as shown in Fig. 4. In the latter figure another modification of my invention is illustrated, which consists in forming the plate 1 with an inwardly and outwardly curved flange 1^c, which is adapted to bear against the inner edge or rim of the shoe, such construction having for its purpose to relieve the fastener-nails 4 from lateral strain exerted by reason of a downward pressure on the

plate 1 when the same is made thin and resilient, it being obvious that when the latter form is used any lateral or radial strain of the plate 1 would be against the inner edge of the shoe.

My invention is exceedingly simple in its character, can be conveniently constructed, and effectively serves its purpose, particularly as a means of protecting the hoof of the racer and shoeing him in such a manner as to give him a greater confidence while running, the arrangement of the shoe or pad being such as to make a comfortable and secure covering for the foot.

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

1. A horseshoe, comprising in combination with the shoe member proper, a plate formed of a light resilient metal having the contour of the frog or sole of the hoof, said plate having a seat at its peripheral edge for the outer or tread portion of the hoof and a bearing portion on the under side to receive the shoe.

2. A tread-plate for horseshoes, formed of a solid resilient metal body having a shape to snugly fit the frog or sole of the hoof, said body having its peripheral edge in the shape of a horseshoe and having nail-apertures near its outer rim substantially as shown and described.

3. The combination with a horseshoe; of a tread-plate formed of a light resilient metal having the contour of the hoof whereby to snugly fit against it, the outer rim of said plate being flattened to form a solid bearing to engage the upper surface of the shoe, and a cushion bearing member having the contour of the plate and adapted to be fitted thereon, all being arranged substantially as shown and described.

4. The combination with the shoe, of the plate 1, formed to the curvature of the frog and adapted to snugly fit against the same, said plate having its rim shaped to conform with the horseshoe and having the said rim flattened to fit flat upon the horseshoe and having a downwardly-extending flange adapted to engage the inner edge of the horseshoe, said plate having nail-apertures registering with the shoe-apertures, all being arranged substantially as shown and for the purposes described.

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