(No Model.)

J. KORBIEN.

RUBBER TREAD HORSESHOE.

No. 591,232. Patented Oct. 5, 1897.

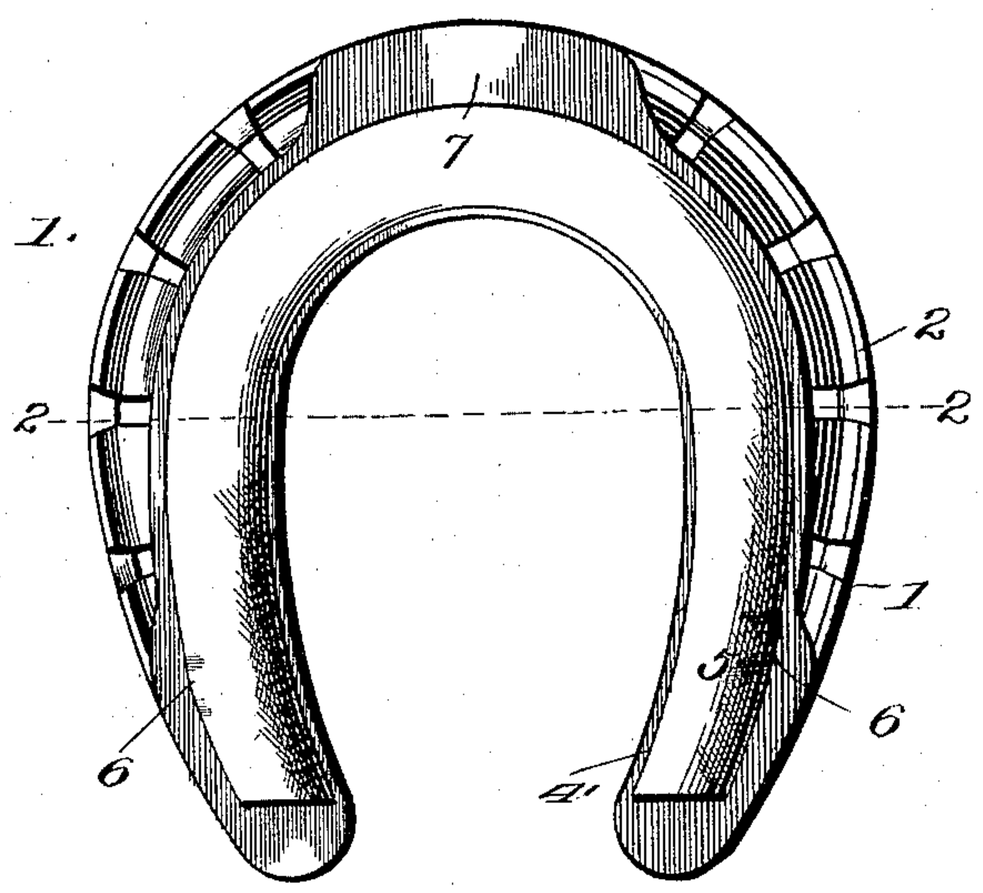


Fig. 1.

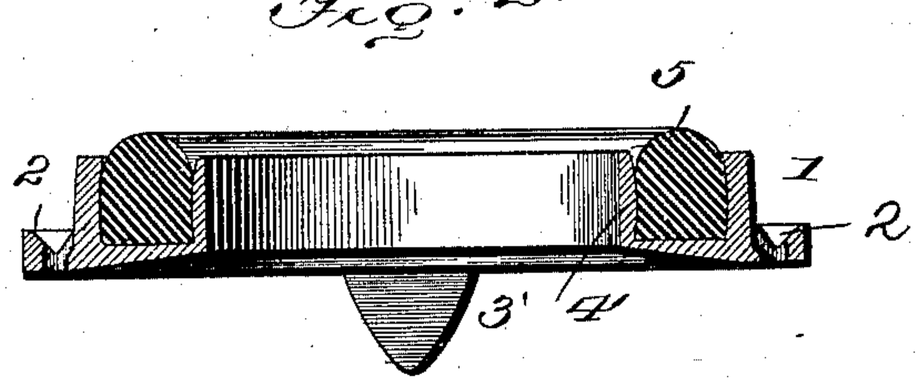
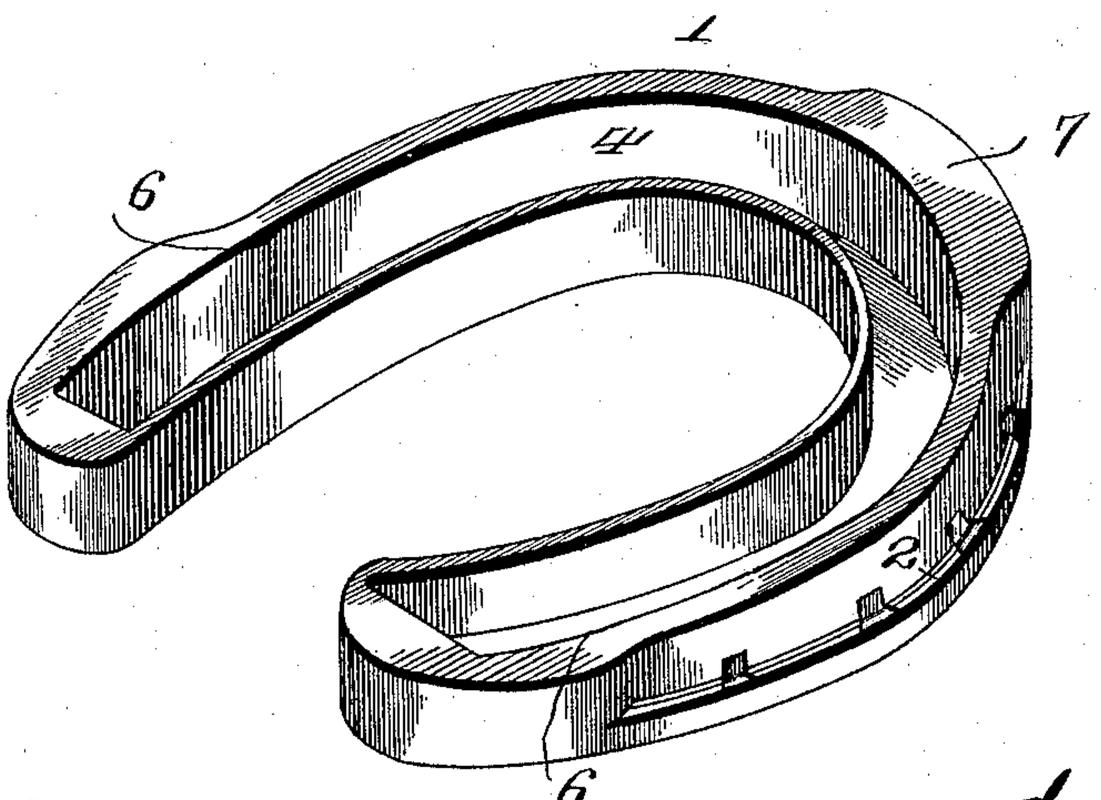


Fig. 2.

Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JULIUS KORBIEN, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO GEORGE C. SUCRO, OF SAME PLACE.

RUBBER-TREAD HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 591,232, dated October 5, 1897.

Application filed June 2, 1897. Serial No. 639,158. (No model.)

To all whom it may concern:

Be it known that I, JULIUS KORBIEN, a citizen of the United States of America, residing at Baltimore city, in the State of Maryland, have invented certain new and useful Improvements in Horseshoes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of horseshoes designated as "soft-tread;" and it consists in the combination and novel arrangement of the several parts, as will be hereinafter described, and pointed out in the claim.

The principal object of the invention is to produce a shoe of the character before mentioned which, besides possessing the qualities to prevent slipping and stumbling, shall have an increased width of tread at the point of greatest wear.

Another and an essential object of the invention is to so construct the rubber-cushion-retaining groove that securing lugs or lips which interfere with the cushion effect of the rubber tread will be dispensed with.

These objects are attained by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 illustrates a bottom plan view of my improved horseshoe; Fig. 2, a cross-section of the same on line 2 2 of Fig. 1; and Fig. 3 a bottom perspective view of the metal shoe, the rubber cushion being removed.

Referring to the several views, the numeral 1 indicates a metal horseshoe which is constructed with a flange 2 at opposite sides thereof, the bottom surface of the shoe being recessed or rabbeted downward to form said flanges. Each flange is provided with the necessary holes to receive the nails which secure the shoe to the foot of the animal, and the front of the shoe is provided with the usual toe-clip, indicated by the numeral 3.

The bottom face of the shoe is provided with a groove 4, in which is seated a rubber cushion 5, of any suitable shape. The inner side of the inner wall of the groove is preferably slightly convex in cross-section, while the inner side of the outer wall of said groove is slightly concave in cross-section, so that the rubber cushion when seated in the groove will be firmly retained therein. The bearing surface or edge of the inner wall of the groove is of uniform thickness, but the bearing-surface of the outer wall of said groove is of much greater width at the sides of the heel, as indicated by the numeral 6, and at the front or toe part of the shoe, as indicated by the numeral 7, than is the surface between the ends of the recessed or rabbeted portions of the shoe. By thus increasing the width of the bearing-surface of the outer wall of the groove at the sides of the heel I am enabled to attain a greater extent of bearing-surface at the points where it is mostly required, thus preventing rocking or side motion of the animal's foot, and thereby greatly prolonging the life of the shoe and securing a more uniform and even tread, reducing the liability to slip to a minimum. The rubber cushion projects slightly beyond the bearing-surface of the shoe and serves greatly to prevent shock to the animal when its foot strikes the ground or pavement, and consequent lameness or affections of the hoof, thus prolonging the usefulness of the animal.

It will be observed that in my invention no clips or turned-over edges are required to keep the rubber in its grooved seat, the rubber cushion being firmly held in said seat by means of the concave and convex sides of the walls of the groove.

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

A horseshoe having the outer side edges of its bottom face cut away or rabbeted to form nail-flanges, said face provided with a groove or channel corresponding to the shape of the shoe, the outer wall of said groove having bearing-surfaces of greater width at the sides of the heels than between the ends of the nail-flanges, the inner sides of the inner and outer walls of the groove being convex and concave respectively, and a rubber cushion seated in said groove and securely held by the convex and concave sides of the groove.

In testimony whereof I affix my signature in presence of two witnesses.

JULIUS KORBIEN.

Witnesses:
THOS. KELL BRADFORD,
CHARLES PETER HOH.