

A. S. Wilkinson,

Horseshoe.

No. 69,140.

Patented Sep. 24, 1867.

Fig. 1.

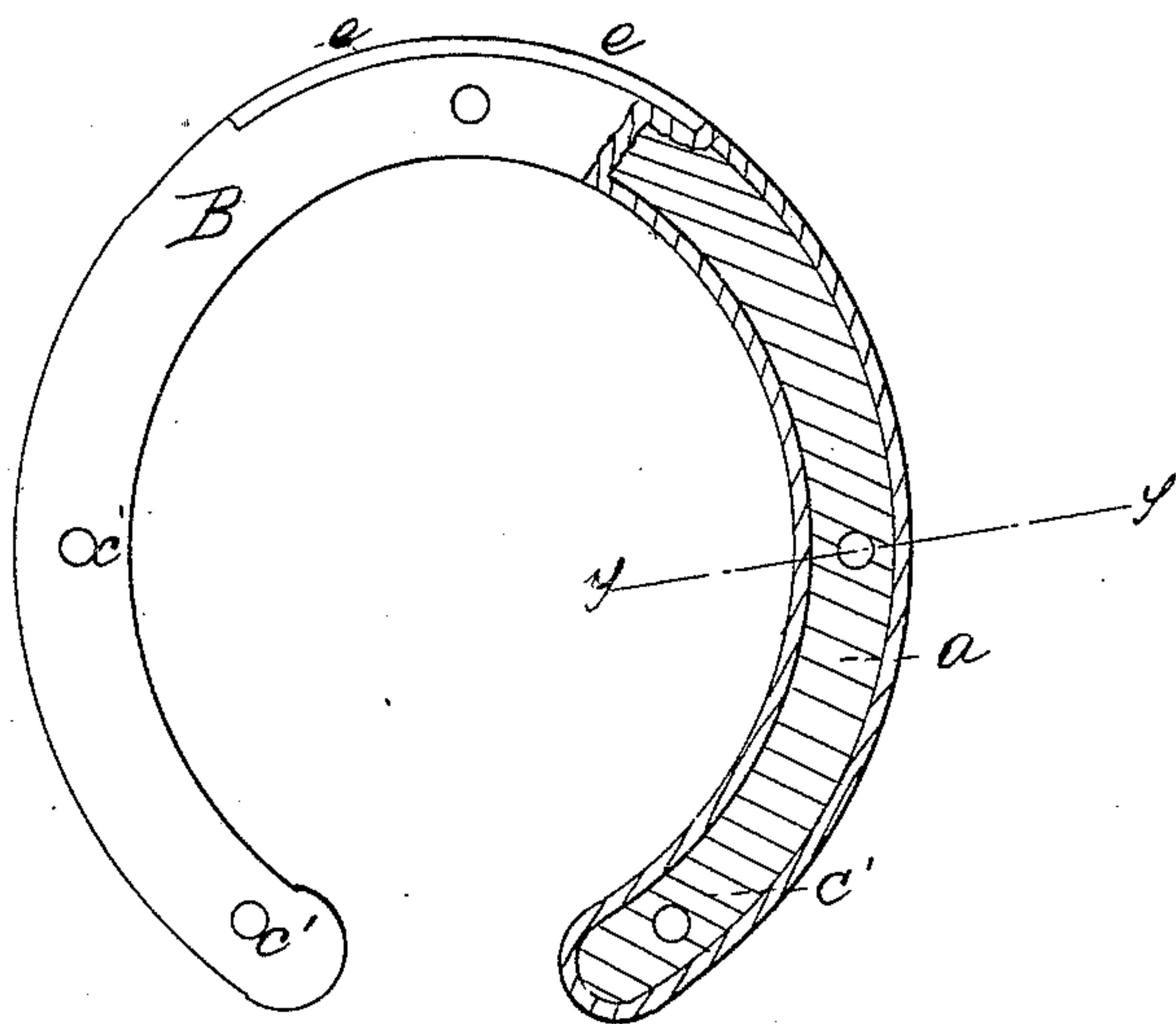
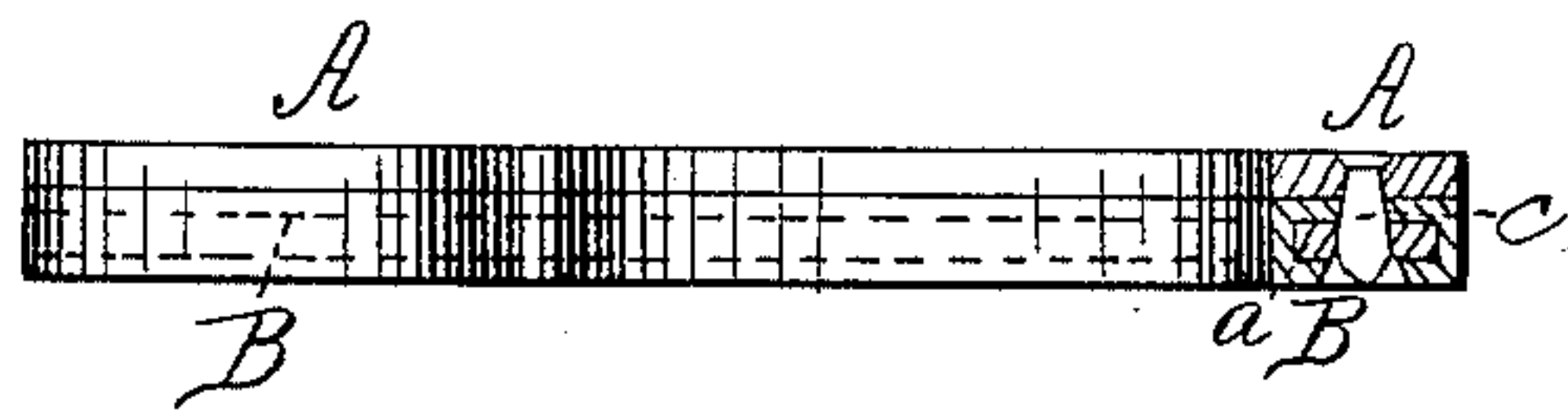


Fig. 2.



Witnesses:

Geo. W. Rothwell
Solomon C. Kemm

Inventor:

A. S. Wilkinson
By O. Knight
For His Attorney

United States Patent Office.

ALBERT S. WILKINSON, OF PAWTUCKET, RHODE ISLAND.

Letters Patent No. 69,146, dated September 24, 1867.

IMPROVEMENT IN HORSE-SHOES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ALBERT S. WILKINSON, of Pawtucket, county of Providence, State of Rhode Island, have invented a Rubber-Soled Horse-Shoe; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a bottom view of my improved rubber-soled shoe for animals, with part of the rubber face removed to expose the interior.

Figure 2 is a section of the same taken in the line *y y*, fig. 1.

The subject of this invention is a horse-shoe constructed with a continuous sole of India rubber or similar elastic material, applied substantially as hereinafter described, and serving to relieve the horse or other animal from danger of slipping, and from injurious and uncomfortable concussion of the feet when travelling upon hard roads.

In the accompanying drawings, *a* represents a metallic shoe-plate encased in a covering, *B*, of India rubber or like elastic material cast upon and around it. The shoe thus made may be attached directly to the horse's foot with nails or other appliances, or, if preferred, a second metal plate may be secured to the first by rivets *c*, as shown in the drawings, so that the shoe will have a continuous sole of elastic material over the entire under surface. *c' c'* represent apertures left or formed in the rubber to admit of supporting the heads of the rivets by a suitable tool in the act of clenching. The rivets *c* may be formed with common flat heads and a regular slow taper, or may be of any other suitable form. If preferred, they may be formed with tapering or pointed heads, as shown in fig. 2, projecting into the apertures *c'* below the plate *a*, so as to serve as small calkins, of such length that their points are about flush with the face of the rubber sole, and they are intended to be brought into action chiefly by the compression of the rubber, as the weight of the horse is brought to bear thereon, the rubber in all cases receiving the brunt of the blow when the foot is placed upon the ground. The nails themselves may be used as calkins in the way above described by forming them with pointed or taper-heads, and employing a suitable countersunk tool to drive them. My shoe-plate *a* and elastic casing *B* may be together applied to a common shoe, as illustrated, by the secondary plate *A*, but without such secondary plate *A* the plate *a* and casing *B* alone constitute a valuable shoe for many lighter uses, and by bringing the rubber into direct contact with the foot of the animal affords a more comfortable tread. The metallic portion of these shoes may be jointed for giving lateral elasticity to the heel of the foot. The rubber casing is especially valuable in connection with either spring or hinge joints to protect them from wear and batter and at the same time permit sufficient freedom of motion. *e* represents a metallic guard or toe-calk, which projects downward from the plate *a*, so as to be flush with the lower face of the rubber sole *B*, and serves as a rest for the toe to roll on as the foot is being lifted from the ground, and saves the rubber at this point from wear. The said metallic guard is free from the objectionable features of the ordinary toe-calk, because, as the rubber surface effectually prevents slipping, the toe-piece does not need to project below the face of the shoe. The horse is thus relieved of a frequent cause of stumbling, and is enabled to travel with greater ease and comfort. If preferred, the toe-calk *e* may be formed upon the secondary plate *A*, projecting downward, so as to be flush with the sole, as before explained.

Having thus described my invention, the following is what I claim as new therein, and desire to secure by Letters Patent, as an improvement in shoes for horses or other animals:

1. I claim the combination of the metallic plate *a*, either jointed or otherwise, with a casing, *B*, of elastic material extending continuously around it, substantially as and for the purposes set forth.
2. I claim the secondary plate *A*, in combination with the plate *a* and casing *B*, substantially as specified.
3. I claim the combination of the metallic toe-piece *e* with the plate *a* or *A* and rubber sole *B*, substantially as and for the purposes set forth.

ALBERT S. WILKINSON.

Witnesses:

GEO. W. GARDNER,
GEO. A. MUMFORD.