

H. J. FILLIEZ.
HORSESHOE.
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943,146.

Patented Dec. 14, 1909.

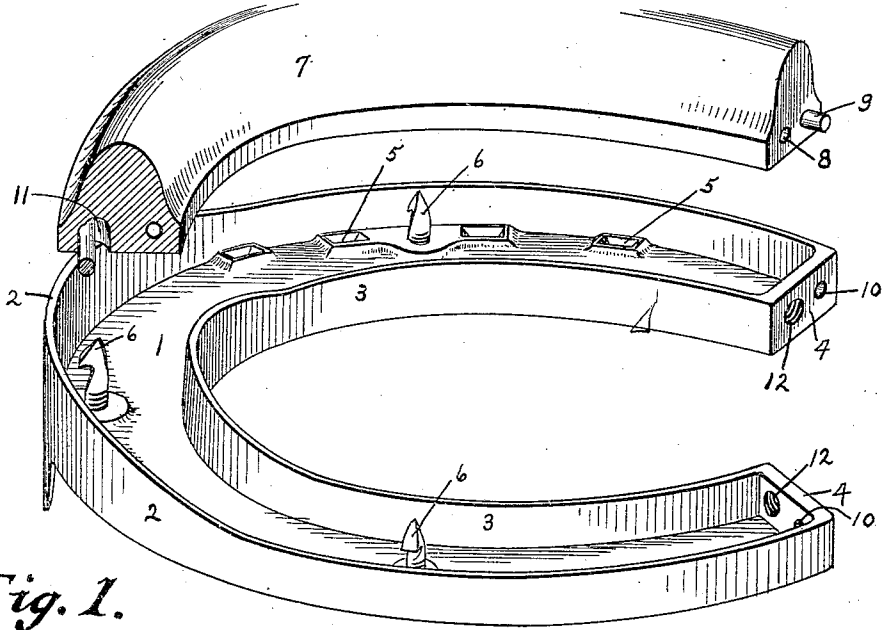


Fig. 1.

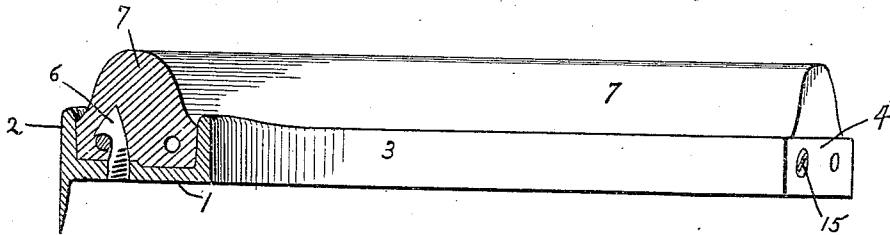


Fig. 2.

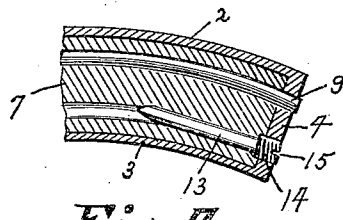


Fig. 4.

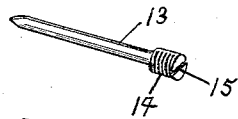


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

HERMAN J. FILLIEZ, OF CANTON, OHIO, ASSIGNOR OF ONE-THIRD TO AUGUSTUS VIGNOS
AND ONE-THIRD TO MARTIN L. KEAGY, OF CANTON, OHIO.

HORSESHOE.

943,146.

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To all whom it may concern:

Be it known that I, HERMAN J. FILLIEZ, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented a new and useful Horseshoe, of which the following is a specification.

My invention relates to improvements in soft-tread horseshoes; and the objects of my improvement are to provide a horseshoe of the character mentioned wherein the cushioned portion may be readily removed when worn, and to provide means for detachably connecting the cushion to the shoe proper in such a way that the same may be readily replaced when worn by the aid of few tools and without the assistance of the professional farrier.

I attain these objects together with other objects readily apparent to those skilled in the art by the construction illustrated in the accompanying drawing, in which—

Figure 1 is a perspective view of the horse-shoe proper showing the elastic cushion member lifted out of said shoe and a portion of said cushion broken away to more fully disclose the construction. Fig. 2 is a view partly in section, illustrating one-half of the shoe with the cushion member properly located for use. Fig. 3 is a perspective view of one of the attaching keys. Fig. 4 is a fragmentary view in cross section illustrating the cushion member located in the shoe proper and showing the method of fastening by means of the wire and attaching key.

Throughout the several views similar numerals of reference indicate similar parts.

The shoe proper is preferably formed of metal and is provided with the hoof-engaging portion 1 shaped to conform to the outlines of the hoof. From the portion 1 an integral flange, continuous around the entire portion 1, depends, said flange comprising the outer flange 2, the inner flange 3 and the heel flanges 4 as best illustrated in Fig. 1. Through the portion 1 extend appropriate apertures for the accommodation of nails by which to attach the shoe to the hoof, and suitable sockets, such as shown at 5, may be provided if desired for the reception of the heads of the nails. Fixedly connected to the portion 1 and extending from said portion between the flanges 2 and 3 are the hooks 6, which may be arranged at intervals around the portion 1, the preferable

construction providing three of such hooks, as illustrated in Fig. 1.

The cushion 7 consists of a strip of resilient or elastic material, such as rubber, the preferable form of such strip being that shown in the drawing, which shows a portion of a rubber buggy tire such as is commonly in use. Such buggy tire is provided with two apertures extending entirely through the strip from end to end near its base in which suitable wires are usually arranged for assisting in maintaining the tire upon the buggy wheel. In my construction I remove one of the said wires thus leaving the aperture 8 vacant. The other wire I permit to remain in the cushion and to extend beyond the heel ends for a short distance, as illustrated at 9, for the purpose of entering the aperture 10 in the corresponding heel flange. At appropriate points in the base of the cushion a portion of the rubber is cut away, as at 11, to permit the hook at that point to enter the cushion and engage the wire therein as illustrated in Fig. 2.

In the heel flanges 4 at points registering with the aperture 8 of the cushion are arranged screw threaded apertures 12. The keys 13 are provided, one for each heel flange, the said keys having a reduced portion adapted to enter the apertures 8 and with an enlarged screw threaded portion 14 provided at the end with a slot 15, the construction being such as to permit the key 13 to enter through the apertures 12 into the aperture 8 and be screwed into place as illustrated in Fig. 4.

It will be understood that the cushion 7 extends entirely around the shoe proper from one heel flange to the other, the cushion in Fig. 1 being broken away at the median line of the shoe only for the sake of clearer illustration.

The shoe proper and cushion having been provided as described the method of application of the cushion to the shoe proper is as follows. The cushion is bent to correspond to the curvature of the horseshoe and the ends 8 of the wire in the cushion are arranged in the apertures 9. The cushion is then forced down upon the portion 1 between the flanges 2 and 3, the hooks 6 entering their appropriate apertures in the base of the cushion. A sharp blow upon the cushion at a point substantially above each hook will then cause the wire in the cushion

to spring down over the point and engage the tang of the said hook as illustrated in Fig. 2. The cushion having been thus fastened by means of the hooks, the keys 13 are inserted through the apertures 12 and into the aperture 8 and screwed into place as illustrated in Fig. 4. The keys will then prevent the cushion from twisting or rolling out of position and will also aid in holding the cushion down to place and in engagement with the portion 1 of the shoe proper.

When it is desired to remove a worn cushion to replace it with a new one, the keys 13 are removed, whereupon the cushion may be readily detached by prying and crowding the same over against the flange 2, thus detaching the wire from the engaging hooks and permitting the cushion to be removed.

It is evident that cushions of the character described, while very desirable are subject to considerable wear, especially where used upon paved streets and the like.

It will be found that by my construction it will be possible to very readily remove the old and worn cushion and replace it with a new one, and the fact that the said cushion is not of an unusual and rare shape but is readily obtainable in practically any community renders the device extremely convenient in use as well as economical and efficient in accomplishing the purposes for which it is intended.

I claim:—

1. In a horseshoe the combination of a shoe proper provided with heel flanges and hooks, each heel flange provided with an aperture and a screw threaded aperture, a cushion provided with a continuous, embedded wire extending from end to end and beyond the ends thereof, said cushion pro-

vided with apertures registering with the screw threaded apertures in the said heel flanges, the said hooks on the shoe proper engaging the embedded wire in the cushion, and separate, removable keys arranged in the screw threaded apertures of the heel flanges and extending into the apertures of the cushion registering therewith.

2. In a horseshoe the combination of a shoe proper, said shoe proper provided with a hoof engaging portion, an integral, continuous flange depending from said hoof engaging portion and comprising an outer flange, an inner flange and heel flanges, hooks connected to and rising from the hoof engaging portion between the outer and inner flanges, each heel flange provided with an aperture and a screw threaded aperture, a cushion adapted to conform to the space between said outer flange and inner flange, said cushion provided with a continuous, embedded wire extending from end to end and beyond the ends thereof, said cushion provided with apertures registering with the screw threaded apertures in the heel flanges, said cushion further provided with apertures in its base adapted to permit the said hooks to enter the body of the cushion and engage the said wire embedded therein, and separate, removable keys adapted to be arranged in the screw threaded apertures of the heel flanges and to extend into the apertures of the cushion registering therewith, all substantially as described.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

HERMAN J. FILLIEZ.

Witnesses:

WILLIAM H. MILLER,
MARTIN L. KEAGY.