

(No Model.)

W. DAVIS.
RUBBER TREAD HORSESHOE.

No. 479,790.

Patented Aug. 2, 1892.

Fig. 1.

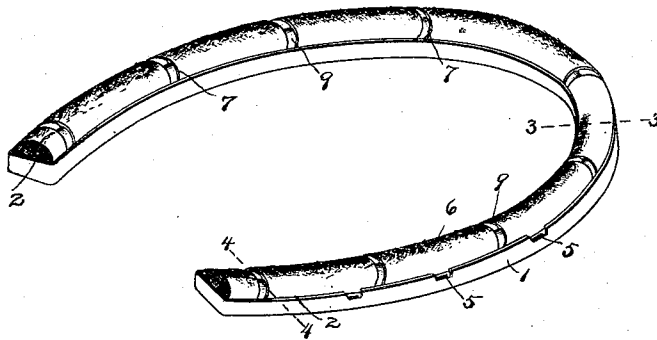


Fig. 2.

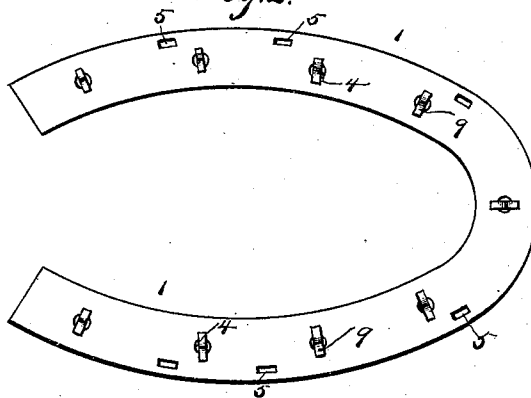


Fig. 3.

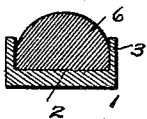


Fig. 4.

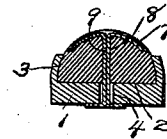
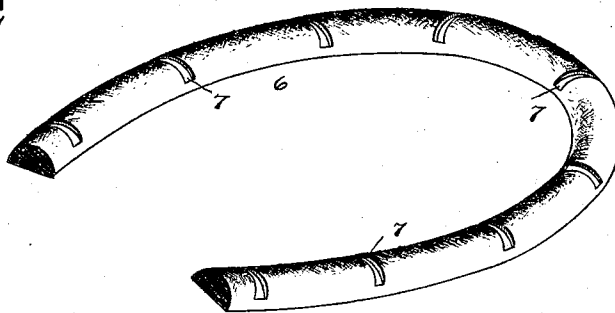


Fig. 5.



Witnesses

B. S. Chapman
J. H. Diggers

Inventor

Warren Davis

By *His* Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

WARREN DAVIS, OF CRAWFORDSVILLE, INDIANA.

RUBBER-TREAD HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 479,790, dated August 2, 1892.

Application filed February 29, 1892. Serial No. 423,171. (No model.)

To all whom it may concern:

Be it known that I, WARREN DAVIS, a citizen of the United States, residing at Crawfordsville, in the county of Montgomery and State of Indiana, have invented a new and useful Horseshoe, of which the following is a specification.

My invention relates to improvements in horseshoes; and the objects in view are to provide a shoe for horses in which the sole is soft or elastic, noiseless, will not slip, cheap, and durable, and which also may be replaced when worn, whereby the shoe proper is preserved against wear.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a bottom perspective of a shoe constructed in accordance with my invention. Fig. 2 is a top plan. Fig. 3 is a transverse section, the same being taken between the fastening-points on the line 3 3. Fig. 4 is a similar section through one of the fastening-points on line 4 4. Fig. 5 is a detail of the sole or tread.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I prefer to form the shoe 1 of malleable iron or steel, and the under side is provided between its edges with a channel or recess 2, bounded by a continuous flange or wall 3. The bottom of the channel, or rather what would be the top of the channel when the shoe is in proper position for use, is provided at intervals with perforations or rivet-holes 4, and the outer portion of the surrounding flange is at intervals cut away to register with nail-holes 5, formed in the edge of the shoe and adapted to receive the ordinary horseshoe-nails, by which the shoe is secured to the hoof.

Seated within the channel formed in the underside of the shoe is a rubber tread or sole 6, the same being preferably molded rather than stretched into position, for the reason that when cut during use, as it inevitably will be, the cuts will not gap or spread, but, inasmuch as the tread or sole is molded to fit the channel, will close. At intervals the under side of the tread or sole is provided with transverse kerfs or recesses 7 of a crescent

shape and at the centers of the same perforations 8 are formed, which extend through the sole or tread and register with the perforations 4 of the shoe. Split or T rivets 9 are passed through the perforations 8 and 4 and have their terminals laterally bent or upset in the crescent-shaped recesses of the tread. Other forms of rivets may be employed in lieu of the split rivets and the recesses in the sole or tread may be omitted or changed to other form for the purpose of accommodating the peculiar rivet or screw to be employed. If desired, also, and I prefer it, the continuous flange or wall 3, surrounding the channel 2, may be inwardly bent or swaged, so as to clamp the sole or tread and prevent its lateral withdrawal from the recess or channel.

A shoe thus provided, as will be obvious, is elastic and easy to the hoof of the animal, accelerating its speed, is noiseless, will not readily slip, and will be found very desirable for general purposes. When worn or impaired, a new sole or tread may be readily substituted for the old one, and thus one set of shoes with an occasional resoling will last a great length of time and may be repaired when occasion requires by persons inexperienced in farriery.

The upsetting or inward bending of the surrounding walls of the channel preferably occurs, as shown in this instance, only at the heels or adjacent thereto, leaving the toe and quarters at the opposite sides thereof unbent. In this manner by first sliding the heels of the soles or treads longitudinally into position the toe portion may be crowded laterally into place.

Having described my invention, what I claim is—

1. The herein-described horseshoe, consisting of the metal shoe proper channeled upon its under side between its edges and provided at intervals at its center with perforations and having its outer wall at intervals cut away and registering with nail-holes, the rubber tread fitted between the flanges and within the channel, and a securing device passed through the openings in the shoe and through the perforations registering therewith and formed in the tread, substantially as specified.

2. The herein-described horseshoe, the same

consisting of the metal shoe proper, the under side of which is provided with a channel, perforations formed in the shoe and nail-holes formed in the outer edge of the shoe, the rubber tread or sole molded to fit within the channel and provided with perforations registering with those of the shoe and with transverse recesses at its under side registering with the perforations, and split or T rivets passed through the perforations in the shoe and tread and having their terminals upset within the recesses of the tread, substantially as specified.

3. The herein-described horseshoe, consisting of the metal shoe proper provided upon its under side and between its edges with a channel and at intervals with perforations, a molded rubber tread seated in the channel,

and securing devices passed through the tread and perforations of the shoe, the walls of the channel being inwardly bent near the heel portions of the shoe, so as to overlap or embrace the sides of the tread and prevent lateral displacement, yet permit of longitudinal retraction, the said walls or flanges beyond said heel portions standing at a right angle to the face of the shoe and permitting of lateral withdrawal of the tread, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WARREN DAVIS.

Witnesses:

JAMES H. WATSON,
MELVILLE W. BRUNER.