





# UNITED STATES PATENT OFFICE.

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## ELASTIC-TREAD HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 617,319, dated January 10, 1899.

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*To all whom it may concern:*

Be it known that we, ARTHUR W. CROZIER and GEORGE SMITH, of the city of New York, borough of Manhattan, in the county of New York and State of New York, have invented a new and useful Improvement in Horseshoes, of which the following is a full, clear, and exact description.

The object of our invention is to construct a horseshoe capable of being fitted hot to the hoof so that rubber pads will form a part of the shoe, the said pads being removable and provided with side calks.

A further object of the invention is to so construct the shoe that the pads will lie snugly in panels made in the bottom face of the shoe, between the heel and toe calks, and will be held in position by the nails driven through the shoe, and, furthermore, to provide eyelets in the rubber pads where the nails are to pass through, which eyelets serve to prevent the pads from becoming lacerated by the nails in the event they should accidentally work loose.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a bottom plan view of the improved shoe, a part of one of the pads being broken away. Fig. 2 is a transverse section through the shoe, taken substantially on the line 2 2 of Fig. 1; and Fig. 3 is a detail perspective view of one of the eyelets for the pads.

The shoe A is provided with heel-calks 10 and with a toe-calk 11, and the shoe is further provided with inner and outer marginal flanges 12, extending below the body portion of the shoe from the heel to the toe calks, forming thereby a channel 13 in the bottom face of the shoe, the said channel preferably having straight side portions, as illustrated in Fig. 2. The usual openings 14 are made in the body of the shoe for the passage of the nails, and each channel 13 is adapted to receive a pad 15, of rubber or other elastic material, the pads being fitted to the said channels and completely filling them. Each pad

upon its outer face is provided with projections 16, forming side elastic calks for the shoe, and these elastic calks are preferably located one at each end of a pad and a third calk at or near the center of the pad.

The elastic pads are provided with eyelet-blocks 17, secured therein. In fact, in the formation of the pads the rubber is cast around the eyelet-blocks. These eyelet-blocks are so placed that when the pads are in position upon the shoe the eyelets will register with the nail-openings 14 of the shoe. These eyelet-blocks are preferably made as shown in Fig. 3, in which the upper face is wider than the lower face and the ends are inclined, while the opening 18 in each block is made to taper from the narrow end in direction of the wider end of the block, so that the larger end of an opening 18 is at the lower or outer end of a block. When these blocks are placed in the pads, their outer and their inner faces are flush with corresponding surfaces of the pad to which they are applied, and the tapering opening 18 admits of a nail being driven with proper inclination, and the nail-heads will be received readily within the openings of the eyelet-blocks.

As hitherto stated, the shoe is one which is adapted to be fitted, when heated, on the hoof, and can therefore be given any necessary shape—in fact, can be handled in the same manner as an ordinary hand-forged shoe. It is evident that in the event the rubber pads should become worn by removing the shoe other pads may be substituted.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In a horseshoe, the combination, with a shoe adapted to be fitted to the hoof in a heated state, the shoe being provided with heel-calks and with a toe-calk, and with an inner and an outer marginal flange extending from the heel-calks to the toe-calk, and elastic pads fitted in the channels of the shoe formed by the calks and the flanges thereof, the said pads being provided with elastic calks, and eyelet-blocks fitted in the material of the said pads between its elastic calks, the said eyelet-blocks being adapted to register with the nail-openings in the shoe, for the purpose specified.



2. In a horseshoe, the combination, with a shoe adapted to be fitted to the hoof in a heated state, the shoe being provided with heel-calks and with a toe-calk, and with an inner and an outer marginal flange extending from the heel-calks to the toe-calk, and elastic pads fitted in the channels of the shoe formed by the calks and the flanges thereof, the said pads being provided with elastic calks, and metal eyelet-blocks fitted in the material of the said pads between its elastic calks, the said eyelet-blocks being adapted to register with the nail-openings in the shoe,

each eyelet-block having its outer surface wider than its inner surface and its ends inclined, each eyelet-block being further provided with an opening extending through from its outer to its inner side surface, the said opening being a tapering one and being widest at the outer surface of the block, for the purpose specified.

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Witnesses:

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