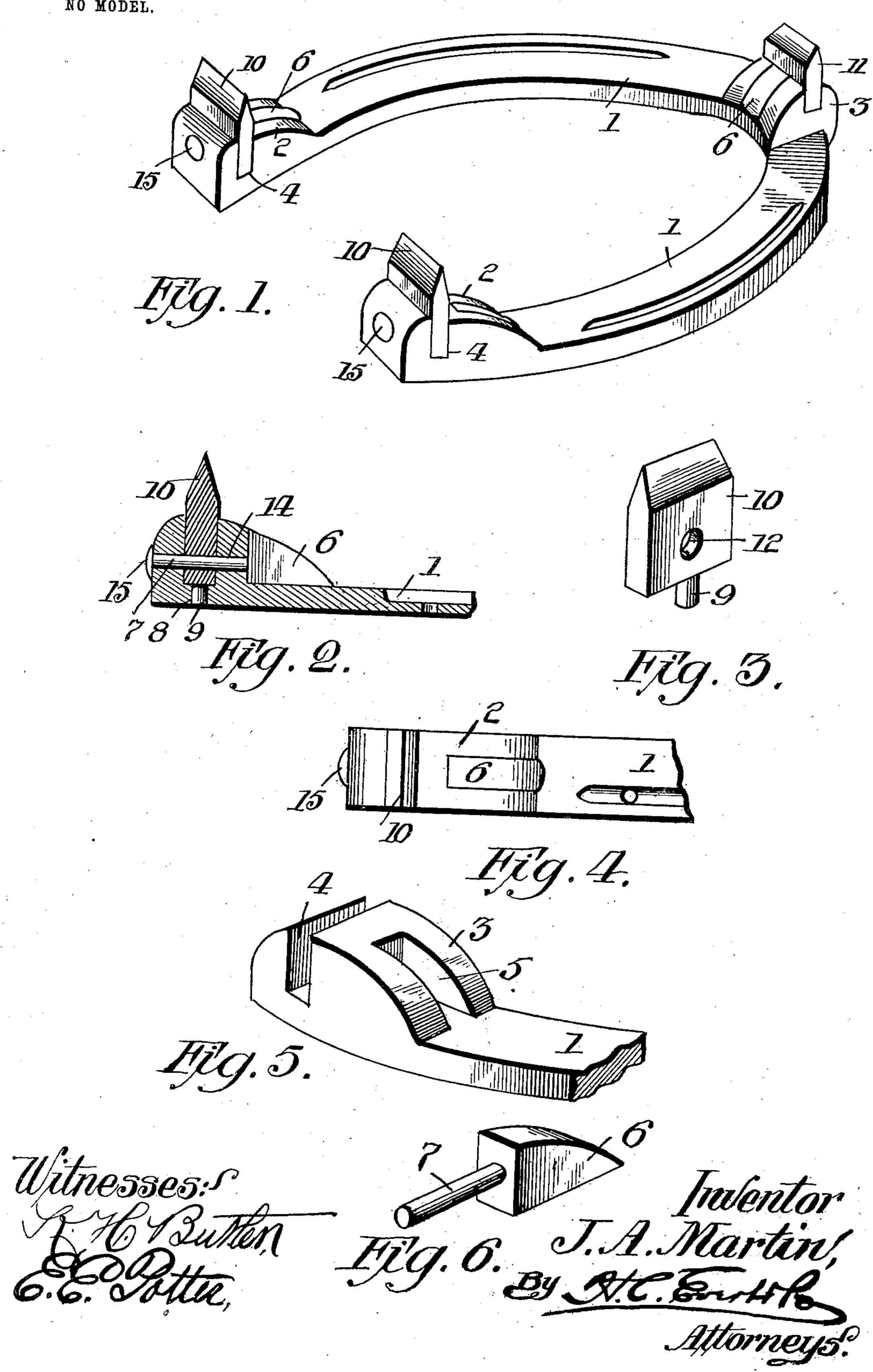
## J. A. MARTIN. HORSESHOE.

APPLICATION FILED NOV. 9, 1903.

NO MODEL.



## United States Patent Office.

JOHN A. MARTIN, OF CHESTER, WEST VIRGINIA.

## HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 754,789, dated March 15, 1904.

Application filed November 9, 1903. Serial No. 180,406. (No model.)

To all whom it may concern:

Be it known that I, John A. Martin, a citizen of the United States of America, residing at Chester, in the county of Hancock and State of West Virginia, have invented certain new and useful Improvements in Horseshoes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in horseshoes, and relates particularly to that type of shoe in which the calks and toe are removably secured.

The invention has for its object the provision of novel means for permitting the ready insertion of substitute calks and toe, the secure holding of the same in the shoe, and the ready removal thereof when desired.

Briefly described, the invention comprises a shoe having enlargements at the calk ends and also at the toe portion of the shoe. These enlargements are provided with sockets which are adapted to receive the calks and toe, and means is provided for securing said calks and toe in their sockets, the said means being so arranged in the enlargements of the shoe as to be fully protected from injury.

All of the above construction is hereinafter more fully described, and specifically pointed out in the claim, and in describing the invention in detail reference is had to the accompanying drawings, forming a part of this application, and wherein like numerals of reference indicate like parts throughout the several views, in which—

Figure 1 is a detail perspective view of the shoe constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view of a part thereof. Fig. 3 is a detached detail perspective view of one of the calks. Fig. 4 is a top plan view of a part of the shoe with the calk in position. Fig. 5 is a perspective view of a part of the shoe with the calk and its fastening means removed. Fig. 6 is a detached detail perspective view of the securing means for the calks and toe.

To put my invention into practice, I provide a shoe 1, provided on its underneath face with

enlargements 2 at the calk ends and with enlargements 3 at the front or toe portion of 50 the shoe, these enlargements being on the underneath face of the shoe-body. The enlargements are provided with transverse sockets 4, extending entirely across the enlargements, being open at both ends. The inner ends of 55 the enlargements are rounded or convexed, and in these rounded or convexed portions is provided the recess 5, which is adapted to receive the head 6 of the securing pin or rivet 7, the said head 6 being shaped to conform to 60 the rounded face of the enlargements, whereby it will be fully protected against injury. The shoe is provided in the bottom of the sockets 4 with an opening 8, through which extends the stud or pin 9, made on the lower 65 end of the calks 10 and also on the lower end of the toe 11. The calks 10 and the toe 11 are provided in their body with an opening 12, which alines with the opening 14, extending longitudinally through the enlargements in 7° line with the recess 5, and which opening 14 and the opening 12 receive the pin or rivet 7, adapted to have its end bolted after each insertion, as shown at 15.

This construction of shoe is particularly 75 adapted for use where it is desired to replace a dull or flat calk and toe with sharpened ones for use on icy roads or streets. To remove the said calks and the toe and replace the same with sharpened ones, it is simply necessary to cut off the riveted end 15 of the rivet 7, withdraw the rivet, and insert the said calks and toe in position. This may be readily and quickly done, and by reason of the calks and toe being embraced by the walls of the socket 85 they may be securely held in position.

In the practice of the invention it will be noted that various slight changes may be made in the details of construction without departing from the general spirit of my invention. 9°

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

A horseshoe provided at its calk ends and at its toe portion on the underneath face with 95 enlargements provided each with a socket ex-

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tending transverse of the shoe, the said enlargements having openings therethrough extending longitudinally of the shoe, of calks and a toe fitted in the respective enlargements and having openings therethrough, and securing-rivets extending through said openings and the openings extending longitudinally of the shoe, and each having a head lying within

a recess in the enlargement, substantially as described.

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

JOHN A. MARTIN.

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Witnesses:

W. C. Johnston, J. H. Allison.