(No Model.)

P. A. ANDERSON.

HORSESHOE.

No. 418,263. Patented Dec. 31, 1889.

Fig. 1.

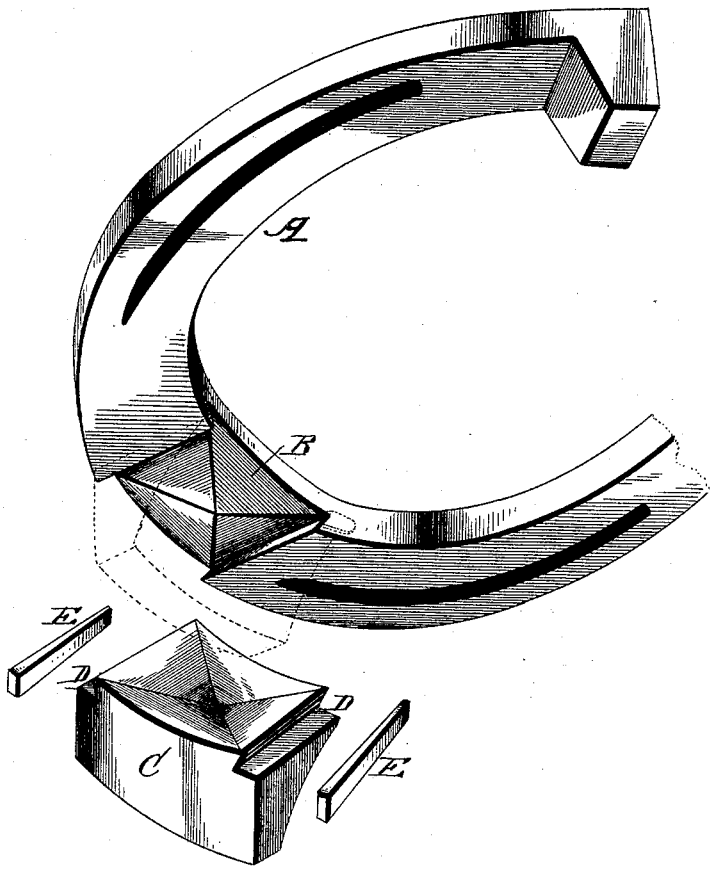
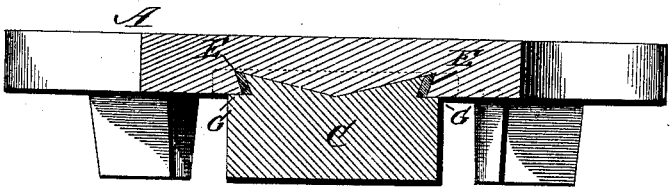


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

PETER A. ANDERSON, OF SPRINGFIELD, MISSOURI.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 418,263, dated December 31, 1889.

Application filed July 31, 1889. Serial No. 319,266. (No model.)

To all whom it may concern:

Be it known that I, PETER A. ANDERSON, a citizen of the United States, residing at Springfield, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Horseshoes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in horseshoes; and it has for its object to provide a shoe having a detachable toe-calk with a simple and efficient provision for securing the calk in place and allowing of its ready removal for repairs or otherwise.

The invention consists in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective bottom view of a shoe with its toe-calk removed, showing the contour thereof and the securing-keys. Fig. 2 is a transverse section through the shoe with the calk in place.

Referring now to the details of the drawings by letter, A designates the shoe proper, which in general construction is of the usual form. At the center of its bend it is formed upon its under side with a recess B, extending lengthwise of the shoe and having its side walls undercut or dovetailed, as shown. The bottom, or rather the top, wall of this recess is formed pyramidal shape—that is, with four sides terminating at a common point or apex, as shown more clearly in Fig. 1. The pyramidal shape is preferred; but other forms of convexity might be employed. The toe-calk C has its upper face concaved and the concavity of a shape to correspond with the convexity of the cavity or recess in the shoe, as shown in Fig. 1. The upper face of the toe-calk is formed with shoulders D, which are undercut, as shown.

E are the securing-keys, wedge-shaped, as shown, there being two employed, one upon each side of the toe-calk.

In practice the parts are assembled by first placing the toe-calk within the recess in the shoe, with the convexity of the shoe fitting the concavity of the upper part of the calk. The keys are then driven in at the sides of the calk, entering in between the side walls of the recess in the shoe and the side walls of the upper part of the calk and drawing the parts tightly together. The top of the calk extends beyond the recess, as shown in Fig. 2, the shoulders G thereof bearing against the under side of the shoe, as shown in the same figure, and thus as the wedges are driven up the parts are bound firmly in place. The ends of the wedges are then turned over against the shoe, as shown by dotted lines in Fig. 1, and the parts cannot be separated until the said ends are straightened and the keys driven out.

The parts are prevented from movement in all directions, and the calk can be very readily removed and replaced by a new one without removing the shoe from the foot.

What I claim as new is—

1. The combination, with the shoe having a recess upon its under face, the bottom wall of the recess being convex, of a removable toe-calk having its upper face concaved, and removable keys for securing the parts together, as set forth.

2. The combination, with the shoe having recess formed with undercut side walls and convex bottom, of the removable calk having undercut sides and concave top, and the wedge-shaped keys fitting upon each side of the calk in the spaces between the side walls of the recess and the sides of the calk, as set forth.

3. The combination, with the shoe having upon its under face a recess, the side walls of which are undercut and the bottom of which is pyramidal-shaped, of the calk having its upper face concaved to correspond with

the shape of the bottom of the recess and formed with undercut side walls, and the wedge-shaped keys, one upon each side of the calk in the space between the side wall of the recess and the side of the calk, substantially as shown and described, and for the purpose specified.

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

PETER A. ANDERSON.

Witnesses:
CHAS. EWING,
HOMER MCELHANY.