(No Model.)

2 Sheets—Sheet 1.

## A. N. GREEN. HORSESHOE.

No. 437,152.

Patented Sept. 23, 1890.

Fig. Z

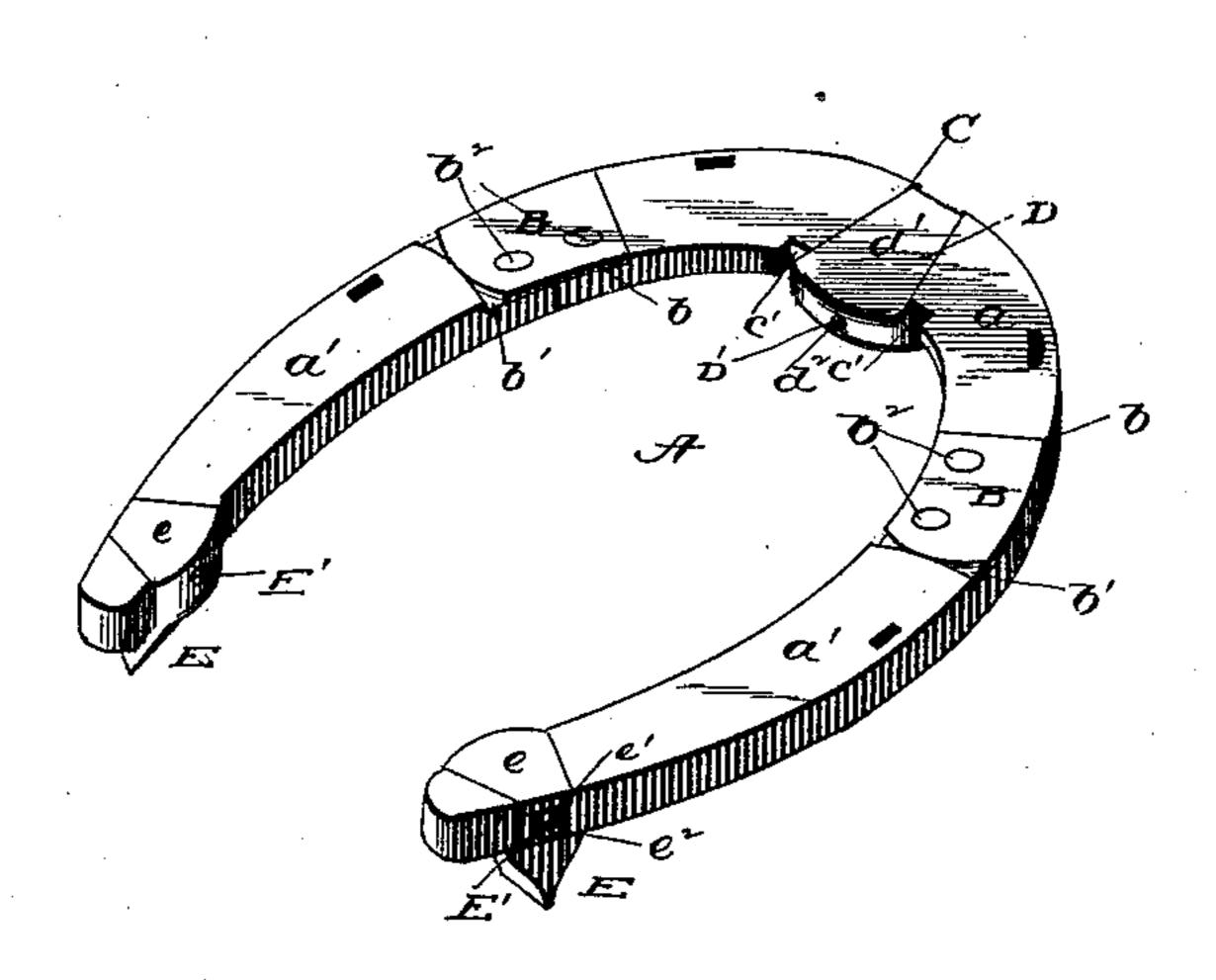
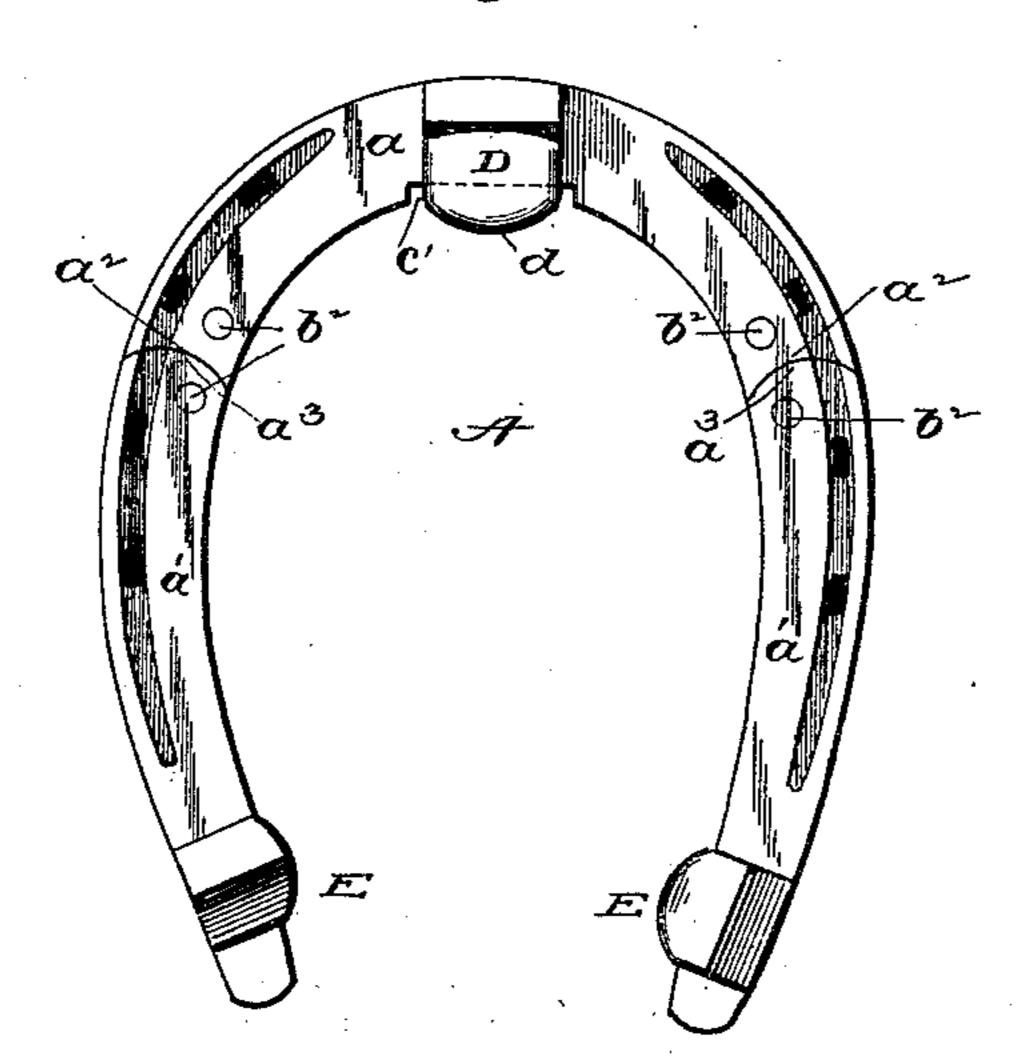


Fig. 2.



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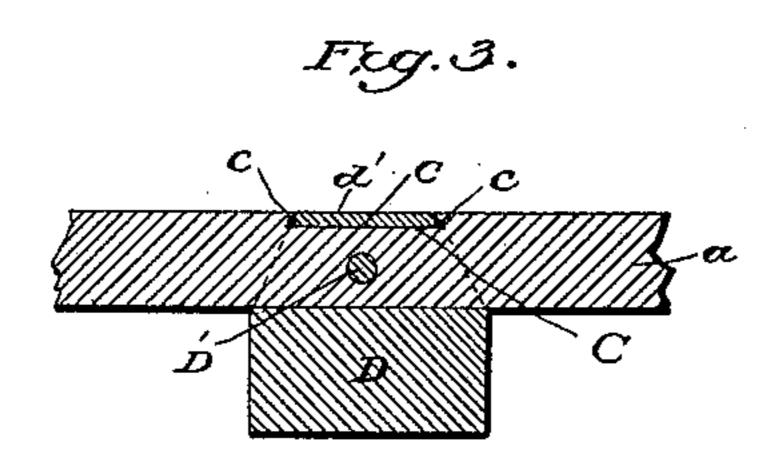
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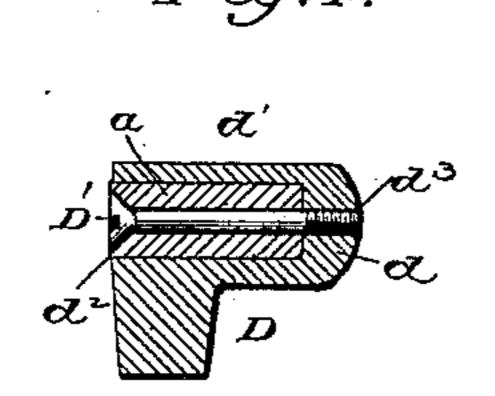
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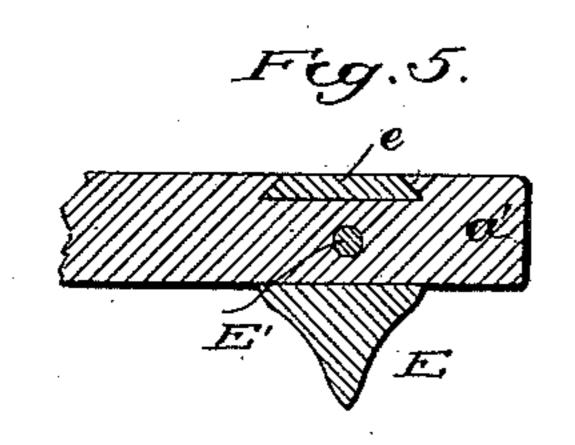
## A. N. GREEN. HORSESHOE.

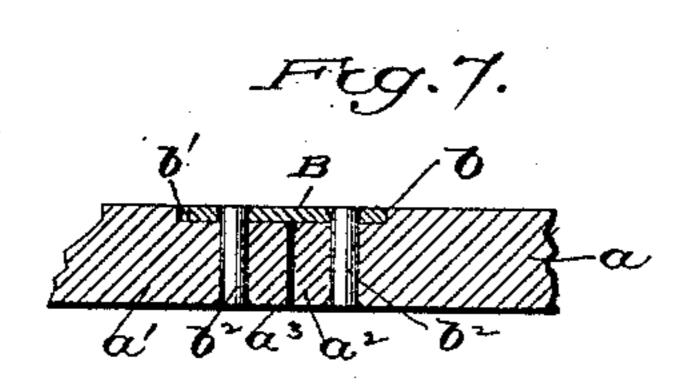
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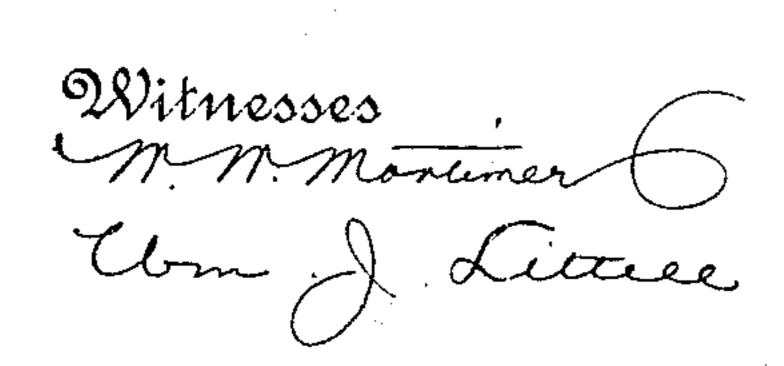
Patented Sept. 23, 1890.

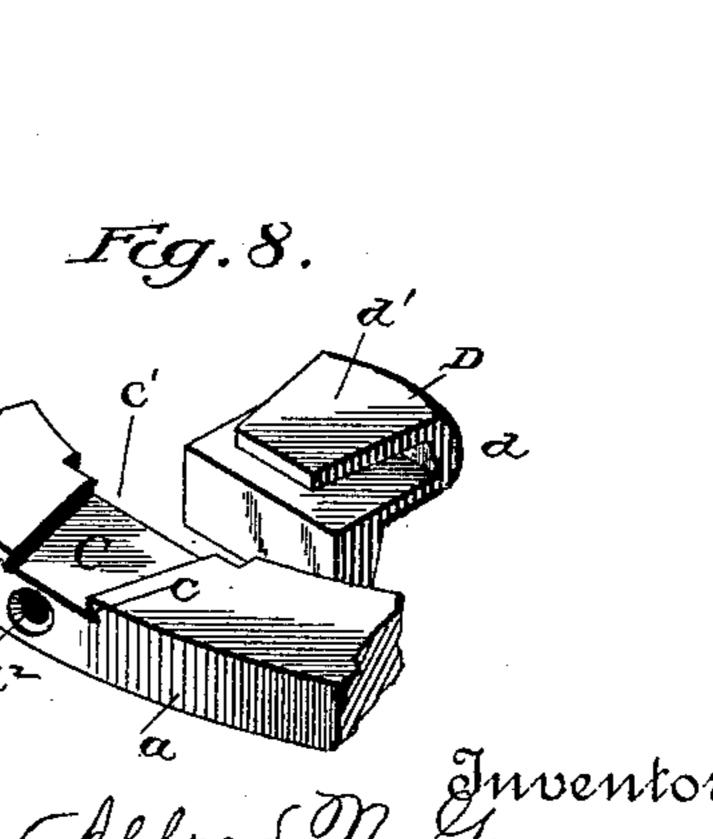












Alfred M. Treen

or

others

others

Sktorney

## United States Patent Office.

ALFRED N. GREEN, OF LEWISTOWN, OHIO.

## HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 437,152, dated September 23, 1890.

Application filed February 26, 1890. Serial No. 341,803. (No model.)

To all whom it may concern:

Be it known that I, ALFRED N. GREEN, a citizen of the United States, residing at Lewistown, in the county of Logan and State of Ohio, 5 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 invention, which will enable others skilled in the art to which it ro appertains to make and use the same.

This invention relates to horseshoes of that class comprising sections hinged together; and it has for its object to provide a horseshoe of this character adapted to be applied to the 15 foot either in its entirety or in sections, as

found requisite or desirable.

A further object of the invention is to provide a horseshoe of this character embodying detachable heel and toe pieces, such pieces 20 being changeable without removing the shoe.

A further object of the invention is to provide a simple and improved horseshoe of this character which will possess advantages in point of inexpensiveness, durability, ease of

25 application, and general efficiency.

In the drawings, Figure 1 is a perspective view of a horseshoe embodying my invention. Fig. 2 is a bottom or inverted plan view. Fig. 3 is a detail sectional view taken through the 30 toe-piece in its secured position. Fig. 4 is a similar view at right angles thereto. Fig. 5 is a detail sectional view taken through one end of the shoe, the calk being in position. Fig. 6 is a similar view at right angles thereto. 35 Fig. 7 is a detail sectional view taken through one of the hinge-joints. Fig. 8 is a detail perspective view of the toe-piece, illustrating the manner of securing the same to the shoe.

Corresponding parts in the figures are de-

40 noted by the same letters of reference.

horseshoe comprising three sections—a front section a and two corresponding rear end sections a' a'—the whole forming a shoe of the 45 ordinary configuration. The ends of the front section are concave, as at  $a^2$ , while the opposing ends of the rear sections are correspondingly convexed, as at  $a^3$ , and fit within the recesses formed in the ends of the front section. 50 The top surface of the opposing ends of the front and rear sections are recessed, as at b

b', respectively, for the accommodation of hinge-plates B B, said plates being flush with the top surface of the shoe. The plates B are secured to the sections forming the shoe by 55 rivets  $b^2$   $b^2$ . Within the top surface of the front section a, at the center thereof, is formed a recess C, having dovetailed sides cc, the latter converging toward the front. At the inner end of this recess the edge of the sec- 60 tion a is further recessed, as at c', forming a straight surface at this point in lieu of the

usual curved surface.

D designates the toe-piece comprising the toe proper, having a rearward extension d at 65 its top edge, said extension continuing upwardly at right angles thereto and thence forwardly and parallel with the top surface of the toe proper, the latter extension forming a retaining-plate d'. The retaining-plate d' cor- 70 responds to the recess C and is adapted to engage the latter from the rear side, and when the toe is in position the plate is flush with the top surface of the shoe, while the toe proper is also flush with the front edge of the shoe. 75 To retain the toe in position, a set-screw D' is provided, engaging a screw-threaded perforation  $d^2$ , formed through the shoe between the toe and retaining-plate and parallel therewith, and also a screw-threaded perforation  $d^3$  in 80 the rear of the extension d.

E E designate the heel-pieces, which are applied in the manner of the toe-piece and comprise the retaining-plates e e, engaging corresponding recesses e'e' in the top surface 85 of the shoe. Set-screws E'E' are also provided in the manner above set forth for retaining the heel-pieces in place, said screws engaging screw-threaded perforations  $e^2$   $e^3$ , provided, respectively, in the shoe ends and heel-pieces. 90

The operation and advantages of my inven-Referring to the drawings, A designates a | tion will be readily understood by those skilled in the art to which it appertains. The shoes may be secured in their entirety or the front section may be first secured in connection with 95 the hinge-plates and the end sections then secured and riveted to said plates. By the employment of the construction of heel and toe pieces, as above described, and the method of securing the same the heel and toe pieces may 100 be readily detached and others substituted at will without removing the shoe, such operation being particularly desirable in cases of substitution of dull for sharp heel and toe pieces, or vice versa.

I claim as my invention—

5 1. The combination, with a horseshoe provided in its top surface at the toe and heel with outwardly-converging recesses having dovetailed sides, of toe and heel calks provided with retaining-plates disposed above said to calks and connected therewith, said plates corresponding to and adapted to engage the recesses in the shoe, substantially as and for the purpose set forth.

2. The combination, with a horseshoe pro-vided in its top surface at the toe and heel with outwardly-converging recesses having dovetailed sides, of toe and heel calks provided with outwardly-projecting retaining-plates corresponding and adapted to engage said re-20 cesses, said plates being flush with the top of the shoe, and set-screws for drawing the retaining-plates tightly within the recesses, substantially as and for the purpose set forth.

3. The combination, with a horseshoe pro-

vided at its toe with an outwardly-converging 25 recess in its top, having dovetailed sides, and with a squared inner edge adjacent to said recess, of a toe-calk provided with a right-angular retaining-plate having an outwardlyprojecting arm corresponding to and disposed 30 within said recess, the vertical portion of said plate abutting against the squared edge of the shoe, substantially as set forth.

4. The combination, with a horseshoe comprising toe and heel sections pivotally con- 35 nected together, of toe and heel calks provided with right-angular retaining-plates adapted to engage corresponding recesses in the top surface of the shoe, said hinge and retainingplates being flush with said top surface, sub- 40

stantially as set forth.

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

ALFRED N. GREEN.

Witnesses:

HEBER A. MONROE, ARTHUR M. RENICK.