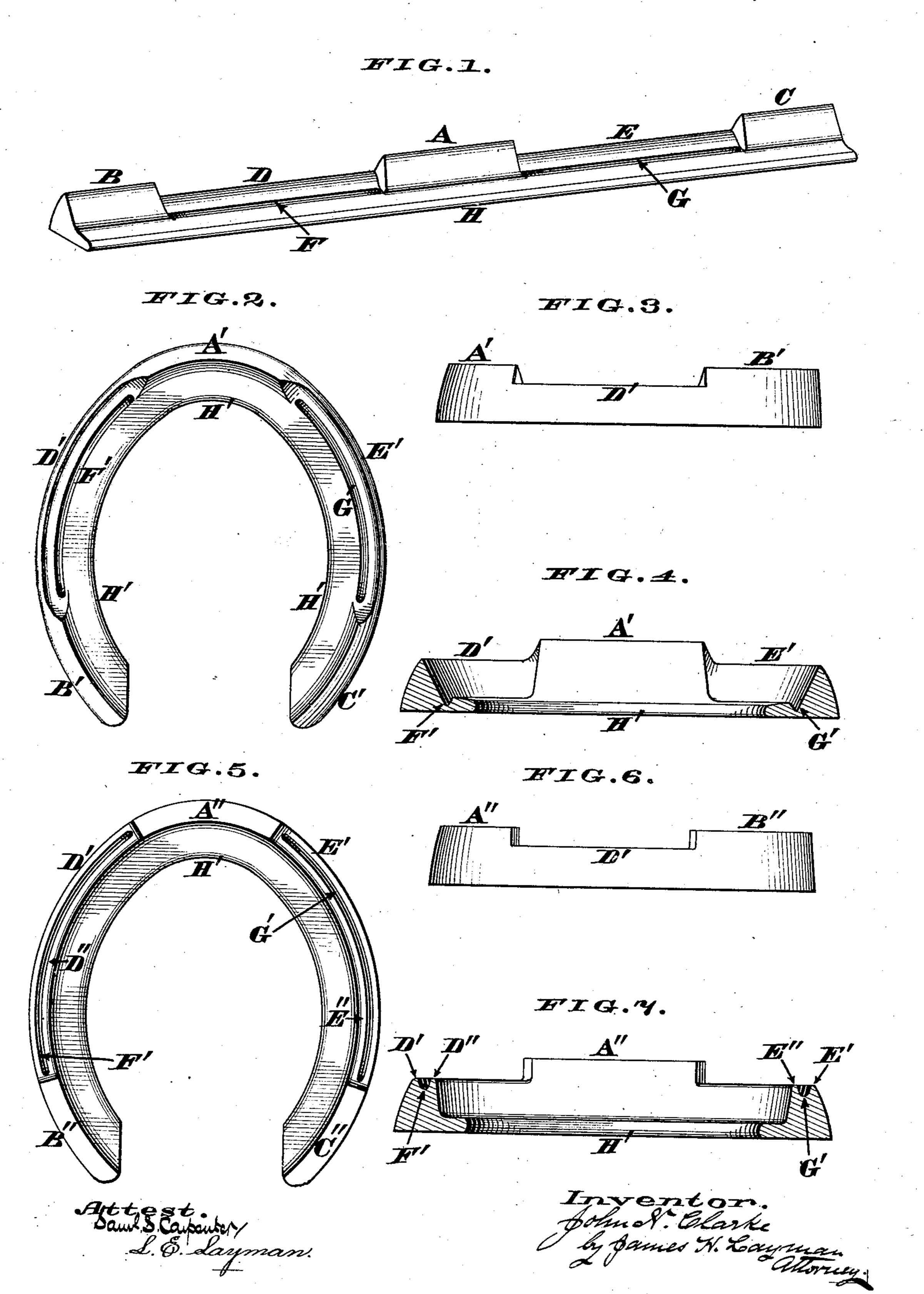
(No Model.)

## J. N. CLARKE.

HORSESHOE.

No. 254,534.

Patented Mar. 7, 1882.



## United States Patent Office.

JOHN N. CLARKE, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF TO HENRY McNICOLL, OF SAME PLACE.

## HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 254,534, dated March 7, 1882.

Application filed December 29, 1881. (No model.)

To all whom it may concern:

Be it known that I, John N. Clarke, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of 5 Ohio, have invented certain new and useful Improvements in Horseshoes, of which the fol-

lowing is a specification.

My improved form of horseshoe is so rolled or wrought as to have a toe-piece and a pair of 10 heel-pieces which may be either sharp or truncated, said pieces being connected by continuous marginal side calks whose apices are not in the same horizontal plane as are the bearingsurfaces of the toe and heel of the shoe. Fur-15 thermore, a groove or crease is located between these side calks and the inner margin of the shoe, and extends uninterruptedly from the opposite ends of the toe-piece to the two heelpieces, so as to afford an opportunity of mak-20 ing the nail-holes at any place that will insure the most secure hold on the hoof, as hereinafter more fully described. This more simple form of the shoe may be modified by duplicating these continuous side calks and locating 25 the uninterrupted grooves between them, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a perspective view of the blank employed for making the more simple form of my shoe. Fig. 2 30 is a plan of the finished shoe. Figs. 3 and 4 are respectively a side elevation and enlarged transverse section of the same. Fig. 5 is a plan of the modified form of the shoe. Figs. 6 and 7 are respectively a side elevation and en-

35 larged transverse section of the same. Referring to Fig. 1, the blank is shown as composed of a metallic bar having a central elevation, A, and two terminal elevations, B C, whose apices are practically in the same 40 plane. Extending from the elevation A to the end elevation, B, is a continuous ridge, D, supplemented by a similar ridge, E, proceeding from said central elevation to the opposite end elevation, C. Furthermore, the apices of these 45 ridges D E are in the same plane, although in a different horizontal plane to the apices of said elevations A B C. Extending from the inner base of elevation A to the inner base of end elevation, B, is a continuous crease or groove,

50 F, of any desired width and shape. G is a cor-

responding groove running from said central elevation to the opposite end elevation, C. H is the web of the blank, which web may be concaved, so as to afford the most effective sole or bearing surface for the animal's hoof.

The above-described blank having been bent to any desired shape, as seen in Fig. 2, will then have a toe piece, A', two heel-pieces, B' C', a pair of side calks, D' E', creases F' G', and a sole, H', the relative height of these va- 60 rious members of the shoe being more clearly indicated in Figs. 3 and 4. As a result of this peculiar construction, the principal bearing will be obtained by the toe and heel pieces A' B' C', because they project considerably be- 65 yond the general level of the shoe; but the side calks D' E' will grasp any elevation in the roadway, and thereby afford an additional foothold. Furthermore, the peculiar location and extended surface of these side calks will 70 effectually prevent the horse's foot slipping either to the right or left, and said calks D' E' will serve as the principal bearings for the shoe after the toe and heel pieces have been worn down to the same level as these members 75 D' and E'. It will also be noticed that the long uninterrupted creases F' G' enable the blacksmith to make the holes in any place where the nails will penetrate a firm or uninjured portion of the hoof, thereby insuring the 80 most secure attachment of the shoe. These leading features of my invention may be elaborated, as seen in Fig. 5, where the calk D' is duplicated by an inner and parallel calk, D", the continuous crease F' being located between 85. these two parallel members, D' D". The opposite side of the shoe is furnished with a precisely similar arrangement of duplex calks, E' E" and crease G'. Furthermore, this illustration shows truncated toe and heel pieces 90 A" B" C".

I claim as my invention—

1. As a new article of manufacture, a horseshoe-blank bar consisting of the web or sole H, armed with a central elevation, A, and end 95 elevations, BC, united by uninterrupted ridges DE, of less height than said elevations, continuous grooves FG being located between said ridges and the inner margin of the blank, as herein described.

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2. A bent horseshoe having side calks, D' E', extending uninterruptedly from the toe-piece A' to the heel-pieces B' C', the apices of said calks being situated in a different horizontal plane to the bearing-surface of said members A' B' C', and continuous creases F' G' being located between said side calks and the inner margin of the shoe, substantially as herein described.

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

JOHN N. CLARKE.

Witnesses:

JAMES H. LAYMAN, SAML. S. CARPENTER.