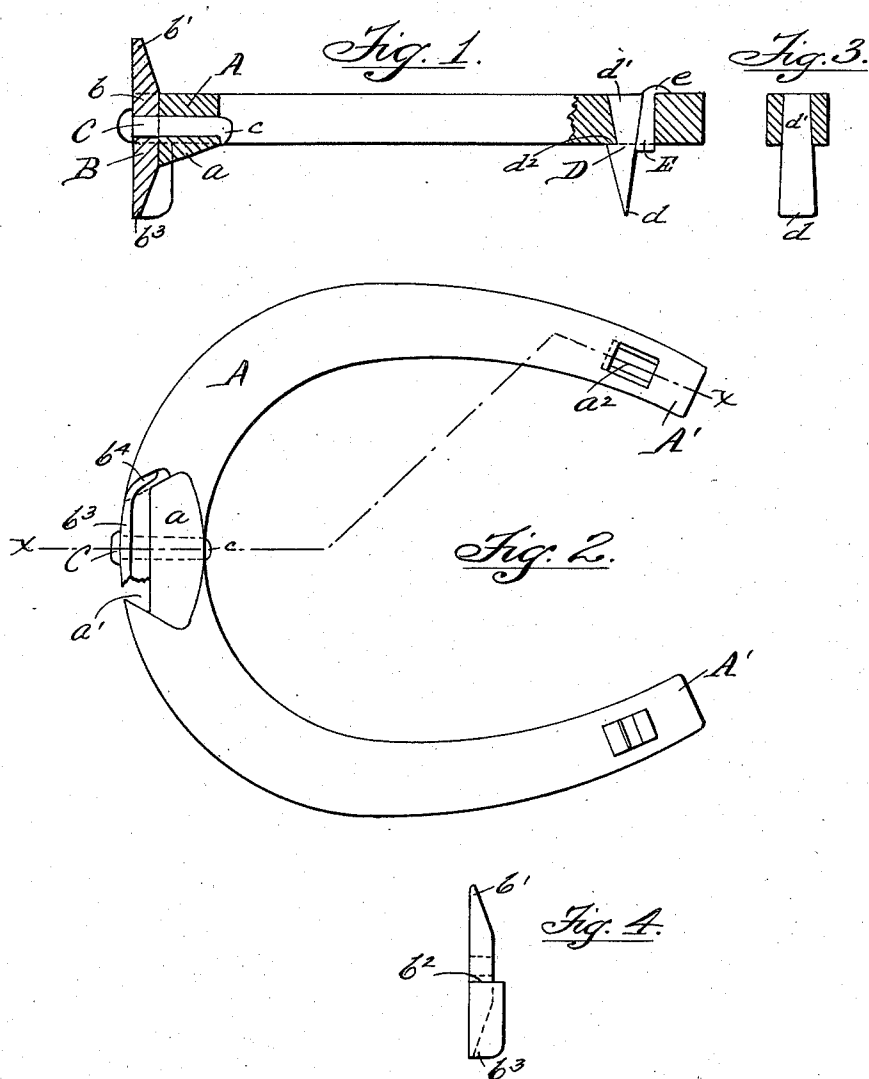


(No Model.)

B. G. FOX,
HORSESHOE.

No. 567,740.

Patented Sept. 15, 1896.



Witnesses.

Ad. Stewart
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By J. H. [Signature]

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UNITED STATES PATENT OFFICE.

BENJAMIN G. FOX, OF PRICETOWN, PENNSYLVANIA.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 567,740, dated September 15, 1896.

Application filed April 1, 1896. Serial No. 585,693. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN G. FOX, a citizen of the United States, residing at Pricetown, county of Berks, State of Pennsylvania, have invented certain Improvements in Horseshoes, of which the following is a specification.

My invention relates to certain improvements in horseshoes and calks therefor, whereby the latter may be more readily secured and replaced and at the same time more effective in service than heretofore.

The invention is fully described in connection with the accompanying drawings.

Figure 1 is a sectional view taken on the line *xx* of Fig. 2. Fig. 2 is a bottom plan of the shoe, showing one end of the toe-calk broken away and the heel-calk entirely removed. Fig. 3 is a cross-sectional view through the heel-calk mortise. Fig. 4 is a separate view of the toe-calk.

A represents the toe, and A' A' the heels, of a horseshoe having my improvements applied thereto. The toe A is formed with a dovetailed mortise *a'* in its forward edge, and the thickness of the shoe to the rear of this mortise is increased by adding metal at the bottom, as indicated at *a*, the object of this increased thickness at the point being to provide for the proper seating and securing of the toe-calk B without weakening the shoe.

The calk B is provided with a tenon or shank portion *b*, fitting the mortise *a'* and having its upper end *b'* extending above the shoe, so as to form a stop for the hoof to abut against. The portion of the calk which extends below the shoe tapers off to a wearing edge *b³*, the sides of which bend inward, as shown at *b⁴*, thus forming a crescent or shallow-U shaped bearing calculated to prevent side slippage. The shoulder *b²*, at the intersection with the shank or tenon of the calk, seats against the bottom surface of the shoe just beyond the thickened-up portion *a* and is drawn up tight against said surface in the act of driving the securing wedge or key C. This key passes horizontally through perforations in the shank of the calk and in the thickened-up portion of the shoe, and when firmly driven is secured by clenching at *c*.

The heel-calks D are wedge-shaped longitudinally in opposite directions, as shown in

Figs. 1 and 3, thus forming a wearing edge *d* and a shank *d'*, which is adapted to engage the dovetailed mortise *a²* in the shoe, so as to effectually prevent movement of the calk in either direction when it has been inserted in the mortise and forced to one end thereof by means of a key E, the upper end of which is clenched over to positively retain it. The driving in of the calk beyond its proper position is prevented not only by the increasing thickness of the shank, as indicated in Fig. 3, but also by a shoulder *d²*, Fig. 1, while its withdrawal is prevented by the increasing width toward the top of the shank engaging the correspondingly-elongated mortise so long as the key E is in place.

When worn, both heel and toe calks may be readily removed by chipping off the clenched-over ends of the keys E and C, respectively, and driving them out, thus releasing the calks.

I am aware that toe and heel calks of different shapes have heretofore been secured to horseshoes by differently-formed tenon-and-mortise connections, and I do not broadly claim such constructions as of my invention.

What I claim is—

1. The combination with a horseshoe having a vertical dovetailed mortise in the edge thereof and increased thickness of cross-section at said mortise, of a toe-calk having a dovetailed tenon or shank fitting the mortise and a shoulder seated against the under side of the shoe, and a key passing horizontally through the calk-shank and the thickened portion of the shoe to firmly unite the same substantially as set forth.

2. The combination with a horseshoe having a dovetailed mortise in the edge thereof and increased thickness of cross-section at said mortise, of a toe-calk having a tenon or shank fitting the mortise and a crescent or U shaped wearing extension seated against the lower face of the shoe and partially inclosing said increased shoe-section, with means for removably securing the calk to the shoe, substantially as set forth.

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

BENJAMIN G. FOX.

Witnesses:

W. G. STEWART,
ADAM L. OTTERBEIN.