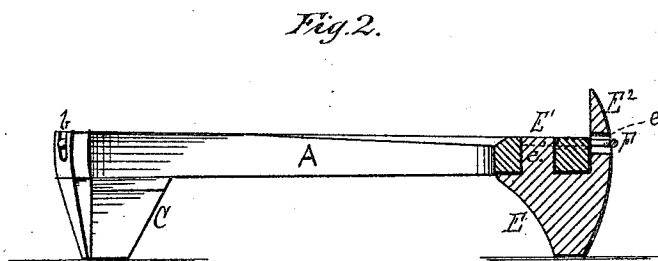
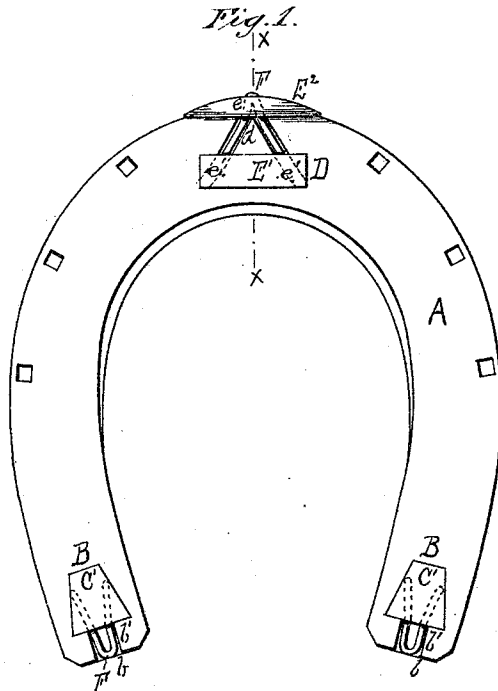


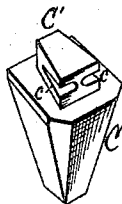
E. L. TEVIS.  
HORSESHOE.

No. 172,522.

Patented Jan. 18, 1876.



*Fig. 3.*



WITNESSES:

J. W. Steward  
Edm. James.

INVENTOR:

Edwin L. Tevis.  
per J. E. J. Holmead.  
Attorney.

# UNITED STATES PATENT OFFICE.

EDWIN L. TEVIS, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. **172,522**, dated January 18, 1876; application filed January 7, 1876.

### CASE B.

*To all whom it may concern:*

Be it known that I, EDWIN L. TEVIS, of the city of Philadelphia and State of Pennsylvania, have invented certain Improvements in Horseshoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing and the letters of reference marked thereon, making part of this specification, in which—

Figure 1 is a top plan view. Fig. 2 is a longitudinal sectional view on the line *x x*, Fig. 1. Fig. 3 is a perspective view of one of the heel-calks.

My present invention is an improvement on the device embraced in a former application, the same style of calks being used in each improvement.

The great advantage of my present improvement over the former one, and what constitutes the essence of this invention, is the method employed in fastening the tenons of the calks in the openings or mortises of the shoe; and consists in employing, instead of a screw, a small staple made of some of the softer or more pliable metals. These staples enter slots cut in the tenons of the calks, and which are of such form as to insure of the spreading or expansion of the shanks of the staple, so as to insure of their being locked within their slotted bearings in such manner as to provide a secure and reliable attachment for the calk, but one which, at the same time, can readily be withdrawn when the calk is broken, unduly worn, or, when desired, for any other reason, and this, too, by any ordinary groom or other attendant, and without the aid of a blacksmith or the involving of any delay.

The construction and operation of my invention are as follows: A is a horseshoe of the ordinary style, and constructed of any suitable material, and is formed with heel openings or mortises B B, and at its toe with an opening or mortise, D. Into the heel-mortises B B lead slots *b b*, so cut at the center of the face of the shoe as to leave lateral shoulders *b' b'*. C C are the heel-calks, and may be either sharp or blunt. In the accompanying drawing they are blunt, with all four sides tapering, and provided each with a tenon, C', as clearly shown in Fig. 3. These tenons C' C' are of such form and dimensions as to fit snugly and entirely fill the heel-mortises B B of the shoe. These tenons are provided with lateral slots *c c*, and which in the draw-

ing conform to the contour of the tenon and run in an angular direction, being much deeper at the rear than at the front, and which causes the shanks of the staple-fastening F, when driven in, to spread, as shown in Fig. 1, and which provides, as it were, a wedge-shaped bearing for the staples, and one which secures the same in position until occasion renders its withdrawal desirable. Into the toe-mortise D there leads a V-shaped guide-slot, *d*, and which provides for the spreading of the shanks of the staple-fastening F precisely as is effected by the slots *c c* of the heel-calks, and which permits of the shanks of the staple passing into the bearing-slots *e' e'* of the tenon E, and in which they are securely held. E is the toe-calk, and is provided with a tenon, E', that fits in and fills the mortise D, and a projecting face-bearing plate, E<sup>2</sup>, as clearly shown in Fig. 2, and in which is cut an opening, *e*, leading into the V-shaped slot *d*, and through which the staple F is inserted, the slot *d* causing the shanks of the staple to spread, providing a wedge-shaped bearing, as clearly shown in Fig. 1. These calks B B E are constructed of steel or any suitable metal, and the staples F F are constructed of any suitable metal, a soft or pliable metal being preferred, as, in being driven in, it will the more readily conform to the slotted bearings which it is designed to fill, and at the same time, when occasion requires, the staples, with ordinary pinchers, can so much the more readily be withdrawn.

Of course I do not confine myself to the exact form of the slots *c c d*, as any other style of slot may be used which will provide for the spreading of the shanks of the staple in such manner as to provide a suitable bearing for fastening.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

A horseshoe, A, having a calk or calks attached by means of spreading slots cut in the tenon of the calk or the face of the shoe, and a staple fastening or fastenings, F, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

EDWIN LAWRENCE TEVIS.

Witnesses:

EDWIN JAMES,  
J. E. F. HOLMEAD.