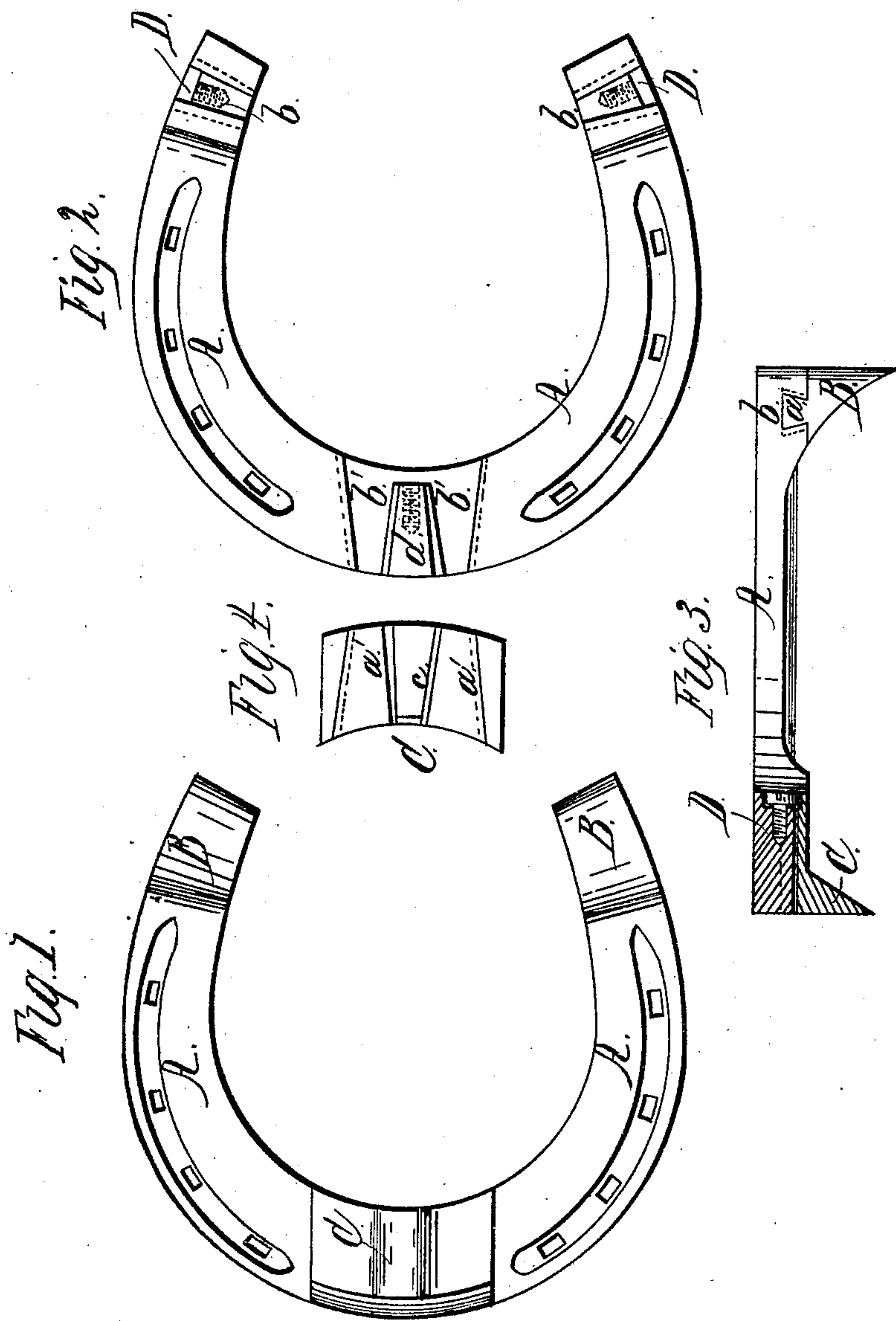


J. M. Cuykendall,

Horseshoe.

N^o 78,436.

Patented June 2, 1868.



*Witnesses,
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JAMES M. CUYKENDALL, OF METOMEN, WISCONSIN.

Letters Patent No. 78,436, dated June 2, 1868.

IMPROVEMENT IN HORSE-SHOES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES M. CUYKENDALL, of Metomen, in the county of Fond du Lac, and State of Wisconsin, have invented a new and improved Horse-Shoe; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to facilitate the removal and renewal of the calks, while the shoe is on the horse's hoof, the shoe being of simple construction, easily made, and strong.

The invention consists in the manner of securing the calks to the shoe, which is done by securing a wedge-shaped dove-tail to the upper surface of the calks, said dove-tails fitting into grooves arranged on the under side of the shoe, and which extend entirely across that portion of the shoe which is occupied by the calk. The dove-tail form prevents lateral as well as up-and-down movements of the calk, while the head of a screw, which is arranged in the side of the shoe, and projects so as to cover part of the side of the calk, prevents backward motion of the latter, the tapering form of the dove-tail preventing a forward movement of the same.

By this arrangement the insertion or removal of the calks is greatly facilitated, especially as the screws are inserted in the side of the shoe, and not in the bottom of the same, which is the manner in which they are generally arranged, whereby the head of the screw comes in contact with the ground, and soon becomes so worn or battered that the screw can only be removed with great difficulty.

In the annexed drawing my invention is illustrated—

Figure 1 being a bottom view of my improved horse-shoe.

Figure 2 is a similar view of the same, the calks being removed.

Figure 3 is a vertical sectional view taken through the centre of the shoe.

Figure 4 is a top view of the toe-calk C.

Similar letters of reference indicate like parts.

A is the horse shoe, made of malleable iron or any other suitable material. B B are the heel-calks, and C is the toe-calk. These calks may be made of cast steel, or of any other suitable material.

The upper part of each heel-calk is provided with a wedge-shaped dove-tail tongue, *a*, which fits into a corresponding groove, *b*, in the shoe, said groove extending entirely across that portion of the shoe where the calk is attached, as shown in fig. 2. The dove-tail calks are made to slide laterally within the grooves, thus allowing the calks to be inserted or removed at pleasure.

The toe-calk C is also provided with a wedge-shaped dove-tailed tongue or tenon, *a'*, and the front portion of the shoe is provided with a corresponding groove, *b'*, but the tenon *a'* is provided with a groove, *c*, across its centre, and the groove *b'* with a corresponding tapering projection, *d*, as shown in the drawing.

All the calks are held in place within their grooves by means of screw-plugs D, which enter the shoe laterally, and have their heads countersunk, partly in the shoe and partly in the calk, as shown.

The extra tenon *d* on the shoe, in the centre of the groove *b'*, is for the purpose of making that portion of the shoe thick enough to allow of the insertion of the screw, and also to afford protection for the head of the screw, without making the shoe too thick at the toe.

In order to remove a calk, when it is worn or needs sharpening, it is only necessary to unscrew its screw-plug D, when the calk can be removed and repaired, or a new one substituted in its place, as may be desired.

By inserting the screw D, the calk is firmly held again in its place.

What I claim as new, and desire to secure by Letters Patent, is—

1. Inserting the screws D into the side of the shoe, directly beneath the calks, in such a manner that the heads of the screws bind upon the calks, and secure them in place, substantially as herein shown and described.

2. The groove *c*, in the centre of the tenon *a'* of the toe-calk C, in combination with the tenon *d* in the groove *b'*, and with the screw D, all made and arranged substantially as and for the purposes herein shown and described.

Witnesses:

PETER CUYKENDALL,
THOMAS HARRIS.

JAMES M. CUYKENDALL.