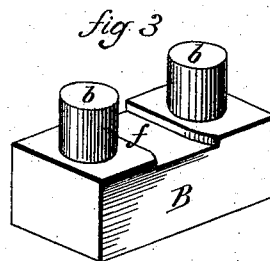
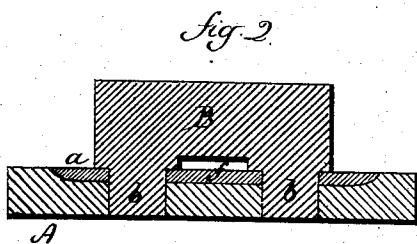
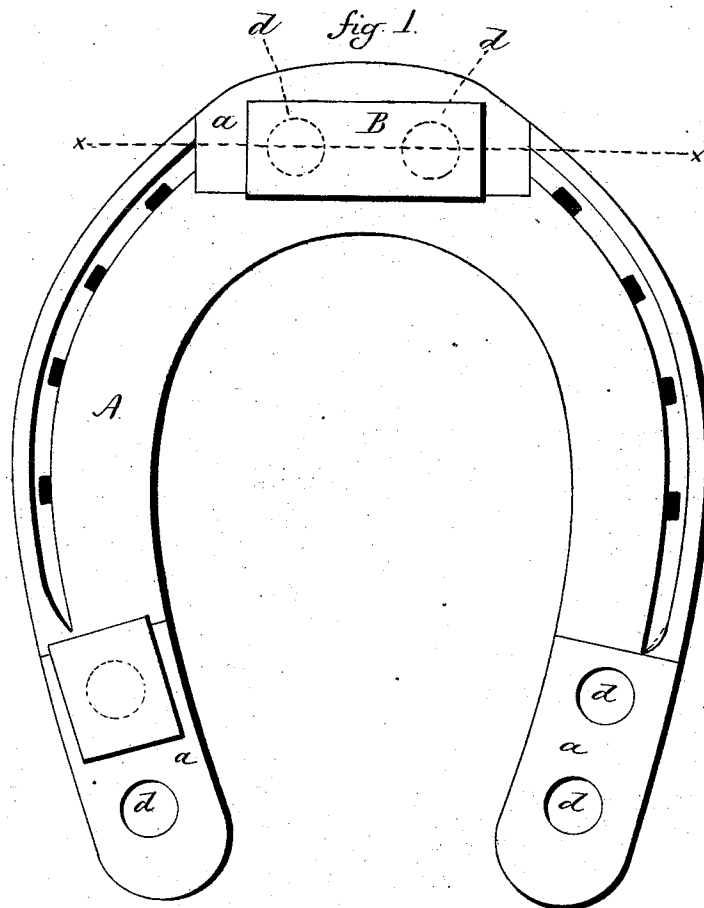


J. JOREY.
Horse-Shoes.

No. 157,179.

Patented Nov. 24, 1874.



Witnesses.
J. H. Shumway
A. J. Tibbitts

James Jorey
Inventor
By atty.
John O. Earle

UNITED STATES PATENT OFFICE.

JAMES JOREY, OF NEW HAVEN, CONN., ASSIGNOR TO HIMSELF, NATHANIEL WATFEBURY, AND HENRY A. CARRINGTON, OF SAME PLACE.

IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. **157,179**, dated November 24, 1874; application filed September 4, 1874.

To all whom it may concern:

Be it known that I, JAMES JOREY, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Horseshoes; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, an under-side view of a shoe, the toe-calk attached, a short calk at one heel, and the other heel as ready to receive the calk; Fig. 2, section on line *xx*; and in Fig. 3, perspective view of the calk.

This invention relates to an improvement in the construction of horseshoes and the attachment of calks thereto, the object being to firmly attach the calks, and yet allow of their removal and replacement by new calks when occasion requires; and it consists in a shoe perforated at the points where the calks are to be attached, the under surface around the said perforation being hardened so that they form dies into which pins or studs on the under side of the calks are driven or forced, the said dies dressing the said studs, so that they become self-fitting, as more fully hereinafter described.

A is the shoe in outline, substantially like the usual construction. At the heels and toe the under surface is faced with a plate, *a*, of steel, hardened as for dies; or the shoe may be made entirely of a metal, the surface of which at the heels and toe is capable of being hardened to the required degree. At these

points the shoe is perforated with two holes, *d*, (one will answer;) but the surface or edge around these perforations upon the under side of the shoe must be clean cut and sharp; B, the calk, is constructed with studs *b* upon the under side, corresponding to but slightly larger than the said perforation. The calk is then placed over the perforations and forced down until the studs are set into their place, as seen in Fig. 2. The die or hardened edge of the perforations dress the studs as they pass in, and thus perfectly fit the calk to the shoe, and in such manner that great force is required to remove the calk.

In order to remove the calks when they are worn, or for any cause require removal, I form a channel, *f*, across the surface between the studs, as seen in Figs. 2 and 3, into which a wedge may be driven to force the calk from the shoe.

By this construction, the calks are practically self-fitted, and in placing or replacing the calks the shoe is not liable to injury, but will ordinarily outlast several sets of calks.

At one heel a short calk with one stud only is shown. In some cases this will be sufficient for that position.

I claim—

A horseshoe, A, with perforations *d*, to receive the calks, and the surface around said perforations hardened, as described, combined with the calks B, constructed with stud or studs *b*, substantially as specified.

JAMES JOREY.

Witnesses:

JOHN E. EARLE,
A. J. TIBBITS.