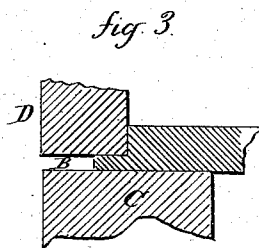
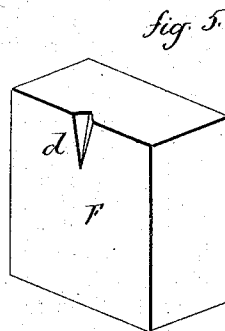
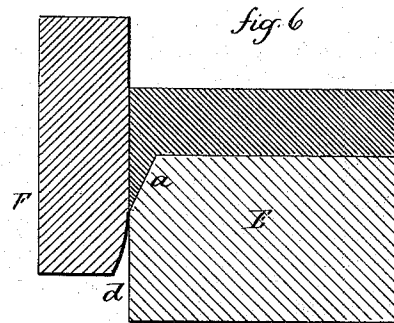
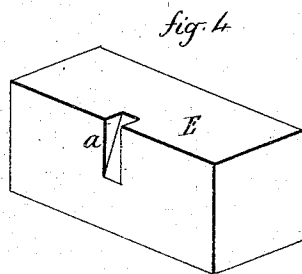
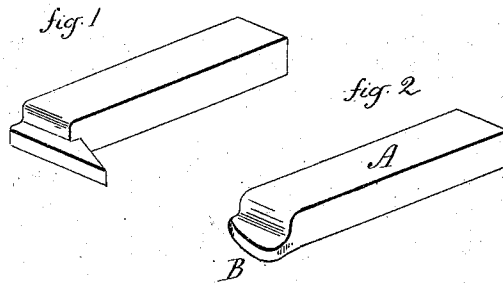


T. M. CLARKE & D. B. CHASE.

Dies for Forming Spurs on Toe-Calks for Horse-Shoes.

No. 157,494.

Patented Dec. 8, 1874.



Witnesses.
W. H. Schumway
A. J. Libbie

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UNITED STATES PATENT OFFICE.

THOMAS M. CLARKE AND DAVID B. CHASE, OF WINSTED, CONNECTICUT.

IMPROVEMENT IN DIES FOR FORMING SPURS ON TOE-CALKS FOR HORSESHOES.

Specification forming part of Letters Patent No. **157,494**, dated December 8, 1874; application filed January 28, 1874.

To all whom it may concern:

Be it known that we, THOMAS M. CLARKE and DAVID B. CHASE, of Winsted, in the county of Litchfield and State of Connecticut, have invented a new Improvement in Dies for Horseshoe-Calks; and we 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, the calk as produced by the improved dies; Fig. 2, the blank after the first operation; Fig. 3, the dies for performing the first operation; Figs. 4 and 5, dies for performing the second operation; Fig. 6, the dies 4 and 5 in operation.

This invention relates to an improvement in the manufacture of toe-calks for horseshoes, such as are formed with a spur at one end to facilitate attachment of the calk to the shoe; and the invention consists in the dies, constructed as hereinafter described, for producing or forming the spur on the calk.

For the first operation, the bar from which the calk is to be made, we employ a pair of substantially flat-faced dies, as seen in Fig. 3, one being narrower than the other. These strike the end and make a thin projection, B, as seen in Figs. 2 and 3. This blank A is then placed upon a die, E, which has a recess,

a, in one angle, of the form of the spur to be produced. This may be so as to produce a sharp edge, or a point. In connection with this die E a second die or follower, F, is used (shown in Fig. 5) inverted. This die F has a transversely-inclined surface, as seen in Fig. 6, or it may be a V-shaped recess in the face of the die F.

In operation the blank A is laid upon the die E, so that the thinned portion B will project over the recess a and beyond the surface of the die E. The follower is then forced down, and the thinned portion of the blank is drawn down into the recess a, giving to that portion the form of the spur required. This leaves the spur with the outer edge at right angles with the calk; but in some cases it is desirable that the calk be turned to a different angle, which may be done by a die and follower like E F, except that the upper surface of the die E should be inclined according to the angle required for the calk.

We claim—

The dies C D and E F, constructed as herein described, for forming the spur upon toe-calks for horseshoes.

THOMAS M. CLARKE.

DAVID B. CHASE.

Witnesses:

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EDWARD H. PERSONS.