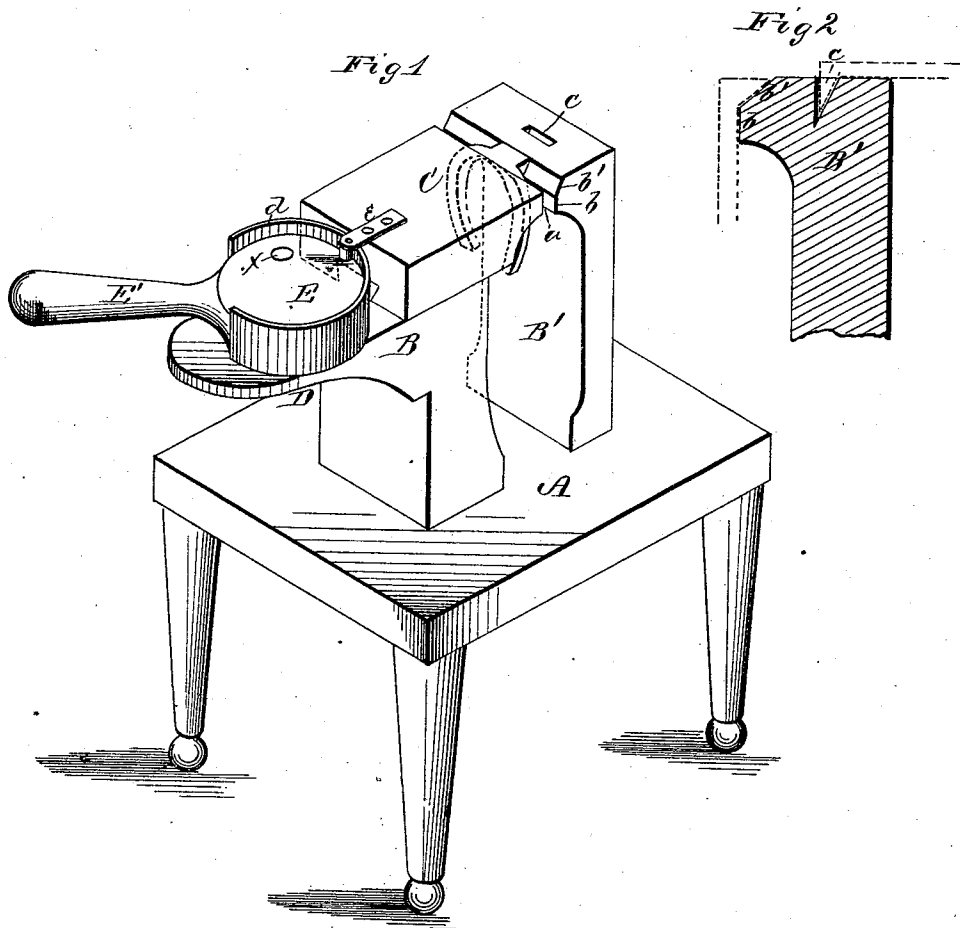


E. GLEASON & R. HAMILTON.

Machine for Sharpening Horseshoe-Calks.

No. 159,918.

Patented Feb. 16, 1875.



WITNESSES

Frank L. Ourand

C. L. Ewert

INVENTOR

Ezraus Gleason
Robert Hamilton
per Alexander Watson.

ATTORNEYS

UNITED STATES PATENT OFFICE.

ERASTUS GLEASON AND ROBERT HAMILTON, OF GREENWICH, NEW YORK.

IMPROVEMENT IN MACHINES FOR SHARPENING HORSESHOE-CALKS.

Specification forming part of Letters Patent No. **159,918**, dated February 16, 1875; application filed February 6, 1875.

To all whom it may concern:

Be it known that we, ERASTUS GLEASON and ROBERT HAMILTON, of Greenwich, in the county of Washington and in the State of New York, have invented certain new and useful Improvements in Machine for Calking Horseshoes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in the construction of a machine for calking horseshoes, as will be hereinafter more fully set forth.

To enable others skilled in the art to construct and use the same, we will proceed to more specifically describe it, referring to the annexed drawings making a part of this specification, in which—

Figure 1 represents a perspective view of the entire machine, and Fig. 2 a vertical section of the outward standard and die.

A represents a suitable table, upon which are upwardly extended two stationary standards, B B', a suitable distance apart. The top of each of these standards forms a jaw. The standard B' is a little higher than the standard B proper. The inner face *b* of the standard B' is straight, and from this face is an incline, *b'*, as shown in Figs. 1 and 2. Upon the top of the shorter stationary standard B is placed a movable die or jaw C. This jaw has a square face, *a*, and is movable forward and backward upon its standard. The standard has a dovetailed projection, and the die C a dovetailed recess, or vice versa, so that the die cannot move upward out of place. Extending forward from the standard B is a table or support, D. Upon this support, at *x*, is pivoted a cam, E, having a handle, E'. A rim, *d*, is formed upon the top of this cam-lever, and a connection is made between the cam-lever and the movable die C by means of a strap, *e*, which may either have a friction-roller or a stud on its end to engage against the rim *d*, so that the die can be moved forward or retracted rearward on a horizontal line by turning the handle E' either one way or the other. The top of the die C and the top of the standard B' are both flat. The latter one is provided with a V-shaped groove, *c*. The

standards may be provided with grooves for the insertion of removable dies of any shape.

In operation the die C is drawn rearward by the cam, and the horseshoe to be calked (whether an old or a new one) is placed between the jaws *a* and *b*, so that the calk extends over the bevel *b'*. The cam-lever is then drawn around, so that the die C is forced forward to clamp the shoe rigidly between the jaws. The shoe is then calked in the usual way, and the bevel *b'* prevents the calk from being drawn downward out of its normal position.

In case the prongs of the shoe should not be level, the shoe, after being taken out from between the jaws, is placed upon the top of the standard B', with its calks inserted within the V-shaped recess *c*, as shown in dotted lines in Fig. 2. It is then hammered down to a level.

It will be understood that the top of the standard B' and the face of the jaw C are of sufficient width to grasp both bars of a horseshoe, so that the shoe will be prevented from being stretched or drawn out of its shape in calking the same.

It is well known that a stationary standard forming a jaw at its top, combined with a standard pivoted at or near its base, have been employed together, not only for use as a common vise, but for grasping a prong of a horseshoe. In such case the pivoted standard will be forced forward on the arc of a circle, and will not grasp a horseshoe on a horizontal line; hence will not allow the shoe to be closely held in its proper position, to allow the calking of the same so that it will be true.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of the standard B', with bevel *b'* and face *b*, standard B, sliding die C, cam E, having flange or groove *d* and handle E', and the strap *e*, all constructed substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing, we have hereunto set our hands this 6th day of February, 1875.

ERASTUS GLEASON.
ROBERT HAMILTON.

Witnesses:

J. TYLER POWELL,
C. L. EVERT.