

C. H. MAYO.
Horseshoe-Nail Machine.

No. 218,636.

Patented Aug. 19, 1879.

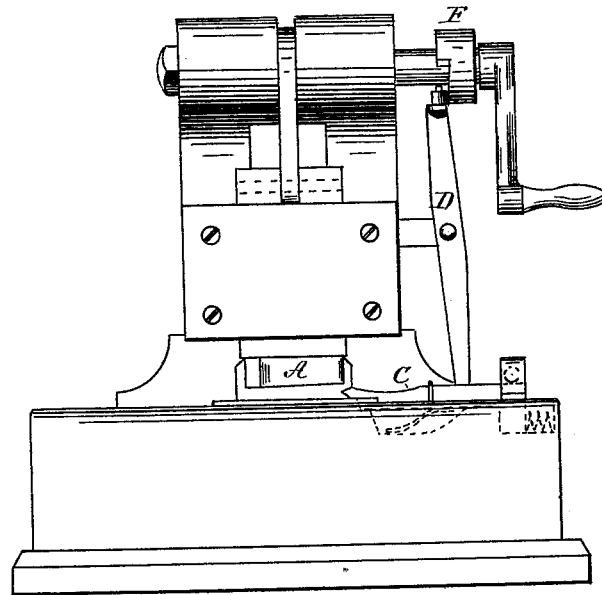


Fig. 1.

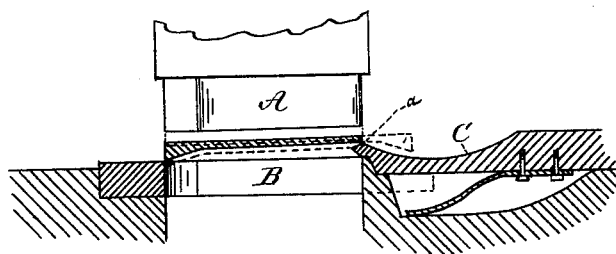


Fig. 2.

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his Atty.

UNITED STATES PATENT OFFICE.

CHARLES H. MAYO, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF THREE-FOURTHS HIS RIGHT TO JAMES W. BRIGGS, OF SAME PLACE.

IMPROVEMENT IN HORSESHOE-NAIL MACHINES.

Specification forming part of Letters Patent No. **218,636**, dated August 19, 1879; application filed May 3, 1879.

To all whom it may concern:

Be it known that I, CHARLES H. MAYO, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Horseshoe-Nail Machine, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, making a part hereof.

In the drawings, Figure 1 is a front elevation of a punch and die, for punching the nail out of the nail-plate, with my improvement attached. Fig. 2 is a section through the punch and die and the movable beveling-die, illustrating the mode of operation of my machine.

My invention relates to pointing the nails—that is, to forming the slight bevel marked *a* in the drawings; and consists in doing this by means of the punch and a movable beveling-die under the nail-plate, more fully described below.

In the drawings, A is a punch, and B a die, both of the usual form, and mounted in the usual way, for punching horseshoe-nails out of a suitable nail-plate, all too well known to all skilled in the art to require further description.

C is a beveling-die, which extends across the die, near its point, until the point of the punch has nearly reached it, when it is withdrawn, to allow the punch to sever the nail from the plate.

The most convenient way to mount the beveling-die C is as a slide, controlled by the lever D and cam F; but other ways of doing this will be obvious.

The principle of my invention consists in the combination, with a punch and die, of a beveling-die for the metal to be punched, which beveling-die extends across the die, and remains in that position until the metal is swaged between it and the descending punch, and the metal thereby brought to the desired shape, when the beveling-die is withdrawn, leaving the punch free to force the severed portion of the metal down through the die, as in a common punch and die.

In the machine shown in the drawings the operation is as follows: The nail-plate is fed in by hand or machinery until it is brought into the proper position with relation to the punch and die, and while in this position the acting-surface of the beveling-die C is in proper position with relation to that part of the nail-plate which is to form the beveled point. The punch then descends, and before the beveling-die C is moved entirely away by lever D and cam F the metal at the point of the nail is compressed between the punch A and beveling-die C, and thus brought to the desired shape.

What I claim as my invention is—

The combination of punch A, die B, and the movable beveling-die C, substantially as described.

CHARLES H. MAYO.

Witnesses:

JAS. W. BRIGGS,
GEORGE O. G. COALE.