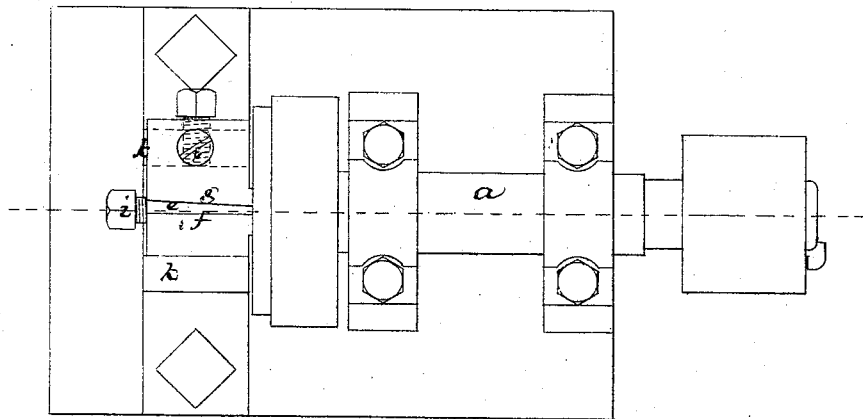
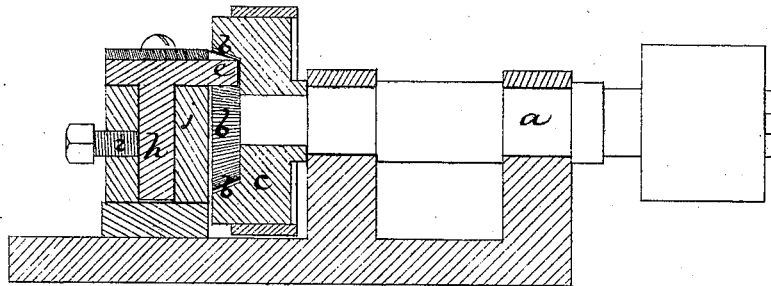


A. H. CARYL.

Improvement in Machines for Pointing Horseshoe-Nails.

No. 114,920.

Patented May 16, 1871.



Witnesses
J. B. Fiddler
L. H. Latimer

A. H. Caryl,
by his Attys.
Crosby & Gould

UNITED STATES PATENT OFFICE.

ALEXANDER H. CARYL, OF GROTON, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR POINTING HORSESHOE-NAILS.

Specification forming part of Letters Patent No. **114,920**, dated May 16, 1871.

To all whom it may concern:

Be it known that I, ALEXANDER H. CARYL, of Groton, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Bevel-Pointing Horseshoe-Nails; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

In machine-made horseshoe-nails the points are generally left unchamfered, no hot-forged nails being, so far as I know, made with chamfered or beveled points.

My invention relates particularly to devices for chamfering the points of such horseshoe-nails as are hot-forged and have no beveled points formed upon them in the operation of forging.

I use, in connection with two edges which form a tapering groove to receive the finished nail-shank, a rotary ring having internal burr-teeth, the upper part of the ring projecting over the end of the groove, and having such position, relatively to the nail-receiving groove, that, when the nail-shank is laid in said groove and thrust endwise into and against the teeth of the ring, its point will be ground off or chamfered to the proper bevel.

The drawing represents, in plan and in vertical central section, a mechanism embodying the invention.

a denotes a rotary shaft, turning in suitable bearings, and having on its front end a wheel, *c*, made of steel, and having its front face made with a projecting part, which forms a ring, *b*, the inner surface of which ring is made with beveling burr-teeth, which have an inclination from a line parallel to the axis of the wheel corresponding to the inclination to be given to the point or bevel of the nail relatively to the opposite face of the nail.

This ring overhangs the inner end of a nail guide or rest, *e*, at one side of which is a shoulder, *f*, and on the other side a movable plate, *g*, the space between the shoulder and the plate forming the groove for receiving the nail-shank, the bottom and sides of the groove keeping the nail-shank in position under the action of the rotating burr-teeth.

The rest or nail-supporting plate *e* is on the top of a shank-pin, *h*, and this pin is held in position by a set-screw, *i*, working through a nut-thread formed in a block, *j*, that sits between cheeks *k*, the nail-groove plate being adjusted in position as to height by the set-screws, and having shims driven under it when it is above the block.

Rapid rotation being given to the burr-ring, the nail to be bevel-pointed is laid in the groove and its point pushed into the ring, when the position of the nail-rest will bring the point to the action of the teeth and cause the metal to be cut from the top of the nail, the edges or walls of the die-groove preventing the nail-shank from twisting. By this means the nails are rapidly and accurately pointed, the nail-rest extending up to the back part of the ring and to the angle of the back of the burr-teeth, so that the nail will be so operated upon as to form a chisel-point, while the back of the nail-point is kept in a plane with the back of the nail-shank.

I claim—

The combination of the rotary burr-ring and the nail-supporting rest and groove, the ring overhanging the nail-rest, and the supporting-face of the rest projecting up to the angle of the burr-teeth, substantially as shown and described.

ALEX. H. CARYL.

Witnesses:

A. H. CARYL, Jr.,
S. A. HAMLIN.