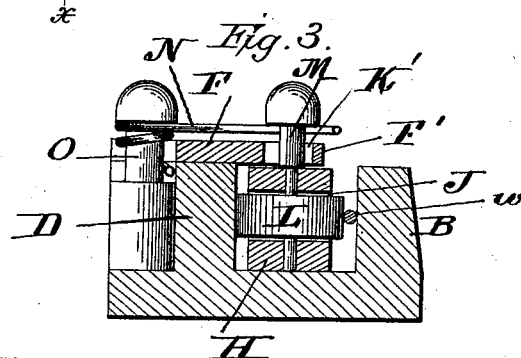
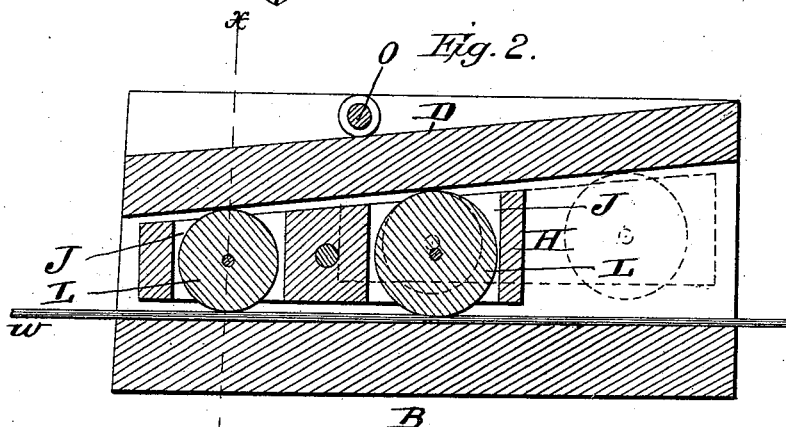


E. J. SMITH.
NAIL MACHINE FEEDER.

Patented July 24, 1894.



WITNESSES:
F. L. Orvand.
J. L. Coombs.

INVENTOR:
Edgar J. Smith,
J. Lewis Patten & Co.
 Attorneys.

UNITED STATES PATENT OFFICE.

EDWARD J. SMITH, OF BEAVER FALLS, PENNSYLVANIA.

NAIL-MACHINE FEEDER.

SPECIFICATION forming part of Letters Patent No. 523,603, dated July 24, 1894.

Application filed February 2, 1894. Serial No. 498,865. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. SMITH, a citizen of the United States, and a resident of Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Nail-Machine Feeders; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved feeder. Fig. 2 is a longitudinal sectional view of the same on a horizontal plane through the middle, showing, in dotted lines, the play of the operating lever and its dog. Fig. 3 is a transverse sectional view on the vertical plane indicated by the broken line marked $x-x$ in Fig. 2.

Like letters of reference denote corresponding parts in all the figures.

My invention relates to devices for feeding a continuous wire blank to the dies of a wire-nail machine, of that type in which the end of the wire is grasped and held firmly in a "dog" (constituting part of the feeder) while it is presented to the heading-die of the nail-machine; and my improvement consists in the novel construction and combination of parts of this "dog" or holder as will be hereinafter more fully described and particularly pointed out in the claim.

Referring to the drawings, the reference letter A denotes the base-plate or under side of a strong metal frame to which is fastened (or it may be cast in one piece with the base-plate) a block B. On the other side of the flat base, opposite to block B, is fastened (or it may also be cast in one piece with the base-plate) an inclined or slanting block D. The block D, which is of the same height as block B, is covered with a plate F of triangular shape, but cut off squarely at the apex or narrow end f of the frame, and presenting an inclined side F' . Located between the plate F and the base A, is a horizontally movable dog or block H, formed with apertures J, J, in which are journaled rollers L, L. Upon

its upper side this dog is provided with a headed pin M, which passes through an inclined slot or aperture K' in plate F. Pressing against the head of this pin is a spring N, which is secured to a post O, fixed to the base A.

The operation is as follows: By pushing the pin M back, the dog will be correspondingly moved, causing the rollers L, L, to recede from the block B. This leaves a space between said rollers and block for the insertion of the continuous wire blank P, as it is unwound from the coil or reel (not shown). By now letting go the pin M, the spring N will force the dog or holder H, back into its normal position so as to grasp and clamp the wire P, firmly between the flat side of block B, and the rollers L, L, in which position the projecting end w , of the wire is presented to the dies of a nail machine, which as it forms no part of my present invention is not shown, but which may be of any desired or approved construction. As the projecting end of the blank is successively cut off to form the nails, the continuous wire is gradually fed forward through the feeder by manipulating the pin M, so as to alternately release the wire as a new length is fed forward and clamp it firmly as the projecting blank is presented to the nail machine to form the nail from the blank.

Having thus described my invention, what I claim is—

The combination in a nail blank feeder of the described type, of the frame comprising the base plate A, straight side B, inclined side D, top plate F, having inclined slot K' , the movable dog having an inclined and a straight side, the rollers journaled in said dog, the pin secured to said dog and passing through said slot, the post secured to the base, and the spring secured to said post with its free end bearing against said pin; substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

EDWARD J. SMITH.

Witnesses:

M. S. DUCKETT,
BENNETT S. JONES.