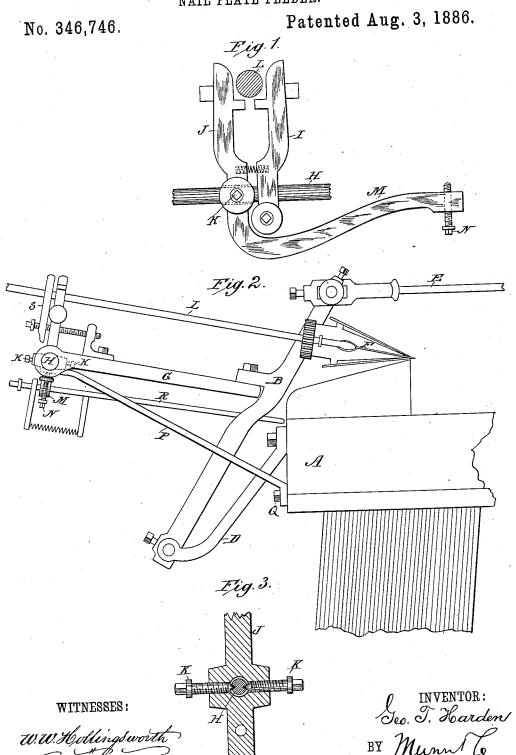
G. T. HARDEN.

NAIL PLATE FEEDER.



ATTORNEYS.

United States Patent Office.

GEORGE THOMAS HARDEN, OF MIDDLEPORT, OHIO, ASSIGNOR TO HIMSELF, LEMUEL SWIFT, AND PELEG SWIFT, ALL OF SAME PLACE.

NAIL-PLATE FEEDER.

SPECIFICATION forming part of Letters Patent No. 346,746, dated August 3, 1886.

Application filed May 11, 1886. Serial No. 201,856. (No model.)

To all whom it may concern:

Be it known that I, GEORGE THOMAS HAR-DEN, a citizen of the United States, residing at Middleport, in the county of Meigs and ; State of Ohio, have invented certain new and useful Improvements in Nail-Machine Feeders, of which the following is a description.

This invention relates to that class of devices which are attached to nail-making machines, and act as a part thereof to intermittently seize upon the nail rod or plate and feed it to the machine; and its object is to provide means whereby nail-rods varying slightly in thickness may be fed with certainty and without danger of breaking the feed-works.

To this end my invention consists in the construction and combination of parts forming a nail-machine feeder, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of my invention. Fig. 2 is a side elevation of the same, showing a portion of a nail-machine to which it is attached; and Fig. 3 is a detail in transverse section.

A represents the body of a nail-machine. B is the feeding-arm, pivoted at C to a bracket, D, which is a fixture to the body.

E is a rod connecting the feeding-arm with 30 an eccentric (not shown) or other device, which gives reciprocating motion thereto to feed the nail-plate F.

G is an arm secured to arm B, and provided with a bearing at its outer end, in which the 35 shaft H of my feeding device is secured.

I is the stationary jaw of the nippers, fixed to the shaft H.

J is the movable jaw of the nippers, pivoted to the shaft H by means of two center screws, 40 K, to swing to and from the opposite jaw I, so as to alternately seize upon and then set free the nail-rod L. This rod L is the com-

mon rock-shaft by which the nail-plate F is fed into the machine, and is rocked to turn it first one side up and then the other. This 45 rod, even if true when first put into use, is likely to be worn by the action of the nipper-jaws in a dusty atmosphere, so as to vary in thickness, and as the gripping of the nippers should be positively certain in order to make even nails, 50 and, further, as unyielding jaws cannot vary to accommodate the said variation in the rod, I have adapted a lever-arm, M, to close the jaw J. This arm is a portion of the jaw, and is provided at its outer end with a set screw, 55 N, adapted to strike against a stiff spring, P, which is fixed at Q to the body A of the machine. In the act of feeding the plate F into the machine the whole feeder swings on the pivot C, and the arm M in the same act rises 60 in the arc of a circle, bringing the screw N against the spring P, and closing the nippers I J upon the rod L. Then the rod is carried forward by the continued movement of the

R is the usual stopping device, and S the usual rod-retainer, which are not peculiar to my invention.

The spring Q might as well be fixed to the floor or ceiling of the room, so long as it is 70 stationary relatively to the movement of the whole feeder.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the swinging arm B G, 75 the nipper-jaw I, fixed thereto, the pivoted nipper-jaw J, provided with the arm M and set-screw N, and the spring P, fixed relatively to the motion of the feeding device, substantially as shown and described.

GEORGE THOMAS HARDEN.

Witnesses:

CHAS. H. GREENE, CHAS. E. HUDSON.