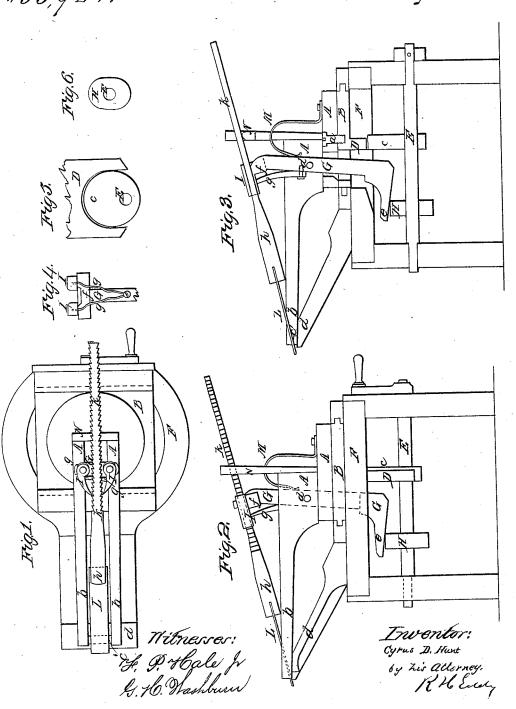
## C. D. Hill,

Making Cut Nails, N. 53,924. Putented Ancio 1866.



## UNITED STATES PATENT OFFICE.

C. D. HUNT, OF FAIRHAVEN, ASSIGNOR TO THE AMERICAN NAIL MACHINE COMPANY, OF BOSTON, MASSACHUSETTS.

## IMPROVED NAIL-PLATE FEEDER.

Specification forming part of Letters Patent No. 53,924, dated April 10, 1866.

To all whom it may concern:

Be it known that I, CYRUS D. HUNT, of Fairhaven, of the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Nail-Machines or in the Feeding Mechanism Therefor; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

in the accompanying drawings, of which—
Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of my improved cut-nail-machine feeder. Fig. 4 is a view of the lever, pawls, and their springs, to

be hereinafter described.

In the drawings, A denotes a vibratory arm or frame, which is mounted on a slide-plate, B, and turns horizontally on a pin or screw, a, which connects the two. A cam, c, fixed on a shaft, E, and operating in a fork, D, projecting down from the plate B, serves to impart to the said plate a reciprocating horizontal motion on the top of the frame or table F. A side view of this cam and fork is shown in Fig. 5.

The two parts b b of the frame A embrace, near their outer ends, a projection, c', extending up from a stationary arm, d, the same being to cause the frame A to have a vibratory motion when moved with the plate B.

A bent lever, G, having its fulcrum d sustained by the frame A, is arranged within and extends below and above such frame, and is formed in manner as shown in the drawings. The foot e of this lever rests on a cam, H, fixed on the shaft E, and formed as shown in Fig. 6.

On a cross-head, f, making part of the lever G, and situated at the upper end thereof, are two pawls, I I, which are forced toward each other and against a double rack-bar, k, by means of springs g g, projecting from the upper arm of the lever. The said double rack-bar k receives the nail-plate L, or has it fastened to

its larger end or head h, the said nail-plate being projected from the bar in manner as exhibited in the drawings.

While the cam H serves to move the lever G in one direction, a spring, M, arranged as represented in Figs. 2 and 3, answers to move

it in the opposite direction.

The rod or double rack-bar carrying the nailplate should be heavy enough to retain its position on the projector c and in the fork of a rest or standard, N, during the rearward movement of the pawls I I and the upper arm of

the lever supporting them.

In the operation of this feeding apparatus the cam answers the purpose of simply moving the lever in order to cause the reversion of the pawls on the double rack-bar, the spring M effecting the feeding of the nail-plate forward as fast as may be required. The end of the nail-plate brings up against a gage of the machine, against which it is forced by the said spring. Thus, while each movement of the lever, in order to retract the pawls, carries them back to one determined position, the forward movement of the lever, by being produced by the spring, will be certain to force the nailplate up to the gage and hold it there, however the nails cut from the plate may vary in width relatively to each other. The said feeding apparatus is found to be very certain in its operations generally, and to cause the nails made to be of a uniform size.

I claim-

The combination and arrangement of the double rack-bar k, the pawls I I, the lever G, the spring M, and the cam H as applied to the vibratory arm A, and the shaft E, substantially as specified.

CYRUS D. HUNT.

Witnesses:

R. H. Eddy, F. P. Hale, Jr.