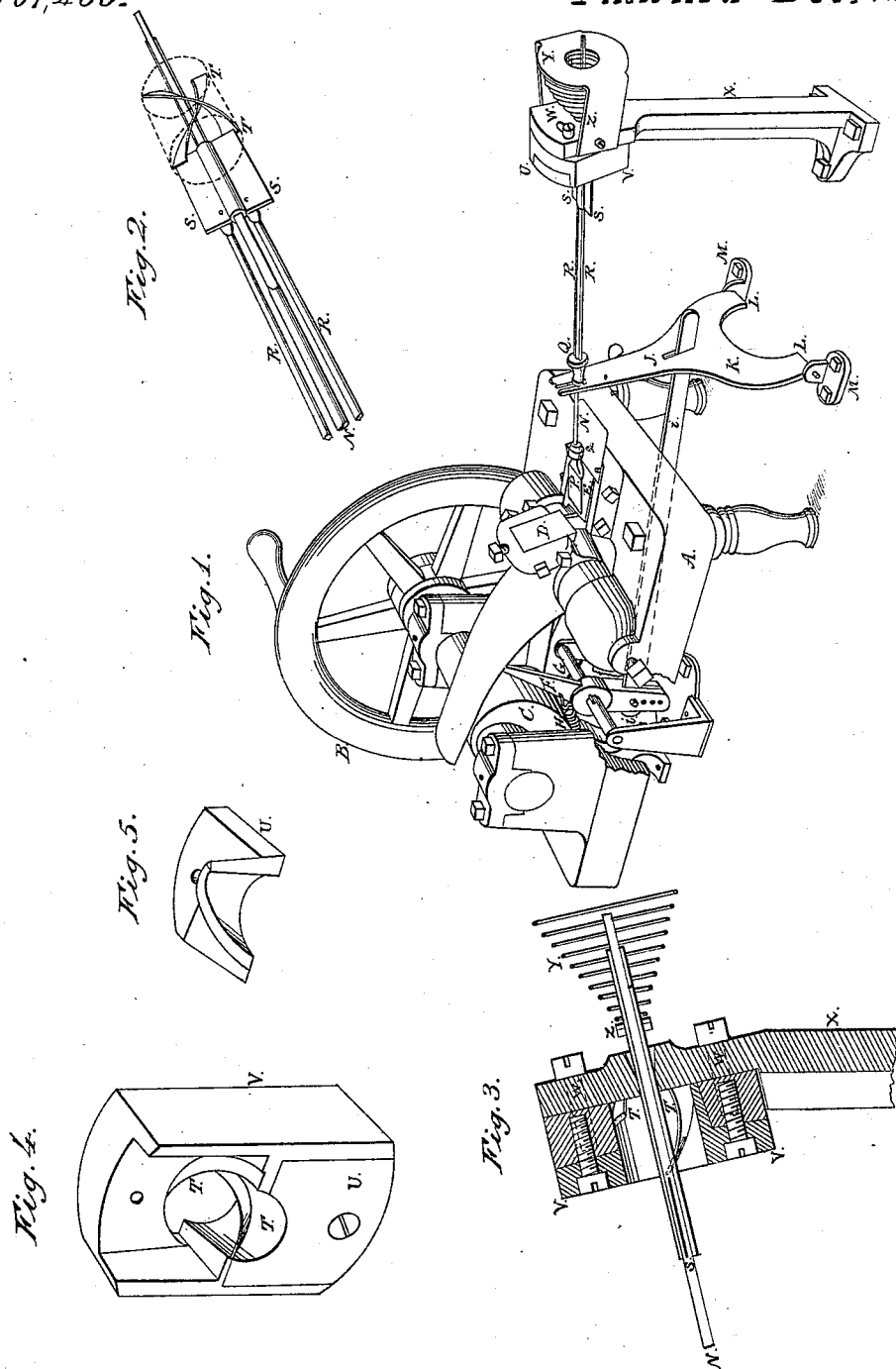


*D. Drawbaugh,*  
*Making Cut Nails,*

*N<sup>o</sup> 51,435.*

*Patented Dec. 12, 1865.*



*Witnesses,*  
*Franklin Reigart*  
*Daniel Reigart*

*Inventor,*  
*Dani<sup>l</sup> Drawbaugh*

# UNITED STATES PATENT OFFICE.

DANIEL DRAWBAUGH, OF EBERLE'S MILLS, PENNSYLVANIA.

## IMPROVEMENT IN NAIL-PLATE FEEDERS.

Specification forming part of Letters Patent No. 51,435, dated December 12, 1865.

*To all whom it may concern:*

Be it known that I, DANIEL DRAWBAUGH, of Eberle's Mills, Cumberland county, State of Pennsylvania, have invented new and useful Improvements in Nail-Plate Feeders; and I do hereby declare the following to be an exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents a nail-machine with my plate-feeder attached. Fig. 2 represents the rear end of the feeder; Fig. 3, a sectional view of the rear end; Fig. 4, the box that contains the two spiral steel flanges; Fig. 5, the incline-shaped lock or die that presses and secures the steel flanges.

The nature of my invention consists in a revolving rod that is revolved by spiral flanges, at the same time revolving the nail-plate from which the nails are cut, the nail-plate being held firmly by tongs on the front end of the rod, and the rod receiving its backward motion by means of a connecting rod and lever geared to the eccentric or cutter-head of the nail-machine, and again forced forward by a coiled steel spring in the rear. Wings are attached to two side rods that move into the box containing the steel flanges and are guided by the spiral steel flanges, and as the wings turn, the upper end of the rod being square and fitting into a tube that is square on the inside, to which the wings are attached, is revolved with the wings, and at each movement of the nail-cutter the nail-plate is at the same time revolved and the nail is cut off.

A represents the frame and support of the nail-machine; B, the fly-wheel; C, the eccentric; D, the cutter that cuts the nails downward; and E, the lower cutter or cutting-bed, all of which are common to nail-machines.

My invention is intended to be attached to any nail-machine, so as to move either with the eccentric or the cutter. To show the operation of my invention, I represent it as moving with the eccentric C.

F is a movable lever, that works upon a rock-shaft, G, the upper end resting against the eccentric C, having a spiral spring, H, at-

tached to it and the back part of the frame A, to keep the lever close to the periphery of the eccentric wheel C.

To the lower end of lever F is attached a horizontal connecting-rod, I, with a notch at the other end that fits into a slot, J, of the oscillating upright K, so as to gear or ungear or give motion to the upright and to the feeder.

The upright K has two feet, L L, oscillating on pivots and bearings M.

At the top of the upright K are several notches and a catch in which the rod or feeder N rests as the upright K moves back and forth. The rod N has tongs P at the front end, for holding the nail-plate and feeding to the cutter D.

A short cylinder, Q, against which the upright K presses, slides upon the rod N, and has two side rods, R R, upon which are permanently fastened two wings, S S, that move back and forth between and upon two spiral flanges, T T, as guides to give the rotary motion to the rod N and revolve the tongs P with the nail-plate. The flanges T are set in between spiral-shaped dies U, that form part of the box Y that the wings S work in.

The box V can be adjusted to either side, when required, (to regulate the course and motion of the wings S,) by means of two screws working in slots W in the top of the upright post X.

The back end of rod or feeder N is square, working in and against the spiral spring Y in the rear, the back and forward movement of the rod being regulated by the nut Z, so as to feed at the proper distance and with accuracy.

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

The arrangement and combination of the revolving feeder N with its rods R, wings S, steel flanges T, dies U, and oscillating upright K, as herein described, and for the purposes set forth.

DANL. DRAWBAUGH.

Witnesses:

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