

L. RICHARDS:

Improvement in Machines for Feeding Nail-Plates.

No. 131,181.

Patented Sep. 10, 1872.

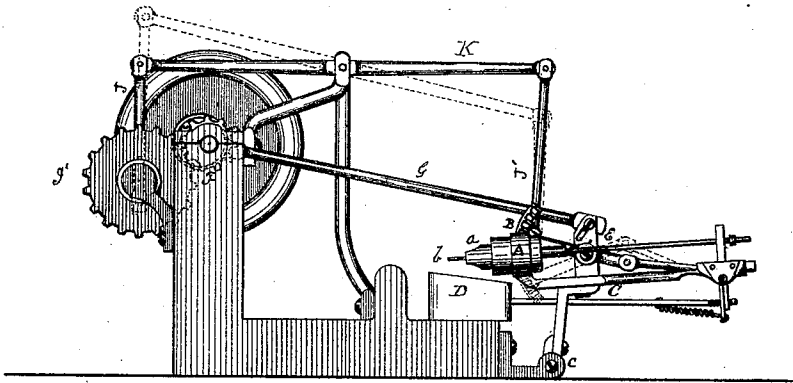


FIG. 1.

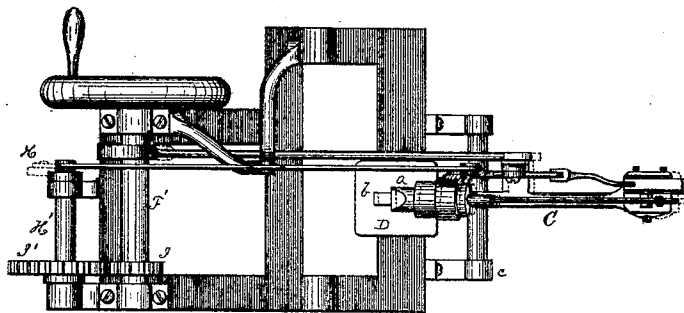


FIG. 2.

WITNESSES.

INVENTOR.

Peter F. Hughes
A. J. Rushing

Levi Richards

UNITED STATES PATENT OFFICE.

LEVI RICHARDS, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR, BY MESNE ASSIGNMENT, TO HIMSELF, OLIVER A. WASHBURN, GEO. S. PERKINS, AND FREDERICK S. ROSCOE, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR FEEDING NAIL-PLATES.

Specification forming part of Letters Patent No. 131,181, dated September 10, 1872.

To all whom it may concern:

Be it known that I, LEVI RICHARDS, of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Improvement in Feeders for Nail-Cutting Machines; and I do hereby declare that the following specification, taken in connection with the drawing making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a side elevation of so much of a nail-cutting machine as is necessary to exhibit my improvement. Fig. 2 is a top view.

In the Letters Patent for improvement in this class of machines granted to me December 21, 1869, a combination of devices is shown for effecting, through the means of a single vibrating lever, both the tilting of the jaws which hold the nail-plate, and their semi-rotation in alternate opposite directions for the purpose of enabling the plate, when fed to the cutting-shears, to be in proper relation thereto. I have found, however, that it is advisable to tilt and to rotate the holding-jaws by movements which are independent of each other and, therefore, capable of separate adjustments.

In the drawing, *a* represents the jaws for holding the nail-plate *b*. *A* is the barrel which, when rotated, will cause the nail-plate to be turned, and *B* is a segment rack-gear working a pinion to effect the semi-rotation of the barrel *A*. *C* is a rocking platform hinged to the bed of the machine at *c*, and the devices for feeding forward the nail-plate are substantially the same as those described in my Letters Patent before referred to. *D* is the stationary cutter-block. The vibrating shear, working in combination therewith, is not shown, but its arrangement will be well understood by constructors of this class of

machines. The rocking platform *C* is vibrated at the proper times relatively to the action of the vibrating shear by means of the lever or arm *E*, actuated by the eccentric *F*, on the driving-shaft *F'*, through the connecting-link *G*. The upper end of the arm *E* is made slotted so as to admit of variations in the adjustment of the link *G* for the purpose of altering the extent of the platform's vibration. The segment-rack *B* is operated by means of the crank *H* on the shaft *H'*, which, by means of the toothed-gears *I I*, revolves in twice the time of the driving-shaft *F'*. This crank is connected with the segment-rack *B* through the links *J J'* and walking-beam *K*, and which connections can easily be made adjustable.

By the arrangement described the proper rotation of the jaws which hold the nail-plate, and the vibration of the platform upon which such jaws are mounted, can be adjusted independently of each other so as to be timed in their movements with reference to the movements of the other parts of the machine in any preferred way.

I do not claim broadly the combination of a rocking platform and rotating jaws in devices for automatically feeding nail-plate, but—

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

The combination of the hinged platform *C*, the arm *E*, and the connecting-rod *G* (the latter joined to said arm and the driving-shaft by the slotted connection and cam) with the plate-holding jaws, the barrel-gear, segment-gear, links *J J'*, and the walking-beam, all as and for the purposes specified.

LEVI RICHARDS.

Witnesses:

PETER F. HUGHES,
A. J. CUSHING.