

J. McNEELY.
Nail-Plate Feeders.

No. 143,022.

Patented September 23, 1873.

Fig. 1.

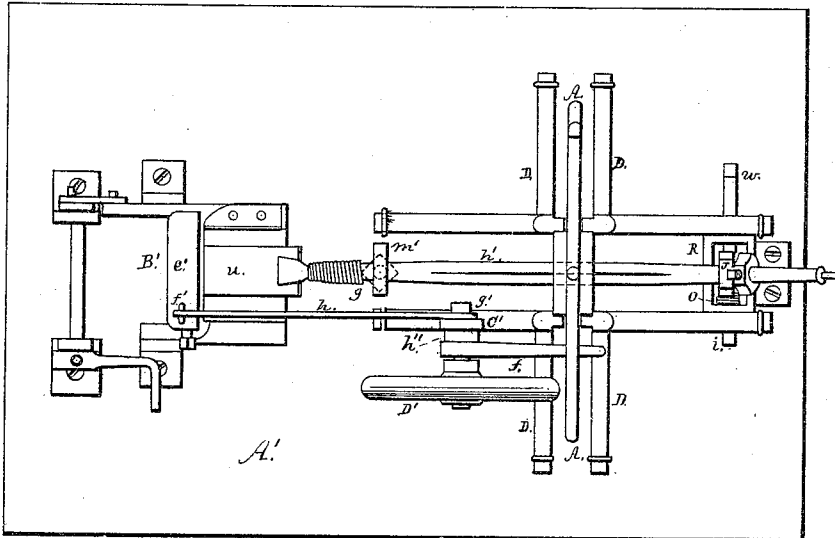
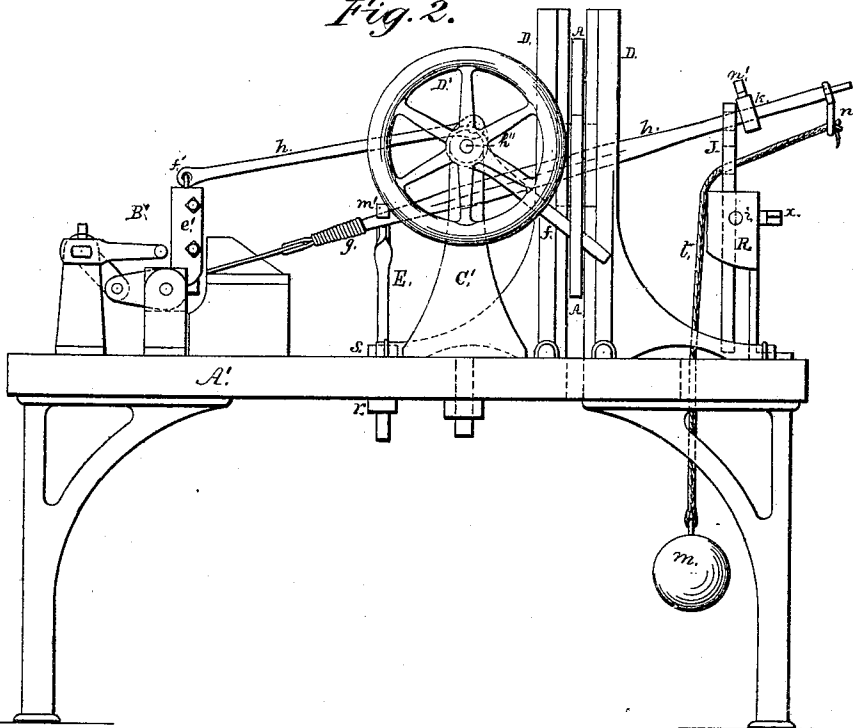


Fig. 2.



Witnesses.

Wm. W. L. Dyre,
James D. Jones

Inventor.

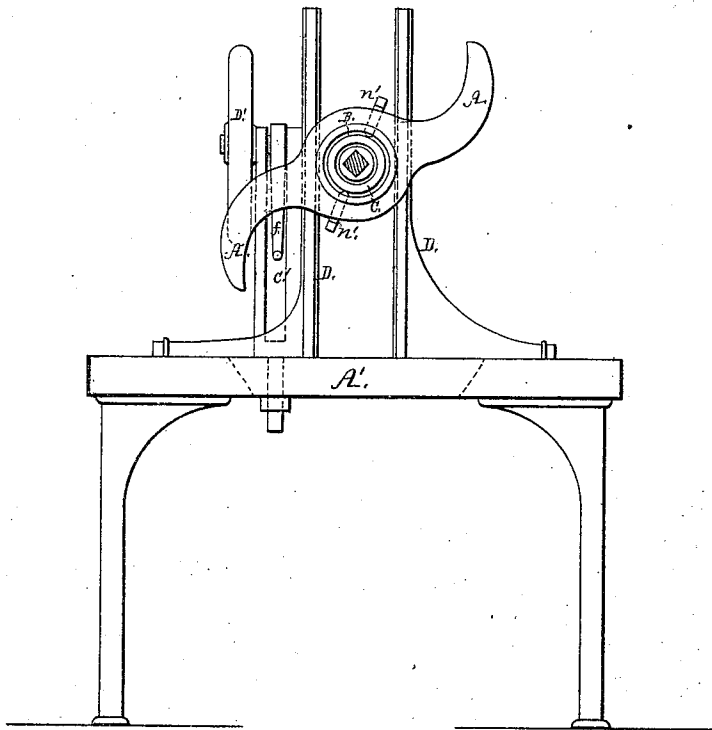
John McNeely.
By Johnston & Grindley
his attorneys.

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Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN McNEELY, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN NAIL-PLATE FEEDERS.

Specification forming part of Letters Patent No. **143,022**, dated September 23, 1873; application filed August 13, 1873.

To all whom it may concern:

Be it known that I, JOHN McNEELY, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Feed Device for Nail-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

My invention relates to an improvement in feed device for nail-machines; and consists in the combination of the several parts hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 is a top view or plan of my improvement in feeding device. Fig. 2 is a side elevation of the same. Fig. 3 is a front elevation of the rotating arms and the lever or arm for operating them, representing all the other parts of the machine removed.

A' represents the base of the machine, upon which is an ordinary nail-cutting machine marked B'. To the cutting or vibrating head *e'*, at *f'*, is pivoted a pitman, *h*, the other end of which is connected to the crank *g'* of the shaft *h''*, on which is secured a balance-wheel, *D'*, and a lever, *f*, for operating the arms A. The shaft *h''* is mounted in suitable bearings in the upper end of the support, marked C'. The curved arms A, which rotate the tongs *g* for reversing the plate *u* from which the nails are cut, are provided with sockets B and C. The socket B is pivoted in the arms A through the medium of set-screws *n'*, and the socket C is pivoted in the socket B, and the shank of the tongs placed in a square opening in the socket C, through which it moves freely. By this arrangement, the tongs *g*, and the plate in them, are allowed a free, easy motion, which is an essential feature in a device for feeding the plate to the cutter of a nail-cutting machine. The curved arms A are supported on the shank *h'* of the tongs *g* between the housing D. To the base A' is at-

tached a support, E, which will be raised or lowered through the medium of the screw-nuts *r s*. On the upper end of this support is a curved spring, *m'*, the upper part of which presses down on the upper side of the shank *h'* of the tongs *g* for the purpose of holding down the plate *u* and tongs in the proper position for the cutter of the nail-cutting machine; but the spring *m'* is sufficiently flexible to allow the tongs *g* and the plate *u* to be rotated or turned, as ordinarily done in nail-cutting machines, when fed by hand. The back end of the shank *h'* moves in an adjustable support, J, which is placed on the rod *i* in the piece R. On the rod *i* is a spiral spring, *o*, which moves the support J toward the set-screw *w* when unscrewing it. The support J is held in a vertical position by its bearings *x*, which move in slots in the piece R. The support J is moved to the left in piece R by screwing in the set-screw *w*, and by unscrewing the set-screw *w* the spiral spring *o* will move the support J to the right, whereby the desired angle can be given to the shank *h'* and tongs *g* for feeding the plate *u* to the cutter of the nail-cutting machine, thereby giving the desired taper to the cut nail. The shank *h'* of the tongs *g* is provided with an adjustable stop, *k*, which is held in position on the shank by means of the set-screw *n'*. On the outer end of the shank *h'* is a swivel-link, *n*, to which is attached a cord or chain, *l*, which passes through an opening in the adjustable support J, and down through an opening in the base A', and to the lower end of this cord or chain is attached a weight, *m*. The cord or chain and weight are used for feeding forward to the cutter the plate *u* placed in the tongs.

The operation of my feed device for nail-cutting machines is as follows: The tongs *g* and the several parts being arranged and adjusted, as hereinbefore described, a plate from which the nails are to be cut is placed in the tongs, as shown in Figs. 1 and 2. Power being applied to the nail-cutting machine, motion is transmitted from the vibrating cutting-head *e'*, by means of the pitman *h*, to the shaft *h''*, revolving it, which will bring the arm or

lever *f* in contact with the curved arms A, which will rotate them alternately, and thereby turn the tongs *g* and the plate *u*, which is fed forward to the cutter of the nail-cutting machine by the weight *m* and cord or chain *l* acting on the shank *h'* of the tongs *g*, which are thereby forced forward toward the cutter.

Having thus described my improvement, what I claim is—

The arms A, provided with the sockets B

and C, mounted in housings D, in combination with the spring and support E, and rotating lever *f*, and tong *g*, the several parts operating with relation to each other, substantially as herein described, and for the purpose set forth.

JOHN McNEELY.

Witnesses:

A. C. JOHNSTON,
JAMES J. JOHNSTON.