A. MORRISON.
Nail-Distributer.

No. 214,305. **Patented April 15, 1879.**

Fig. 1.

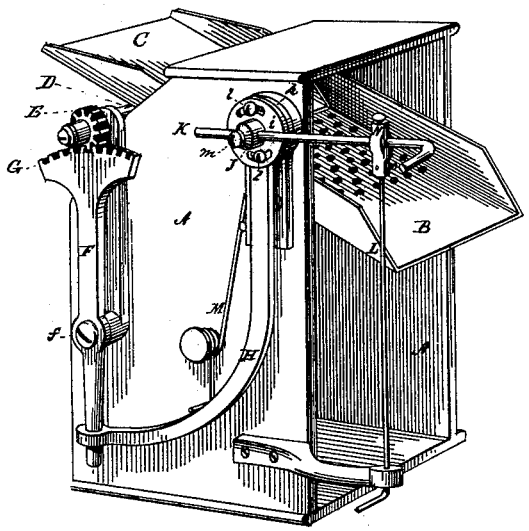
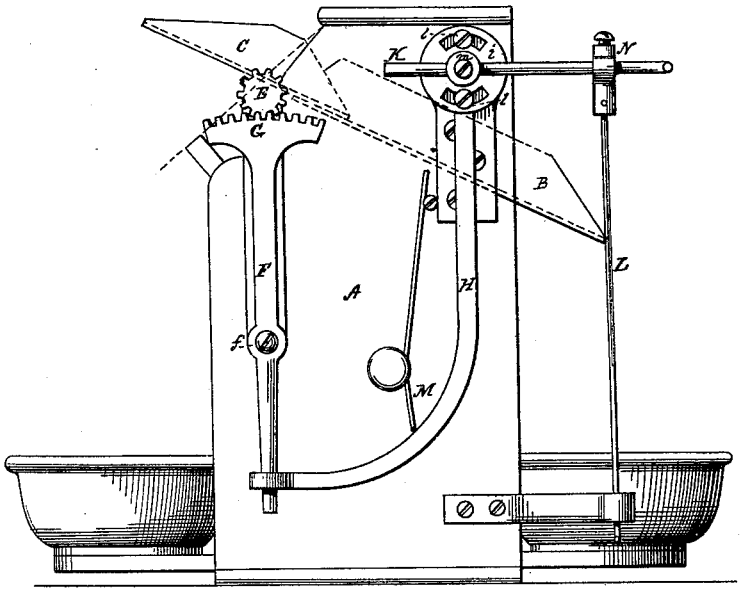


Fig. 2.



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UNITED STATES PATENT OFFICE.

ALEXANDER MORRISON, OF HARRISBURG, PENNSYLVANIA.

IMPROVEMENT IN NAIL-DISTRIBUTERS.

Specification forming part of Letters Patent No. **214,305**, dated April 15, 1879; application filed February 8, 1879.

To all whom it may concern:

Be it known that I, ALEXANDER MORRISON, of Harrisburg, Pennsylvania, have invented a new and useful Improvement in Nail-Distributers, of which the following is a clear, full, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of a nail-distributer with my improvements attached. Fig. 2 is a side elevation, showing the oscillating chute in position to discharge the defective goods, partially broken away.

My invention relates to that class of nail-distributers designed to separate defective nails and spikes; also the initial and final cuts of the plate from which spikes and nails are made from the perfect or merchantable goods; and it is an improvement on Patent No. 144,407, issued to me November 11, 1873.

My invention consists in certain devices for operating the oscillating chute, as hereinafter explained and claimed.

To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the drawings, A A represent the frame-work of the distributer, B a stationary chute, and C an oscillating chute, all as shown in my former patent. To the under side of the oscillating chute C, I secure the transverse shaft D, provided with suitable bearings in or attached to the frame-work, and on one end of this shaft is secured the pinion E.

On the outer side of the frame A, I place the vertical lever F, pivoted at *f*, and carrying on its upper end the curved bar G, with teeth meshing in the teeth of the pinion E.

Connecting with the lower end of the vertical lever F is the bent lever-arm H, pivoted to the frame A. On the head of the lever-arm H is constructed a collar, *h*, fitting over the pivot on which it turns; and this collar is fitted with a slotted face-plate, *i*, having a projection, J, perforated for the reception of the foot-lever K, as shown in Figs. 1 and 2.

By means of the slots in the face-plate *i* and the screws *l l*, I am enabled to give the foot-lever K any desired vertical adjustment or elevation; and by means of the set-screw *m* on the end of the projection J, which secures the foot-lever in position, I am enabled to give that lever any desired adjustment in length, which is a point of primary importance.

It is well known to those skilled in the use of my invention that the operator's foot rests upon the lever K during all the time the machine is running. The weight of the foot has therefore to be balanced on the lever. In my former patent this had to be accomplished by means of counter-weights. By my new improvement it is evident this can be effected by simply lengthening or shortening the arm of the lever K by moving it through the perforation in the projection J, and then using the set-screw *m*.

If the outer end of the lever needs to be raised or lowered to adjust to the convenience of the operator's foot, it is only necessary to loosen the screws *l l* and slightly turn the face-plate *i* in the direction desired.

When the operator stands up to work, the foot-lever K is too high to be conveniently reached with the foot, and I provide against this difficulty by the vertical rod L, which, at its upper end, N, is made adjustable, as shown, on the foot-lever K, whereby I am enabled to balance the foot-pressure on the lower bent end of the rod without disturbing the position of the lever in the projection J.

In constructing the lever-arm H it may be made in parts, so as to be reversible, and, if desired, be placed on the opposite side of the machine.

The stationary chute B is perforated to form a sieve for separating the dust and dirt from the nails before they are passed into the receiver.

The spring M, which bears against the lever-arm H, is designed to quicken the return of the chute C to its normal condition, as described in my former patent.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a nail-distributer, the oscillating chute

C, provided with the transverse shaft D and pinion E, in combination with the lever F, provided with toothed bar G, the lever-arm H, and foot-lever K, constructed to operate substantially as and for the purpose set forth.

2. The combination of the lever-arm H with the slotted face-plate *i*, screws *l l*, perforated projection J, set-screw *m*, and foot-lever K, substantially as and for the purpose set forth.

ALEXANDER MORRISON.

Witnesses:
W. F. MORSELL,
W. L. ARGUE.