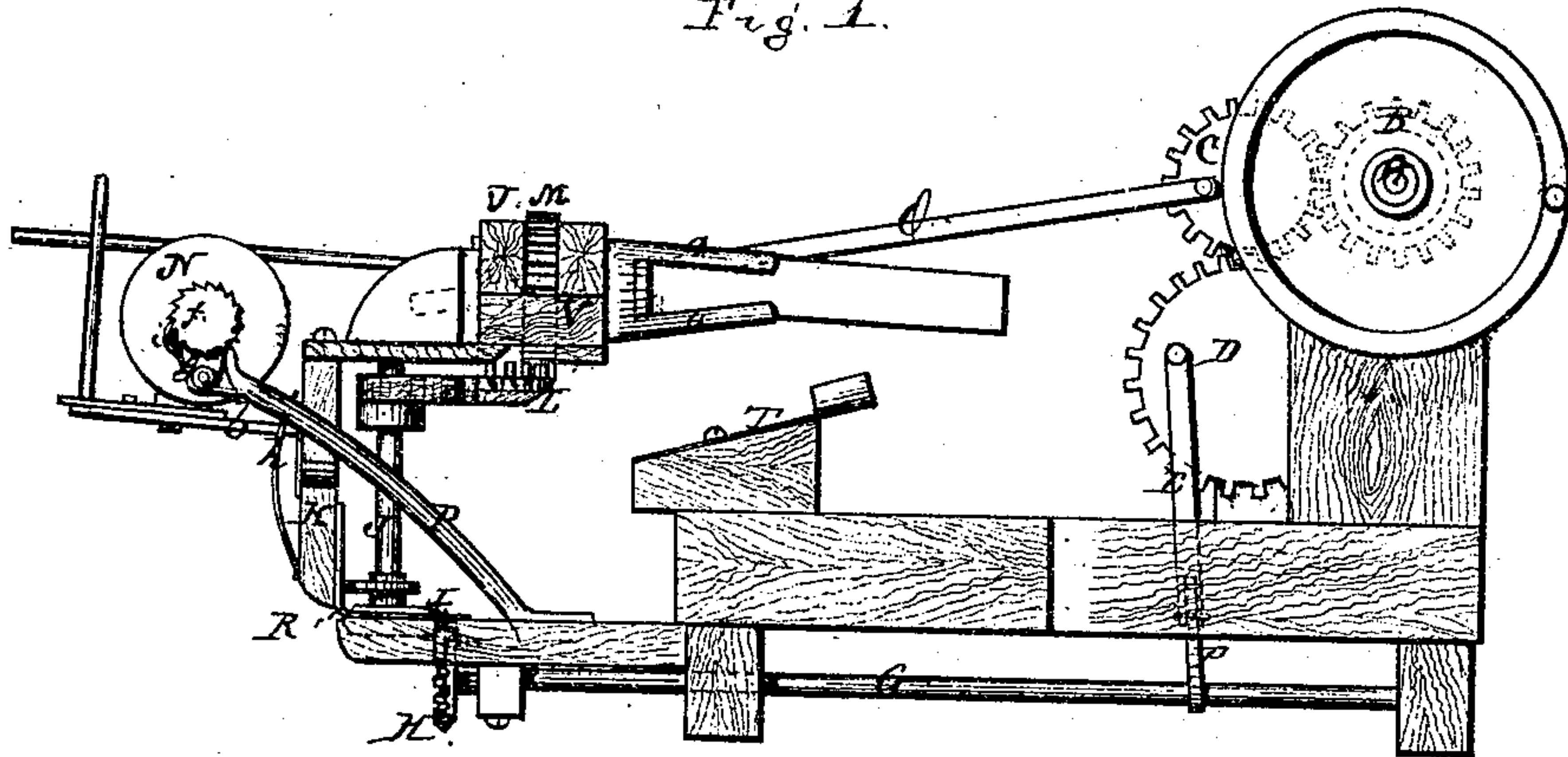


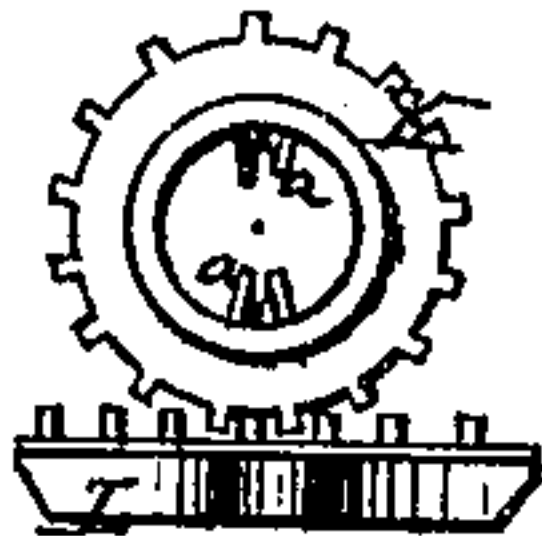
*C. D. Hunt,*  
*Nail Cutting Machine.*  
*No. 95802.*

*Patented Oct. 12. 1869.*

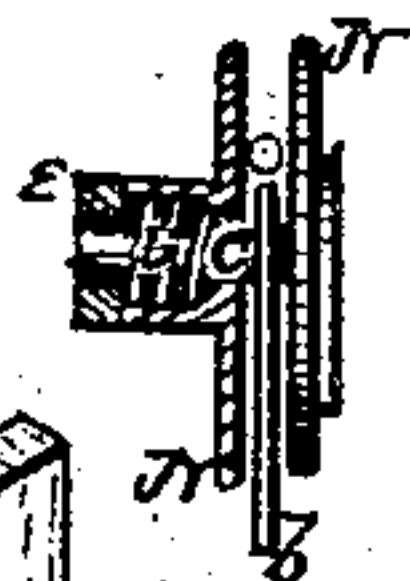
*Fig. 1.*



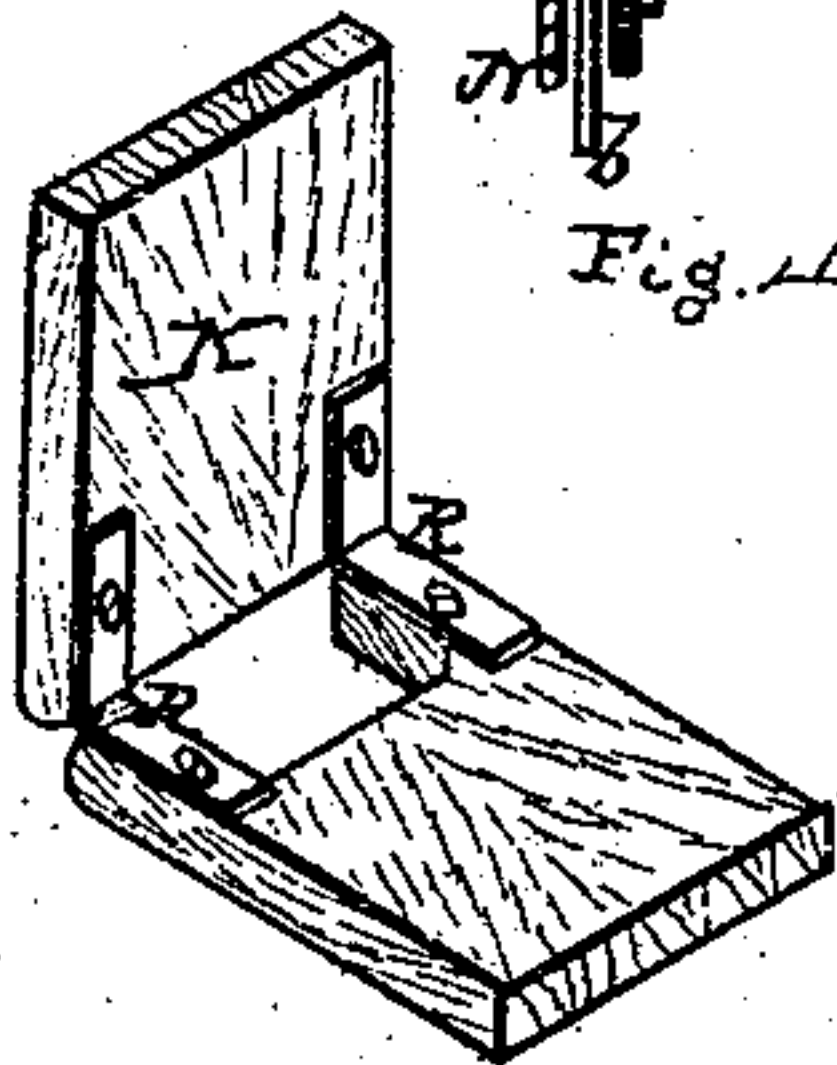
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses  
*C. L. Quest*  
*Alfred Hunt*

Inventor  
*C. D. Hunt*  
*Alexander T. Hunt*  
*Atty.*



# United States Patent Office.

C. D. HUNT, OF FAIRHAVEN, MASSACHUSETTS.

Letters Patent No. 95,802, dated October 12, 1869.

## IMPROVEMENT IN NAIL-CUTTING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, C. D. HUNT, of Fairhaven, in the county of Bristol, and in the State of Massachusetts, have invented certain new and useful Improvements in Automatic Feeder for Nail-Machines; and 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, making a part of this specification.

The present invention relates to the automatic nail-plate feeder, for which Letters Patent were issued to me, on the 17th of November, 1868, and 5th of January, 1869; and consists in certain improvements simplifying the construction, and securing more uniformity and certainty in operation, and giving a uniform size in the nails, particularly the heads.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation of the machine.

Figure 2 is a front view of the barrel, with the sector that gives it its motion.

Figure 3 is a vertical section of the friction-disks.

Figure 4 is a perspective of the vibrating arm.

The nail-machine to which the feeder is attached, is what is generally known as the Reed machine, but may be adapted to any nail-machine desired.

I have deemed it only necessary to show so much, in the drawings, of the machine as will indicate my present improvement.

On a spindle, A, is a gear-wheel, B, which gives motion to a second wheel, C, of the same size, running on a separate shaft.

This second gear C runs another wheel, D, just twice as large, which, by a rod, E, is connected to the arm F of a rocking shaft, G, which runs under the machine to the feeder, and has on it a mitre-gear, H.

The gear H unites with another and smaller mitre-gear, I, attached to a shaft, J, running at right angles to the barrel, and supported in bearings connected with the vibrating arm K.

United to the shaft J, is a toothed sector, L, which inosculates with the gear on the barrel M.

By this arrangement, the barrel is made to rotate one-half a revolution, and then back, thus inverting the plate when placed between the nose-pieces *a a*.

Extending from the vibrating arm K is a rest, *b*, to support the friction-disks N N, which turn on an arbor, *c*, and are pressed together by a spring or springs, *d*, that may be increased or diminished in power by nuts *e* on the arbor.

Attached to the right-hand disk is a ratchet-wheel,

*f*, which is turned by a catch, *i*, on the lever *g*, that turns around the arbor or hub of the disk, thus causing the disks to turn.

Attached to the left-hand side of the vibrating arm K, is a rod, O, that connects with a crank-pin in the small gear-wheel C, and thus motion is imparted to the vibrating arm.

A bar, P, attached to the horizontal rest of the feeder, is so adjusted as to strike against the lever *g*, that turns the disks at the forward motion of the vibrating arm.

The lever *g* is brought back in position, at the backward motion of the vibrating arm, by means of the spring and connecting-link *h*, as seen in fig. 1.

The vibrating arm K is supported on springs R R, of a yielding nature, to admit of movement of the barrel back and forward, also to allow the barrel to lift a little, and also to allow the nose-pieces *a a* to throw a little to the right as they are drawn forward, to force the plate between the knives.

It has always been a desideratum, in all automatic feeders, to get this movement to the right as the plate is being drawn forward, thus carrying the plate against a guard, and always giving so much for the heads of the nails, thus securing a perfect uniformity of heads to the nails, resulting from the yielding nature of the springs, as the movement-rod O, on the left hand, draws forward, and the stationary bar P, on the right hand, is met by the lever *g* that turns the disks N N.

In operation, this imitates hand-feeding perfectly.

It is necessary to have the nail-plate perfectly flat on the bed-knife T, a little before it is drawn between the knives, thus avoiding the liability of striking the moving knife.

By the use of the springs this is effected, for they will yield sufficiently to allow the barrel to rise the little that is required, as the plate is drawn forward between the knives.

The two mitre-gear wheels H and I should be so arranged, relative to the axis of movement of the vibrating arm, that they will not be thrown out of gear as the arm is thrown back and forward.

To render the knives accessible, the box V, containing the bearings for the barrel, is so dovetailed, that it will fit on the vibrating arm, also dovetailed, and may be easily removed.

The operation of the friction-disks and other portions of my invention has been fully set forth in the two patents above referred to.

Having thus fully described my invention,

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

1. Connecting the vibrating arm of a nail-feeding

device to the frame supporting it, by one or more flexible metallic straps, in the manner and for the purposes substantially as herein set forth.

2. The combination of the reciprocating rod O, barrel-box V, vibrating arm K, bar P, link and spring h, and arm g, substantially as set forth.

3. The construction of the barrel-box V, and its connections to the vibrating arm K, substantially as specified.

4. The arrangement, substantially as described, of the shafts C and J, mitre-wheels H I, toothed segment

L, and barrel-wheel M, in relation to the vibrating arm K and barrel-box V.

5. The combination of the friction-disks N N, ratchet-wheel f, pawl i, and arm g, with the bar P and the link and spring h, substantially as set forth, and for the purposes specified.

In testimony that I claim the foregoing, I have hereunto set my hand, this 30th day of August, 1869.

Witnesses:

C. D. HUNT.

J. T. BUTTRICK,  
CHAS. DREW.