G. Meyer.

Wiring Blind-Rods and Slats.

No. 97,541. Patented Dec. 7. 1869.

Fig. 1.

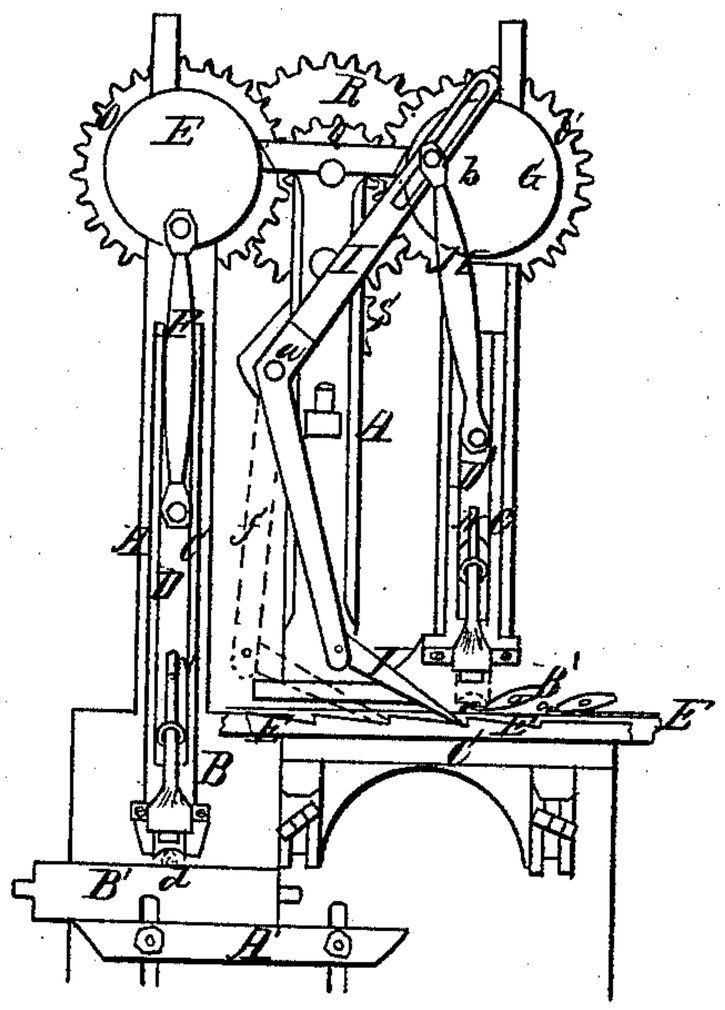


Fig. 2.

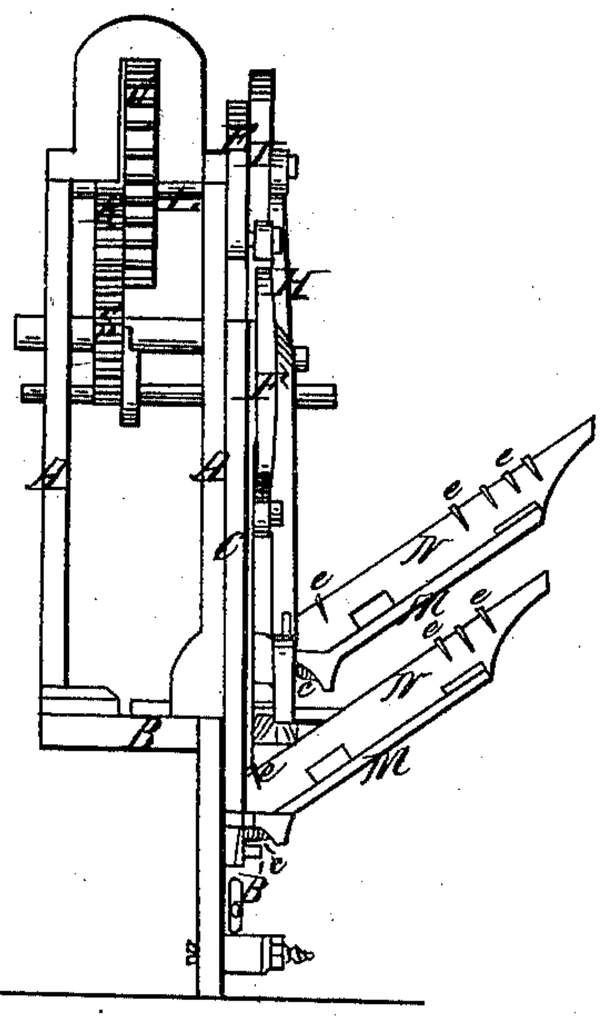
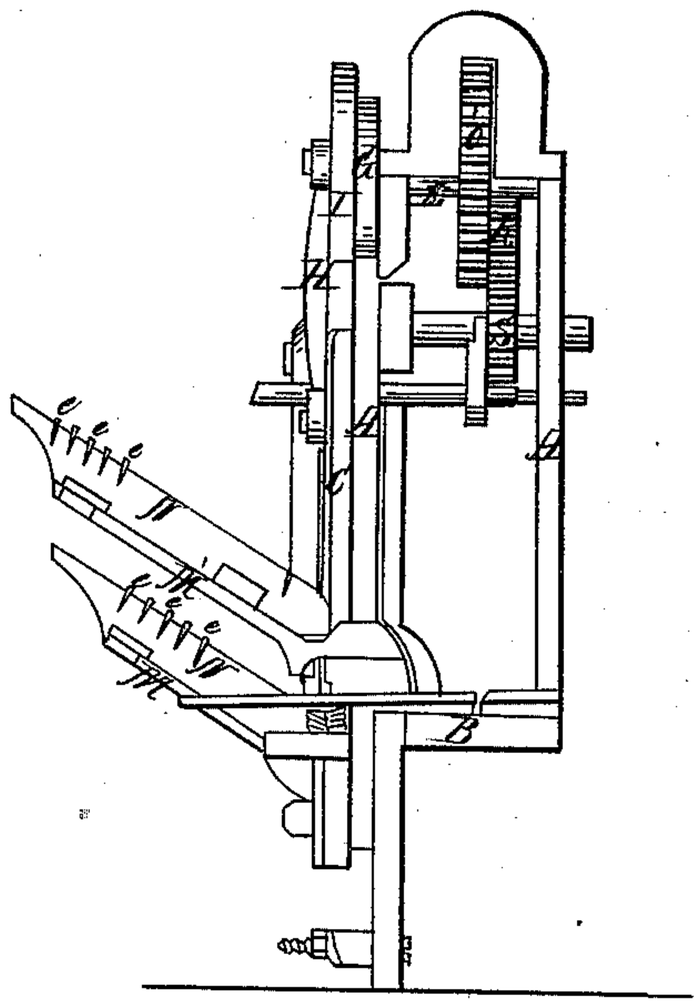


Fig 3.



Witnesses,
J. H. Burridge
W. Hemmingway

Inventor
G. Meyer

United States Patent Office.

GODLIP MEYER, OF CLEVELAND, OHIO, ASSIGNOR TO HIMSELF AND JACOB WAGNER, OF SAME PLACE.

Letters Patent No. 97,541, *dated December* 7, 1869.

IMPROVEMENT IN MACHINE FOR WIRING BLIND-RODS AND SLATS.

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

I, GODLIP MEYER, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented certain Improvements in Window-Blind Staple-Driver, of which the following is a specification.

Objective.

This invention has for its object the driving of staples into the slats and the rods connecting said slats of window-blinds, by an arrangement of devices, consisting of driving-rods working vertically in grooved standards or posts, a feeding-device, whereby the work is fed to the machine automatically; also, of certain springs, by the use of which the descent of the staples is controlled; and, also, of certain gearing, whereby the several parts are operated, as hereinafter more fully described.

Drawings.

Figure 1 is a front view of the machine.

Figure 2, a side view of the same.

Figure 3, a view of the opposite side of fig. 2.

Like letters of reference indicate like parts in the several views presented.

Description.

A, fig. 2, is a frame mounted upon the base or table B.

To the face of each of the front posts of said frame is secured a grooved guide or channel, C and C, in each of which is fitted loosely a driving-rod, D D′. Said rod D is connected to a crank-wheel, E, by a link or pitman, F, and whereby it is operated.

The driving-rod D′ is also connected to a crank-wheel, G, by means of a link or pitman, H, and operated thereby, as and for a purpose hereinafter shown.

I is a lever, pivoted to a section of the frame at the point *a*. One end of said lever is slotted, and attached thereby to the crank-wheel G by the wrist-pin *b*, whereby the link H is connected to the wheel.

To the lower end of said lever is pivoted a foot, J, the purpose of which will presently be described.

Projecting forward and upward, at a certain angle from the foot of each of the grooves or channels in which the driving-rods slide, is an arm, M, in the upper side of which is cut a groove, and therein fitted, so as to slide freely upward and downward, a feather, N, the lower end of which is held in close contact with the back or bottom of the groove referred to, by a spring, *c*, fig. 2.

It will be observed that the upper corner of the lower end of the feather is rounded off, so that it does not touch the bottom of the groove, whereas, the rest-post of the end is in contact therewith. The purpose of this will be shown hereafter.

Motion is given to the driving-rods or drivers, by means of the gearing arranged in the upper part of the frame, and which consists of the cog-wheels O O′, the wheel O being secured to the shaft L, supporting the crank-wheel E, whereas, the wheel O′ is secured to the shaft supporting the crank-wheel G.

Said wheels are made to engage the small pinion Q, secured to the shaft bearing the cog-wheel R, said wheel R receiving motion from the primary pinion S, operated by a crank, and transferring its motion to the side wheels O O′, by the intervention of the pinion Q. By this arrangement of gearing, a vertically-reciprocating action is obtained to the driving-rods or drivers, by means of their connection therewith, in the manner above described.

Operation.

As above said, this machine is for driving staples into the slats and rods of window-blinds, and which is performed in the manner as follows:

The staples for immediate use are hung upon the edge of the feathers N, as shown at *e*, figs. 2 and 3, a few only being shown, which, however, may fill the length of the feather, and hang touching each other.

A slat, in the edge of which a staple is to be driven, is placed under the driving-rod D, on the adjustable table A′, as shown in fig. 1, in which B′ is the slat. Into the slat, while in this position, a staple, *d*, is driven by the driver, which, as it descends from above the end of the feather on which the staples are hung, the lowermost one, against the back of the channel, immediately under the driver, is dislodged therefrom and driven into the slat, as shown in the drawing.

This being done, the slat is immediately removed and adjusted on the table C′, so as to bring the staple therein under the driver D′, as shown at the right-hand side of fig. 1, in which B′ represents an end view of the slat.

Immediately under the slat, lengthwise the table, is laid the slat-rod E′, to which the slats are to be attached. While in this position the driver D′ descends, and, dislodging a staple from the feather, drives it into the rod.

The adjustment of the slat B′ is such, that one limb of the rod-staple passes through the staple therein, and thus links it to the rod, as shown in the drawing.

The position of the pivoted foot J, at the instant that the staple is being driven into the rod, is as indicated by the dotted line *f*. Now, on the ascent of driver D′, the foot moves forward, carrying with it the slat-rod and slat, the distance of one notch, *s′*, of the gauge F′, which is temporarily attached to the rod, said distance being that proper for the attachment of another slat, which, during the ascent of the driver and forward movement of the rod, has been stapled by the driver D, ready to be placed under D′, and ad-

justed for its attachment to the rod, in the manner as above instanced.

The movement of the two drivers is so timed that the slat receives its staple during the ascent of the driver D′, and the forward movement of the rod and slats. Hence, there is an uninterrupted continuation of the work of driving the staples, first, that into the slat, and secondly, that into the rod, for its attachment to the slats.

By this device, the work of stapling the blinds is greatly facilitated, and is done with an exactness unattainable by the ordinary means employed for this purpose.

As above said, the upper corner of the lower end of the feather is rounded off, which is for the purpose of allowing the staple to slip from the feather, on being struck by the driver, which falls directly upon the staple, and forces it between the end of the feather and back of the groove in which the driver moves. The feather is immediately forced back against the groove by the spring referred to, thereby preventing the dislodgement of the staples left on the feather. Hence, one staple at a time only can leave the feather, and which is dislodged by the descent of the driving-rod.

Claim.

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

The cog-wheels O R O′, pinions Q S, crank-wheels E G, driving-rods D D′, adjustable feather N, spring *c*, lever I, and foot J, all arranged substantially as described, and for the purpose specified.

GODLIP MEYER.

Witnesses:

J. H. BURRIDGE,

D. L. HUMPHREY.