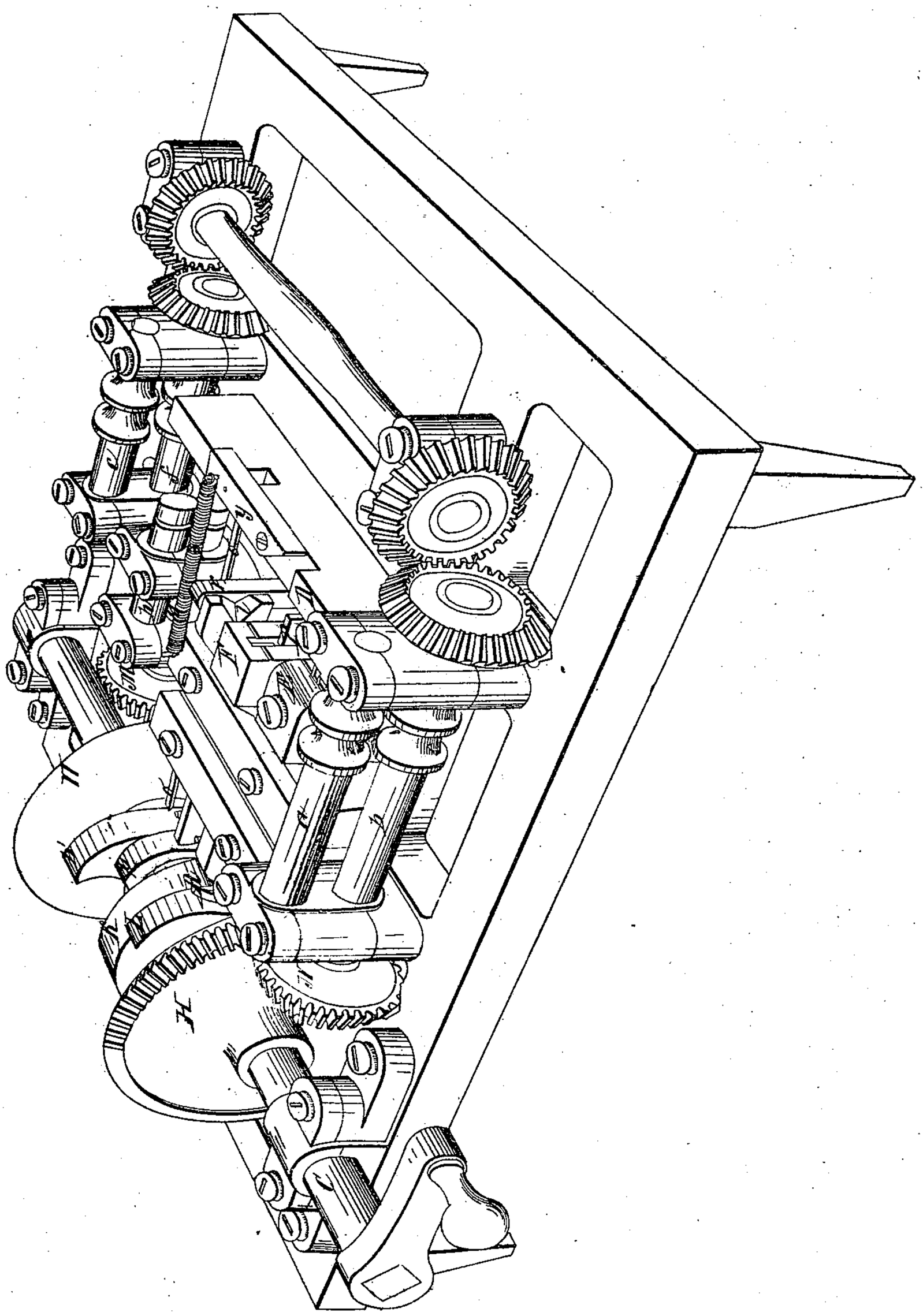
F. H. MOORE.

WIRING BLINDS.

No. 9,032. Patented June 15, 1852.



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UNITED STATES PATENT OFFICE.

FREDK. H. MOORE, OF ITHACA, NEW YORK.

MACHINE FOR WIRING BLIND-RODS.

Specification forming part of Letters Patent No. **9,032,** dated June 15, 1852.

To all whom it may concern:

Be it known that I, FREDERICK H. MOORE, of Ithaca, Tompkins county, and State of New York, have invented a new and useful Machine for Wiring Blind-Rods and Forming the Staples for the Slats; and I do hereby declare that the following is a full, clear, and exact description of the operation and construction of the same, reference being had to the drawing, which represents a perspective view of the entire machine complete.

The operation of wiring the rod and forming the staples for the same is as follows: The blind-rod in its plain state is passed between the toothed or fluted rollers *a b*, which are driven by the bevel gearing N from the main shaft C, the rod being carried along on the guide-table D. When the rod arrives opposite the perforating-slide E, it rests or stops, because the wheel H is toothed only a certain part of its circumference. The slide E is then, by the operation of a cam on the shaft C, pushed forward, causing the rod to be pricked by two awls or needles in the end of the slide E. This process is repeated for the formation of the required number of holes in the rod, which is finally carried along on the table D and out through the toothed or fluted delivery-rollers *c f*. When each pair of holes arrive opposite the wiring-slide F, they have the staples or wires set in them in the following manner: At the same time the rod is being fed through the tooth or fluted rollers *a b* and *e f* the wire is fed between the rollers *g h*, which rollers are driven by the bevel-gearing M from the main shaft C. The length of the wire is increased or diminished by increasing or diminishing the number of cogs or teeth in the large wheel W on the main shaft C. The rollers *g h* carry the wire through the pierced upright *r* and into a groove in the end of the forming-slide F. The wire is then cut off to its proper length by the moving or sliding shears or cutter I, operated on by the cam *i*, and the the slide F is similarly worked by the cam K, both cams *i* and K being on the main shaft C, and the vertical former P, worked by the cam L, through the lever R, serve, by their united surfaces and action, to bend the wire in the groove of the slide F by lapping the wire on either side of the former P when raised. The end of the slide F being formed to suit the wire or staples, as soon as the wire is pressed around the vertical former P by the action of the lever R through the cam L on the main shaft C, the former P is drawn down, leaving the wire bent as follows, ⊂, but sticking in the end of the slide F. The vertical former P being drawn down, the slide F is carried forward by the cam K on the main shaft C, and shoving the bent wires or staples in the holes made by the perforating slide E. During the time the slide F is being acted upon by the cam K the lever O is acted on by the cam *b'*, also on shaft C, throwing the clincher *y* on the guide-table D around, so that the curved part or end comes against the leg of the bent wire or staple protruding through the rod, which bends the wire down against the surface of the rod or "clinching it." The clincher is drawn back to its state of rest by the spiral spring S. The distance of the wires apart in the rod can be governed by adding or diminishing the number of cogs or teeth in the wheel H, and by moving also the awls or needles in the end of the perforation E correspondingly, which awls or needles are held fast by a cap secured with a "set-screw." The wires for the slats are different from those for the rods, each leg being of a length—thus ⊂—those for the rod being in this form, ⊂, having one leg longer than the other in order to go through the rod and be made secure from pulling out by being clinched. The wires for slats are formed in the same manner as those for the rods, merely adding the desired number of cogs or teeth in the wheel W on main shaft C.

It will be seen that the slides for the various operations of pricking, cutting off, bending, and clinching are thrown to their places of rest by springs or their equivalents. Such are the operations of my blind-rod-wiring machine.

It will be seen that the rod, after being started in between the two toothed or fluted rollers *a b*, in due time, and by the various operations herein described, is wired and delivered out through the fluted or toothed rollers *e f*.

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

1. The combining of clinching mechanism,

substantially such as herein described, with devices for feeding the rod and the wire, and piercing the former, and severing, forming, and inserting the latter, whereby I make and firmly attach blind-staples in their proper positions, substantially as herein described.

2. The pivoted clincher arranged and actuated substantially in the manner herein specified.

FREDERICK H. MOORE.

In presence of—
F. R. DANA,
M. A. MOORE.