C. H. Mellor,

Wood Molding Machine.

No. 80,648. Patented Aug. 4, 1868.

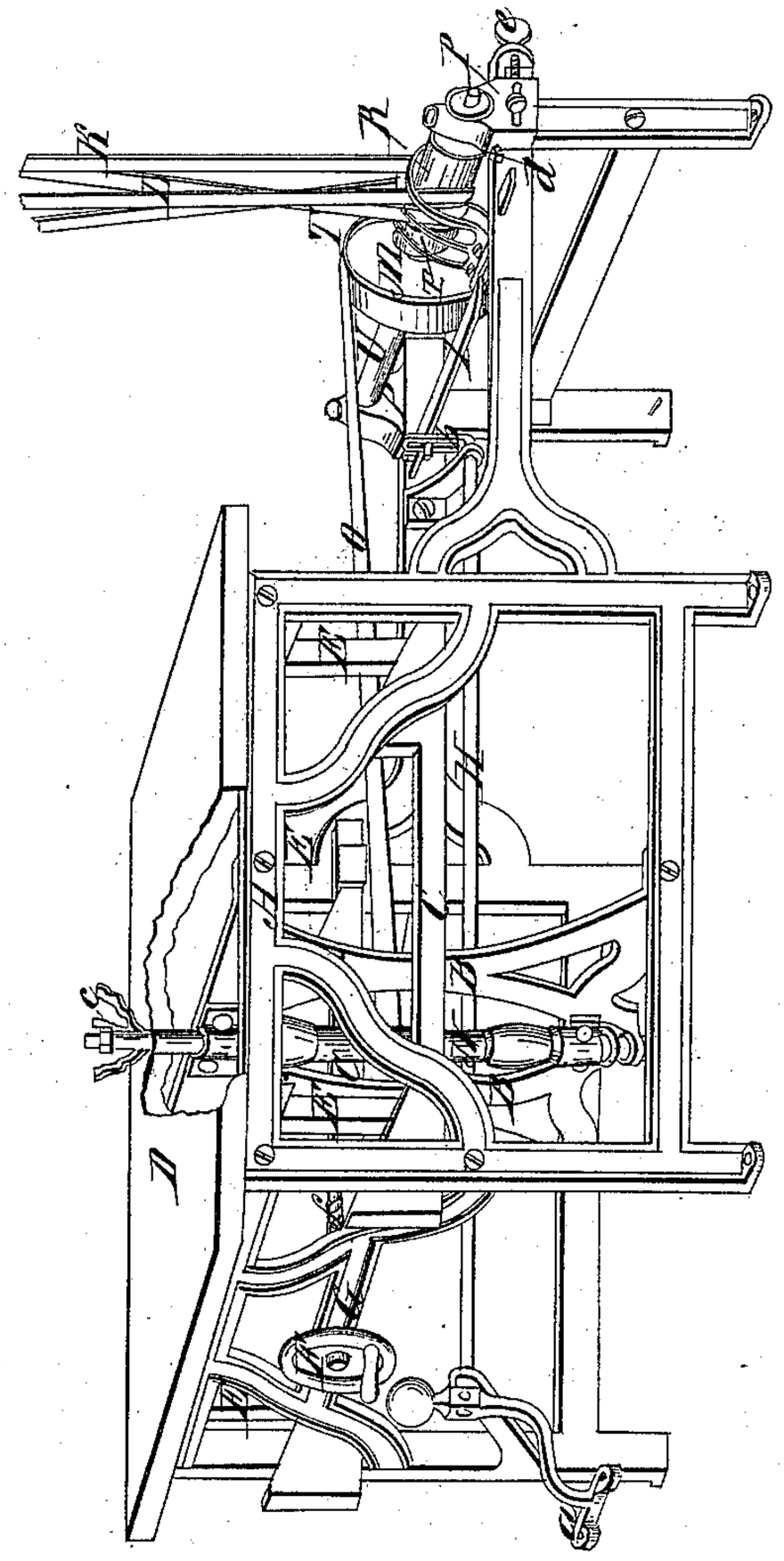

Fig. 1.

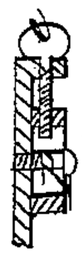

Fig. 2.

Witnesses:

W. H. Laubach

Andrew Reuck

Inventor:

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United States Patent Office.

CHARLES H. MELLOR, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 80,648, *dated August* 4, 1868.

IMPROVEMENT IN MOULDING-MACHINE.

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, CHARLES H. MELLOR, of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Moulding-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the whole machine.

Figure 2 is a section through the dotted line in fig. 1.

Similar letters denote like parts in both figures.

This invention consists of a moulding-machine with certain mechanical devices and arrangements whereby the cutter-head can be made to revolve either to the right or left, as required.

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

The frame of this machine is designed to be constructed of iron, with an adjustable wooden top, as below described.

Letter A, fig. 1, is the frame, cast in pieces, and firmly fastened together by screws, as shown in the drawing.

Letters B B, fig. 1, is the middle piece, carrying the mandrel N of the cutter-head *c*. It is also firmly attached, by screws, to the frame A, of which it makes part.

Letters C C, fig. 1, is a sliding frame, of wood, moving horizontally, and having four inclined faces or planes and a metallic screw-plate, by which, in combination with the posts E E, &c., and wheel F, operating on its screw *f*, passing through the rail G and the said screw-plate, and moving the said frame, the top, D, is elevated or depressed, by the faces of the inclined planes acting against the lower ends of the posts E E, &c.

Letter D, fig. 1, is the top of the machine, (represented in the drawing as opened, to show the top rail of the middle piece B,) and is made of wood, with two battens or cross-pieces on its lower side, into which the posts E E, &c., are framed.

Letters E E, &c., fig. 1, are posts attached to the top D, and sliding perpendicularly through rabbets or grooves in the frame A.

Letter F, fig. 1, is the wheel by which, with its screw *f*, &c., as before described, the top D is raised and lowered.

Letter G, fig. 1, is a rail of the frame A, carrying one end of the screw *f* attached to the wheel F.

Letter H, fig. 1, is a rod by which, in combination with its foot-piece *a* and slotted lever *b*, the belt-shifter I is operated.

Letter *a*, fig. 1, is the foot-piece attached to one end of the rod H.

Letter *b*, fig. 1, is the slotted lever attached to the other end of the said rod H.

Letter I, fig. 1, is a shifter for the belts K and L.

Letter K, fig. 1, is a belt for giving direct motion to one of the pulleys T T on the journal U.

Letter L, fig. 1, is a crossed belt, for giving a reverse motion to the other of the pulleys T T.

Letter N, fig. 1, is the mandrel of the cutter-head, and has two projections, (one at or near each end,) slightly raised above the surface, on one of which the strap O runs when the mandrel is revolving to the right, and on the other of which it runs when it is revolving to the left.

Letters R R, fig. 1, are loose pulleys on the journal U, and carry the belts K and L when the mandrel N is not in motion.

Letters T T, fig. 1, are fixed pulleys on the journal U, and one or other of them is operated singly by the straps or belts K or L, as a direct or reverse motion is required.

Letter M, fig. 1, is the pulley carrying the strap or belt O, and is fixed on the journal U.

Letters P P, figs. 1 and 2, are slides working on projections *d* in the frame A, and carrying the boxes for

the journal U. They are attached loosely to the frame A by a screw passing through a slot, as shown in the drawing.

Letters *e e*, figs. 1 and 2, are set-screws, one end passing through the end of the frame A, and the other end into the slide P.

Letter *c*, fig. 1, is a cutter on the mandrel N, to be substituted by others when necessary.

The machine being firmly fixed in place, and the top, D, properly elevated by means of the wheel F, screw *f*, slides C C, and slides E E, &c., the cutter-head *c* and mandrel N, to which it is attached, are rapidly rotated by the belts L or K and O, and pulleys T or T and M, operated by suitable power applied to them. The piece of wood to be moulded is then placed upon the top, D, and, guided in contact with the cutter-head, by the hands of the operator, is moulded of the form desired.

Should the motion of the cutter-head need reversing while in operation, it can be instantly done by the operator placing his foot on the foot-piece *a* of the rod H, and moving the belt-shifter I, so as to change the driving-belt running on the pulley T or T from K to L or L to K. When the motion of the mandrel N is thus reversed, the belt O will reverse its position from the projection at one end of the mandrel to that on the other end, for which reason a projection at each end of said mandrel is necessary.

Should the belt O become slack at any time, it can be readily tightened by means of the thumo-screws *e e* operating on the slides P P.

The frame A being of iron, and very firm, as constructed and described, conduces, by its solidity, to the smoothness and beauty of the work done; and the cutter-head being so quickly and easily reversed, saves much time and trouble to the operator.

I am aware of the patent of D. A. Harris, dated February 11, 1868, for "moulding-machine," and do not claim any of the devices therein; but

What I do claim is—

The combination of the vertical cutter-bearing mandrel N, having glands for controlling the belt with the table D, made adjustable vertically by wedges placed on a frame, C, controlled by hand-wheel F and screw *f*, all constructed and operated substantially as described.

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Witnesses:

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