J. F. BLACKMAN.

Machine for Carving Wood.

No. 165,150. Patented July 6, 1875.

FIG. 1.

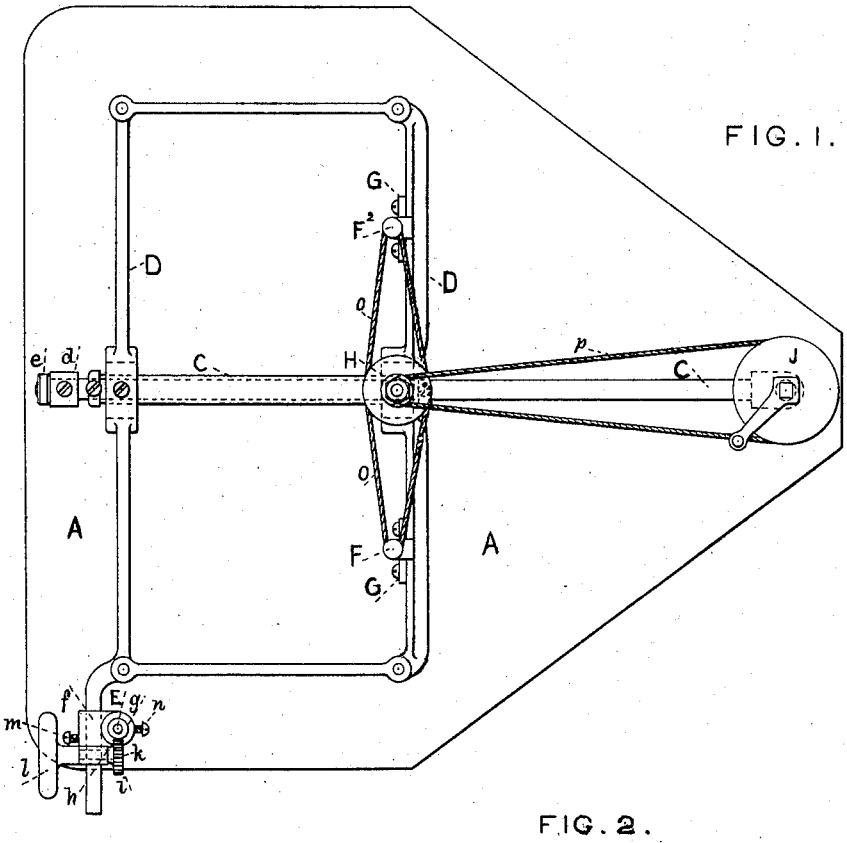


FIG. 2.

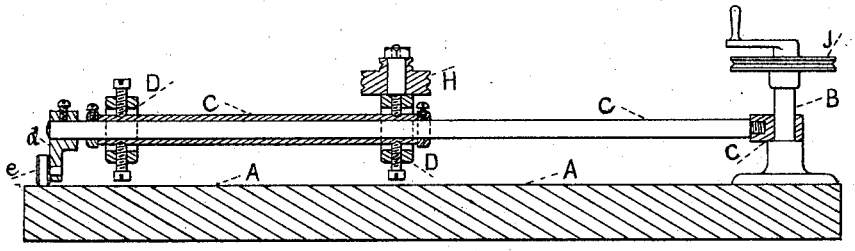
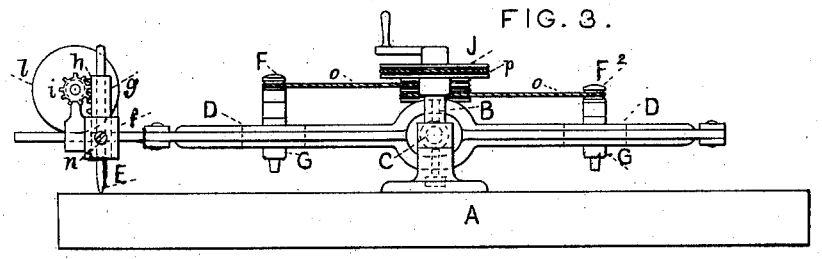


FIG. 3.



WITNESSES.

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JOHN F. BLACKMAN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN MACHINES FOR CARVING WOOD.

Specification forming part of Letters Patent No. **165,150**, dated July 6, 1875; application filed May 26, 1875.

To all whom it may concern:

Be it known that I, JOHN F. BLACKMAN, of Brooklyn, Kings county, New York, have invented, made, and applied to use a new and useful Machine for Carving Wood; and that the following is a full, clear, and correct description of the same, reference being had to the accompanying drawing making part of this specification and to the letters of reference marked thereon, in which—

Figure 1 is a top view of my invention. Fig. 2 is a sectional view of the same. Fig. 3 is an end view of the same.

In the drawing like parts of the invention are designated by the same letters of reference.

The nature of the present invention consists in the construction, as more fully hereinafter set forth, of an improved machine for carving wood or stone.

A represents the table of the machine, upon which the pattern and the wood or stone to be carved are placed. B shows a standard or upright fastened in the table of the machine. C is the central bar of the machine for supporting the frame D, in which are held the pointer E and the cutter F and auxiliary cutter F^2. This central bar C is provided with the opening *c* at one end which is passed over the standard B, and to its opposite end is attached a foot-piece, *d*, provided with a roller, *e*. The frame D consists of the side and end pieces provided at their ends with eyes or openings, through which, when these ends have been brought opposite each other, the pins are passed. The side pieces of the frame are provided with central openings which allow them to be passed over and centered upon the central bar C. One of the side pieces of the frame is made longer than the other, and over it is passed a block, *f*, having in it an opening through which is passed a standard, *g*, provided with a rack, *h*, gearing into a pinion, *i*, secured upon one end of a spindle, *k*, free to revolve in a raised portion of the block, and upon the opposite end of which spindle is secured a hand-wheel, *l*. This block is adjustable upon the side piece, and is held in any desired position by a set-screw, *m*, and the pointer E is inserted and held in the standard *g* by a set-screw, *n*, passed through the standard, and having a bearing upon the pointer E. The position of the pointer relatively to the pattern employed is governed by the rack and pinion—that is, it is raised or lowered to accommodate itself by these means and the hand-wheel. The cutters F and F^2 are free to revolve in hollow standards G, attached to one of the side pieces. The heads of the cutters are grooved to allow belts *o*, passed over the pulley H, to be passed over them. This pulley H is, in turn, driven by a belt, *p*, passed over it and over a pulley, J, secured upon the upper end of the standard B and connected with any suitable motor.

Such being the construction, the operation is as follows: The pattern to be imitated or reproduced upon the wood or stone is placed upon the table A of the machine, and the pointer E is properly positioned to the same. The wood or stone to be carved is placed upon the table A, and the cutter F is inserted in the hollow standard G, and the belt *o* is passed over its grooved end. The pulleys H and J are connected by the belt *p*, and the latter, J, is connected to any suitable motor. The pointer E is then moved by the operator and follows the lines of the pattern or design to be reproduced, and, being attached to the frame D, as described, the cutter F is moved in the same direction, carving or reproducing the pattern or design upon the wood or stone placed upon the table A.

The frame D, centered upon the central bar C, has a rocking as well as a horizontal motion imparted to it, enabling the cutter F to closely follow the course or direction imparted to the pointer, and it will be observed that these motions are effected whether the frame be placed in a vertical or a horizontal position.

The ability to place the frame, with the pointer and cutter, in a vertical position, enables the operator to accomplish a certain class of carving accomplished by few if any of the carving-machines now in use.

When desired to produce a reverse or left of the pattern, the cutter F^2 is secured in the standard G, and the pointer being moved over the pattern, and the cutter F^2 having a movement in the opposite direction to the pointer, a reverse or left of the pattern is produced. This will be found a feature of importance.

Having now set forth my invention, what I claim as new is—

1. The frame D, constructed and operating substantially as described, in combination with an adjustable pointer, E, and cutter F, substantially as and for the purposes set forth.

2. The combination of the frame D, constructed and operating substantially as described, the adjustable pointer E, and the cutters F and F^2, as and for the purposes set forth.

JOHN F. BLACKMAN.

Witnesses:

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ROBERT G. ROBERTS.