(No Model.)

B. V. CROWE.

MITER MACHINE.

No. 403,462. Patented May 14, 1889.

Fig. 1.

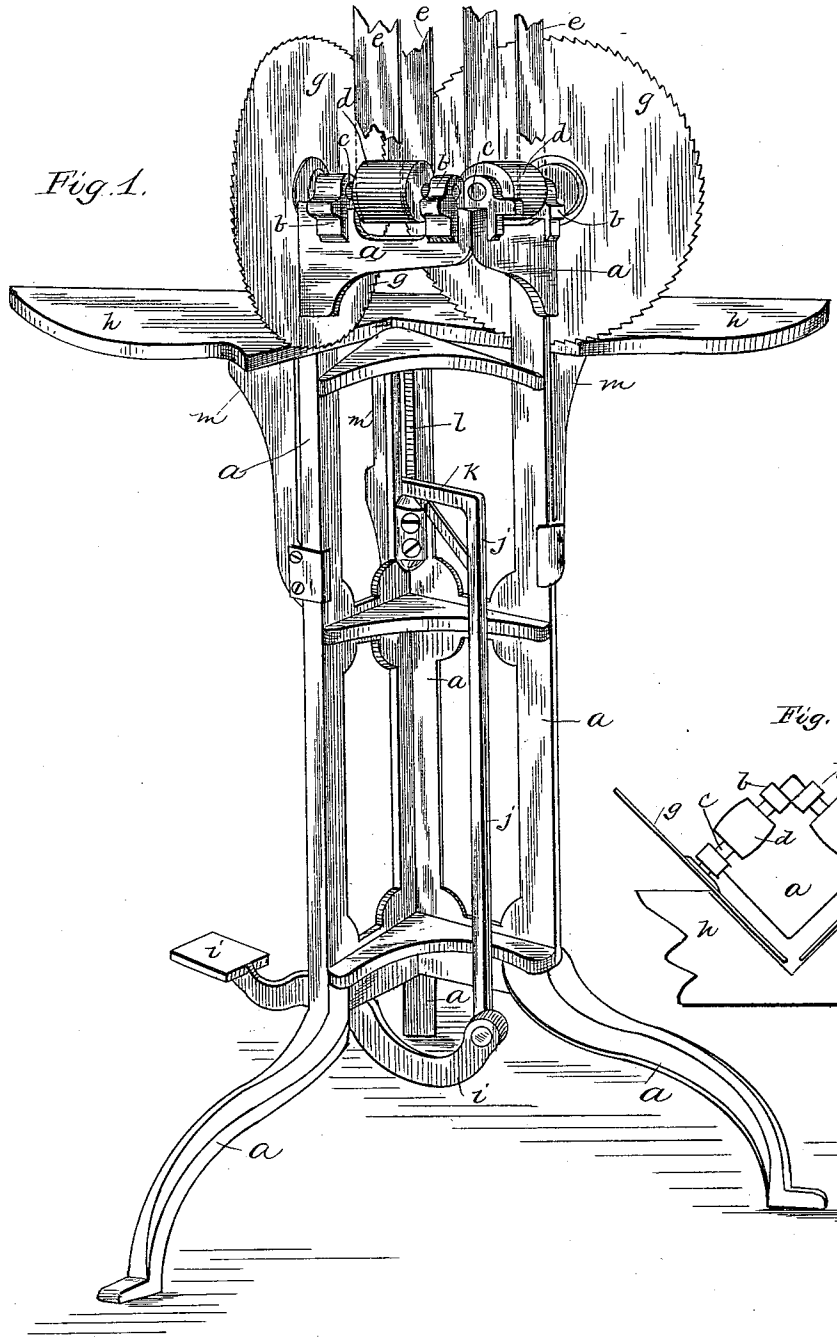


Fig. 2.

Witnesses:

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UNITED STATES PATENT OFFICE.

BENNINGTON V. CROWE, OF PITTSBURG, PENNSYLVANIA.

MITER-MACHINE.

SPECIFICATION forming part of Letters Patent No. 403,462, dated May 14, 1889.

Application filed August 17, 1888. Serial No. 282,969. (No model.)

To all whom it may concern:

Be it known that I, BENNINGTON V. CROWE, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Power Miter-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in a miter-machine; and it consists in a suitable frame having mounted thereon two circular saws placed at an angle with each other and a means for rotating the same, and a vertical moving table for conveying the wood upward against one or the other of the saws, together with certain other details of construction and combination of parts, as will be fully set forth hereinafter.

In the accompanying drawings, Figure 1 is a rear perspective view of my improved miter-machine constructed in accordance with my invention. Fig. 2 is a reduced plan or top view of the same.

To construct a miter-machine in accordance with my invention, I provide a frame, *a*, of suitable size and form of construction, and mount on the top of the same in suitable bearings, *b*, two small shafts, *c*, placed at any desired angle with each other. Attached to the center of each of these shafts *c* are small pulleys *d*, which are connected by belts *e* to overhead driving-pulleys, which construction affords a means of giving the shafts *c* a rapid rotary motion on their axes. Secured to the two ends of these shafts *c* which are the most widely separated are two small circular saws, *g*, which almost come together at the front of the machine.

At the front of the machine and below the center of the saws *g* is a table, *h*, suitably braced to the frame *a*, and adapted to be moved vertically a limited distance by means of a foot-lever, *i*, connected by a rod, *j*, to a short lever or horizontal portion, *k*, projecting through a slot, *l*, in the frame *a*, and rigidly attached to one of the downwardly-extending brackets *m* of the table *h*. This last-described mechanism enables the operator to move the table upward by placing his foot on the lever *i*.

In operation the piece of wood to be cut or mitered is placed on the table *h*, the one end projecting beneath one of the saws *g*. The table *h* is now moved upward, which carries the piece against one of the saws *g*, which being in rapid motion quickly saws the piece to a true miter. The pressure is now removed from the foot-lever *i* and the table *h* allowed to lower itself by gravity.

It is obvious that the two saws *g* are for the purpose of sawing right and left hand miters.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a miter-machine, the combination of a vertical triangular frame, the rotary shafts journaled in suitable fixed bearings and arranged at an angle to each other, the saws carried by said shafts, the vertically-movable table arranged in a horizontal position beneath said saws and having a V-shaped slot riding against the legs of the vertical frame, and a treadle connected by an intermediate rod with said table for moving the latter vertically, substantially as and for the purpose described.

2. In a miter-machine, the combination of a vertical triangular frame having a longitudinal slot, *l*, formed in one of the legs thereof, the inclined rotary shafts carrying the saws, the horizontal gravity-table arranged on the frame below the saws and having a V-shaped recess in one side thereof, the depending arms fixed to the table and having the guide-plates which slide on the legs of the vertical frame, a horizontal arm, *k*, working in the slot *l* and secured to one of said depending arms, and a treadle connected by an intermediate rod with said horizontal arm, substantially as and for the purpose described.

3. In a miter-machine, the combination of a vertical triangular frame, the inclined rotary arbors or shafts journaled thereon and carrying the saws, a horizontal gravity-table hav-

ing a V-shaped slot in one side thereof and fitted close against the legs of said frame, the depending arms *m*, fixed to the table and carrying the clamping-plates which engage and slide on the legs of said frame, and a treadle for elevating the table, substantially as and for the purpose described.

In testimony that I claim the foregoing I hereunto affix my signature this 23d day of June, A. D. 1888.

BENNINGTON V. CROWE. [L. S.]

In presence of—

O. D. LEVIS,

FRANK W. SMITH.