J. EMERY.

MITER-MACHINE.

No. 185,168. Patented Dec. 12, 1876.

Fig. 2.

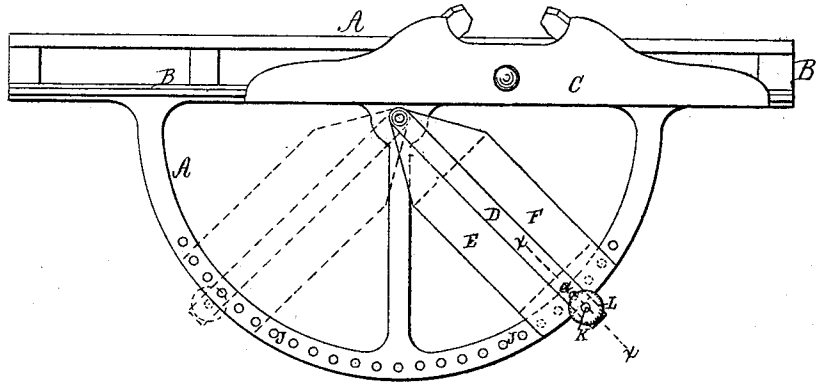


Fig. 1.

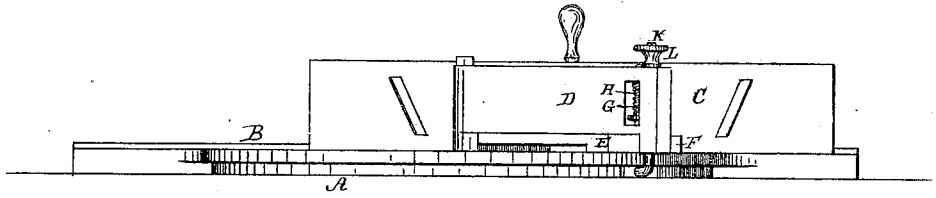
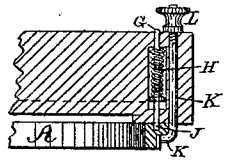


Fig. 3.



Witnesses.

E. A. Hemmenway.

B. Andrews Jr.

Inventor.

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by his Atty
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UNITED STATES PATENT OFFICE.

JOHN EMERY, OF SALEM, MASSACHUSETTS.

IMPROVEMENT IN MITER-MACHINES.

Specification forming part of Letters Patent No. **185,168**, dated December 12, 1876; application filed January 4, 1876.

To all whom it may concern:

Be it known that I, JOHN EMERY, of Salem, in the county of Essex and State of Massachusetts, have invented an Improvement in Miter-Machines; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The object of my invention is to finish or plane wood which has first been sawed or cut to an angle, and designed for use in cabinet-work, the manufacture of picture-frames, &c.

The nature of the invention consists in the combination of devices employed, as hereinafter more fully set forth.

One particular advantage of my invention is that my rest or guide is provided with a shelf or lip on each side, which is very essential, inasmuch as (if it is inconvenient to hold the molding or stock on one side of the rest) it can readily be held on the other side. And, again, as the two shelves and the frame are made parallel with each other, and the rest or guide and the face of the plane perpendicular thereto, it is impossible that the work performed on the machine can be other than true, and the joints will invariably fit each other perfectly.

In the drawings which accompany and form a part of this specification, Figure 1 is an edge view. Fig. 2 is a plan of my invention; and Fig. 3 is a sectional elevation on the line *x x* of Fig. 2.

A represents the frame, having ways B, on which slides the plane C, which is provided with a knife at each end. Pivoted to the frame near the face of the plane is the rest or guide D, provided with lips or shelves E F, and having near its outer end the retaining-pin G, acted upon, by the spiral spring H, to force it into the holes J in the frame. The rest is also provided with the clamping-rod K, extending under the frame, and having at its upper end the thumb-nut L.

The operation of the machine is as follows: The thumb-nut L being loosened, the pin G is raised, and the rest swung round until the desired angle is obtained, when the pin is allowed to drop into the hole in the frame provided for that purpose; or, should there be no hole, the rest is held in place by the rod K and thumb-nut L; but it will be obvious that the pin and the clamping-rod will never be required both at the same time. Having planed the piece at this angle, to plane the piece that is to match it, it simply becomes necessary to raise the pin or loosen the clamp, and swing the rest to the required angle on the opposite side of the center line, as, in connection with this frame and rest, I use a plane with a knife at each end, so that it can be used to cut in either direction.

I claim—

The combination of the plane C with the frame A, pivoted guide D, having the lips or shelves E F, retaining-pin G, clamping-rod K, and thumb-nut L, all constructed to operate substantially as shown and described, and for the purpose specified.

Executed at Salem, county of Essex, and State of Massachusetts, this 31st day of December, A. D. 1875.

JOHN EMERY.

Witnesses:

C. WARREN BROWN,

A. S. BROWN.