

H. MALIN, G. W. MALIN, & A. D. MALIN.
 Improvement in Mitering Machines.
 No. 125,745. Patented April 16, 1872.

Fig. 1.

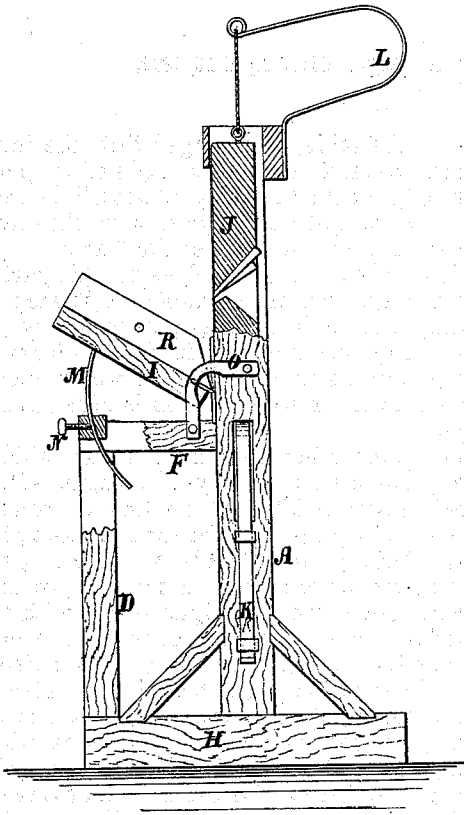


Fig. 2.

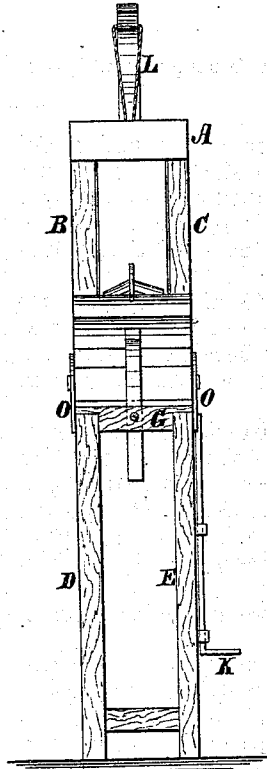


Fig. 3.

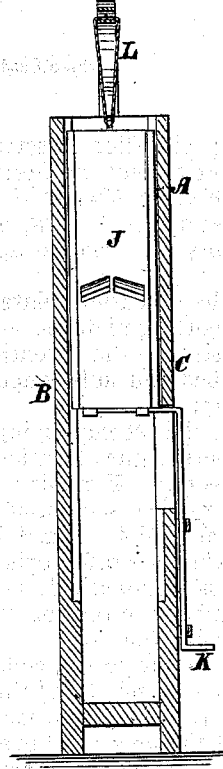


Fig. 4.

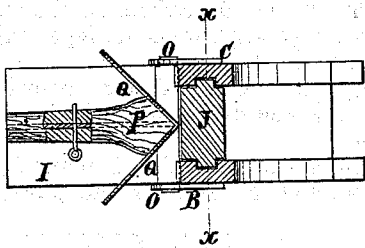
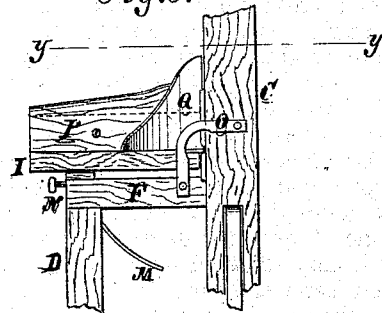


Fig. 5.



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UNITED STATES PATENT OFFICE.

HARRY MALIN, GEORGE W. MALIN, AND ALBERT D. MALIN, OF PLEASANTVILLE, PENNSYLVANIA.

IMPROVEMENT IN MITERING-MACHINES.

Specification forming part of Letters Patent No. 125,745, dated April 16, 1872.

Specification describing a new and useful Improvement in Miterring-Machines, invented by HARRY MALIN, GEORGE W. MALIN, and ALBERT D. MALIN, of Pleasantville, in the county of Venango and State of Pennsylvania.

The invention relates to miterring-machines for cutting picture-frame and box joints; and consists in the invention hereinafter fully described and subsequently pointed out in the claim.

In the accompanying drawing, Figure 1 represents a side elevation of the machine, partly in section. Fig. 2 is a front elevation. Fig. 3 is a vertical section of the machine on the line *xx* of Fig. 4. Fig. 4 is a horizontal section looking down from the line *yy* of Fig. 5. Fig. 5 is a sectional side view.

Similar letters of reference indicate corresponding parts.

A is the frame, consisting of the long uprights B and C and the two short uprights D and E. F F are horizontal timbers, which connect the long and the short uprights together. G is a cross-piece, which connects the upper ends of the two short uprights. H is the bed of the machine. I is the adjustable table, which is supported by the horizontal timbers F F and cross-timber G when it stands at right angles with the plane. J is the plane, which is confined in grooves in the uprights B C, as seen in Fig. 4, to which a vertical motion is imparted by means of treadle K and spring L, or by any other convenient means. The plane has a double face, with two cutting-bits, arranged, as seen in the drawing, so as to give a drawing cut. The table I is raised to an angle of forty-five degrees, as seen in Fig. 1, but it may be adjusted to any intermediate angle, and fastened by means of the curved plate M, attached to the bottom of the table, which plate passes down through a mortise in the cross-piece G, where it is fastened by the set-screw N. The fronts of the two long uprights have metallic plates thereon, as also has the

edge of the table, so arranged that the table turns up as on a hinge. The ends of the plate on the edge of the table extend out a little from the table, so that they engage with the circular bars O O on the sides of the frame.

We do not confine ourselves to this particular arrangement of the table, as it may be confined and made to turn up in various ways. When in the position seen in Fig. 1, it is ready for the molding or other piece of wood for cutting a true miter when motion is given to the plane.

For a joint other than a miter, the table is lowered and fastened at any other angle. When placed as seen in Fig. 5, the plane will square the ends of a piece of wood for a right-angled joint. P is a guide attached to the top of the table by means of a vertical plate, R, so that its center shall stand at right angles with the face of the plane, upon the inner end of which guide is the right-angle plate Q. By putting this guide-plate Q upon the table, as seen in Fig. 4, pieces of board for making boxes or for other purposes may be cut edgewise while resting upon the table. This guide may be made adjustable on the table, so that a piece of lumber or a board when standing on edge may be cut to any other angle than a miter.

We do not limit or confine ourselves to the precise form or arrangement of any of the parts herein shown and described, as they may be varied in many ways without departing from our invention.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination of table I, plane J, guide P, and plate Q, as and for the purpose described.

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Witnesses:

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