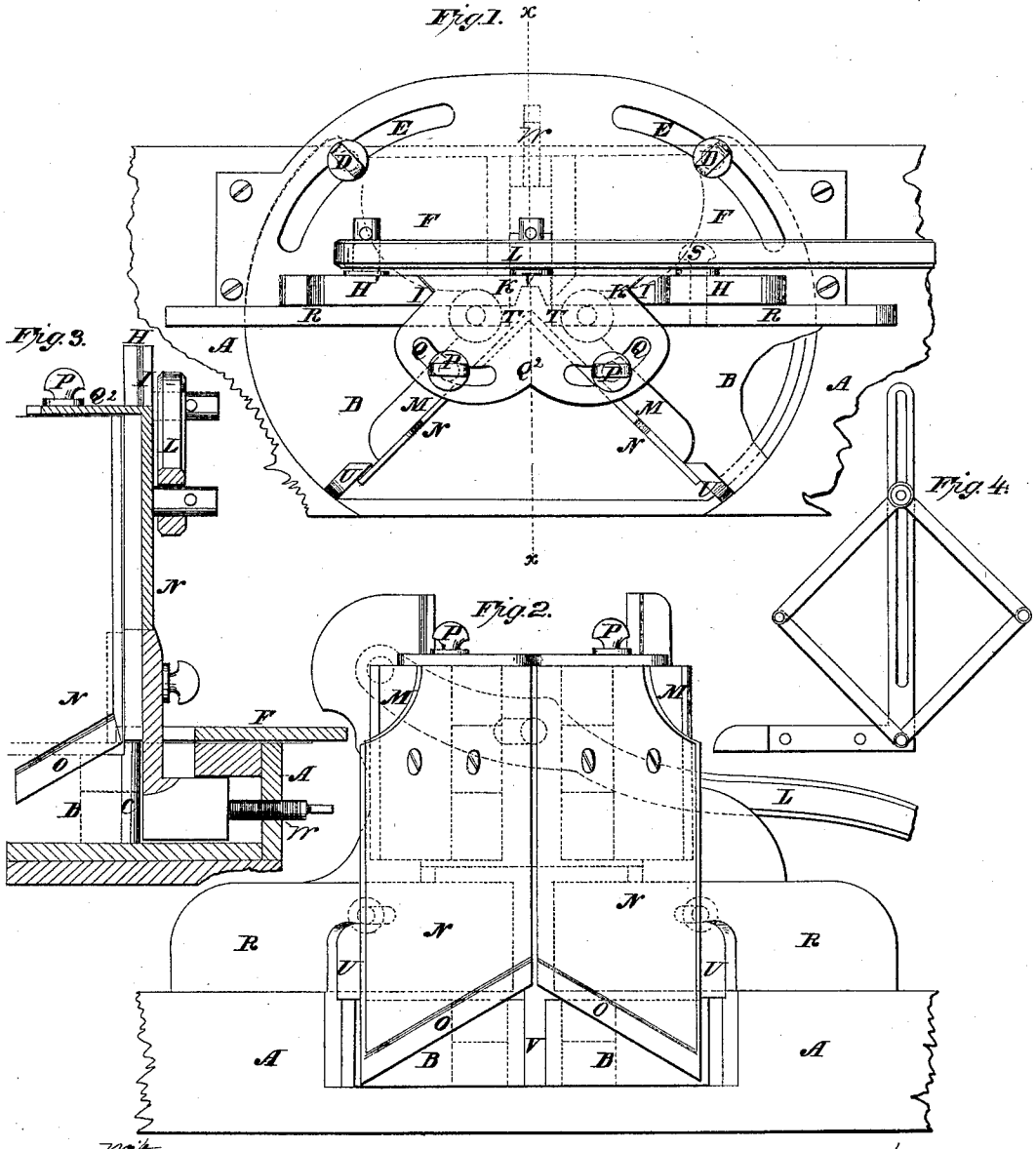
R. F. Tompkins,

Mitering Machine,

No. 69,510, Patented Oct. 1, 1867.



Witnesses:

Thos. Tuschl.
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A.M. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

United States Patent Office.

ROBERT F. TOMPKINS, OF NEW YORK, N. Y.

Letters Patent No. 69,510, *dated October* 1, 1867.

IMPROVEMENT IN WOOD-MITREING MACHINES.

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, R. F. TOMPKINS, of the city, county, and State of New York, have invented and useful Improvement in "Machines for Cutting Mitres;" and I do hereby declare that the following full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan or top view of the machine.

Figure 2 an elevation or view of the machine from its front side.

Figure 3 a transverse vertical section taken in the plane of the line *x x*, fig. 1, and

Figure 4 a detail view of a tool suitable for setting the machine for cutting mitres of different degrees.

Similar letters of reference indicate like parts.

The machine embraced in the present invention consists of two cutter or knife-blades arranged to be moved up and down in a vertical plane, and so as to be adjusted with regard to each other at a greater or less angle in combination with rests or blocks for the material or stuff to be cut, correspondingly susceptible of adjustment, and to be brought into the proper relative positions with regard to the cutter or knife-blades.

A, in the drawings, represents a block or base, to and in which my improved mitre-cutting machine is secured and arranged. In this block A are two similar sector-shaped rests or blocks, B. These blocks B are each hung upon a separate centre-pin, C, so as to swing or turn thereon and in the block in a horizontal plane, the upper surface of the two blocks being flush and even with the upper surface of the block in which they are hung. D, set or thumb-screws, one to each rest-block B, into which they screw, passing through a circular-shaped slot, E, in a stationary board or plate, F, secured to the main block A over the position of the rest-blocks B. The centre of each circular slot E is at the centre-pin to the rest-blocks, and by the set or thumb-screws D the said blocks can be thus secured in any position to which they may be swung or brought with reference to each other, and within the limit of the length to the slots E. H H, uprights or posts secured to upper side of plate F, with their edges I parallel to each other, and angular shaped in cross-section. Between the edges I, to the post H, a plate, K, is arranged to move up and down or in a vertical plane. L, a lever-handle hung to plate K, for operating the same between its guide-posts. To the plate K two wing-pieces M are hinged, so as to swing around thereon in a circular direction, the centre-pin of each wing M being in corresponding vertical planes to the centre-pins to the rest-blocks below. To each wing a knife or cutter-blade, N, is fastened in a vertical position, each cutter-blade having its lower edge sharpened, and inclined or angular in direction to the length of the blade. P, thumb or set-screws screwing into the wing-pieces M, one to each of the same, passing through circular slots Q, concentric with the wing-centres of fixed plate Q^2. These thumb-screws enable the wing-pieces to be secured in any position to which they may and can be adjusted. R, strips secured to front side of posts H by means of thumb-screws S passing through slots of the posts, so that they can be adjusted to bring their inner ends T nearer to or further from each other. These strips R act as guides to the stuff or material to be cut in the machine.

In the use of the machine above described, first loosen the set-screws to the cutter-carrying arms and the rest-block, when, by means of the instrument shown in fig. 4, bring the two cutter-blades to the desired angle or direction apart, where secure them by their set-screws. Now bring the rest-blocks to a corresponding angular position with the knife or cutter-blocks, and so that the side T to such blocks will form guides to the cutting edge of the blades in their downward movement, which being done, there secure them by tightening their set or thumb-screws, and the machine is then ready for cutting, for which purpose the cutter-blades are raised by properly lifting the handle-lever, when, sliding the stuff along to the position of the cutters over and upon the blocks B, bring down the knife-blades thereon, each of which will cut through the stuff in an angular direction to its length, and, of course, corresponding to the angular direction in which they were previously adjusted. To enable the rest-blocks to be the more readily adjusted in position to the knife-blades, I provide each one with an upright common guide-piece U. V, an upright grooved post at the angle to the cutter-blades N. This post is arranged to be moved or adjusted in position either more or less in or out, being operated through a thumb-screw, W, properly applied thereto.

I claim as new, and desire to secure by Letters Patent—

1. The adjustable sector-shaped rest-blocks B, having guide-pieces U, in combination with the guide-wing M, adjusted by means of the set-screws P in the slotted plate F and bearing the inclined cutter-blades N, and with the adjustable guide-strips R, substantially as described for the purpose specified.

2. The adjustable grooved post V, in combination with the cutter-blades N and rest-blocks B, as and for the purpose specified.

The above specification of my invention signed by me this 22d day of April, 1867.

ROBT. F. TOMPKINS.

Witnesses:

WM. F. MCNAMARA,

ALBERT W. BROWN.