H. HEMPEL.

Miter-Box.

No. 159,573 Patented Feb. 9, 1875.

Fig. 1

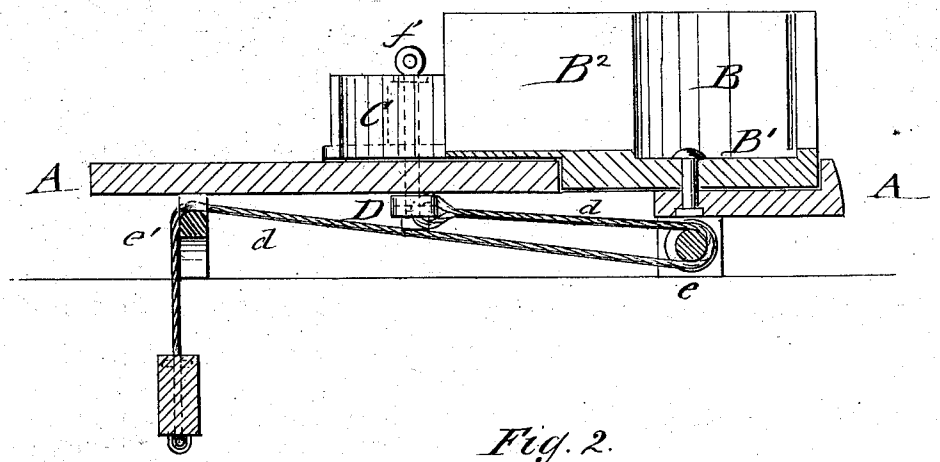
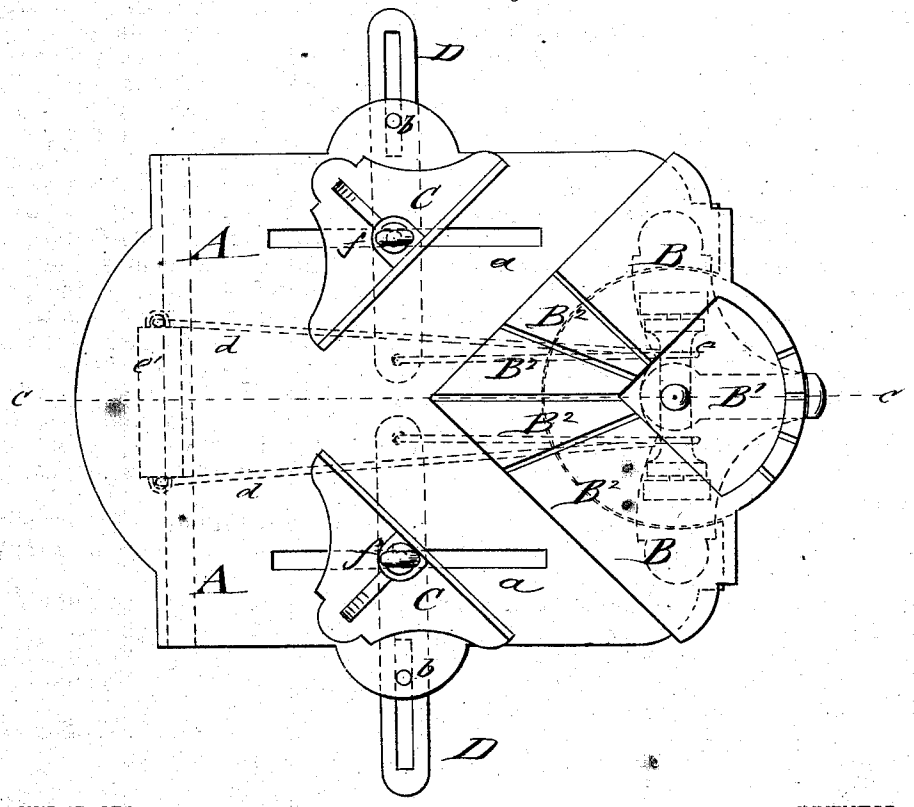


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HERMAN HEMPEL, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN MITER-BOXES.

Specification forming part of Letters Patent No. **159,573**, dated February 9, 1875; application filed June 27, 1874.

To all whom it may concern:

Be it known that I, HERMAN HEMPEL, of Syracuse, in the county of Onondaga and State of New York, have invented a new and Improved Miter-Box, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of my improved miter-box on the line *c c*, Fig. 2; and Fig. 2, a plan view of the same.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claim.

In the drawing, A represents the base-plate of my improved miter-box, to the rear part of which is pivoted the guide-block B. Guide-block B is constructed of a rotating base-plate, B^1, to which vertical sections B^2 are applied, for cutting miters of forty-five degrees, sixty degrees, seventy-two and a half degrees, ninety degrees, or of any other suitable angle used for special purposes.

The sections or blocks B^2 may be either cast in one piece with the base-plate B^1, or bolted on the same, the mitering-guide slots being cut as required.

The front part of guide-block B forms a right angle, while the rear part is of arc shape, and slotted to guide the saw jointly with the front block, as shown in Fig. 2. A longitudinal central slot of the main base-plate A takes up the saw when cutting the miters.

The movable clamps C are adjustable in slots *a* of base-plate A, being parallel to the longitudinal center slot of the same. They are pivoted to levers D at the under side of base-plate, which are guided, by their slotted outer ends, along stationary pins *b* of base-plate A, and applied, at their opposite ends, to cords *d*, which pass over a lateral pulley, *e*, below the pivoted guide-block, and suitable front pulleys or guides, *e'*, to a treadle, for carrying the clamps C thereby against the molding to be cut. The clamps C are firmly secured in position by top set-screws, *f*, and the molding then cut to the required miter.

The movable clamps C may be adjusted to the different miters of the guide-block, and also readily adjusted sidewise for clamping firmly moldings to the guide-block, for being glued or otherwise joined.

The rapid adjustment of the clamps to the required mitering angle and the molding by the simple pressure on the treadle make the miter-box very convenient for practical application.

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

The guide-block of a miter-box, constructed with a rotary base-plate, B^1, and sectional blocks B^2, made right-angled in front and formed circular in the rear, as and for the purpose specified.

HERMAN HEMPEL.

Witnesses:

A. V. LANDBEY,

PHILIPP ROTH,

M. DIBBLE.