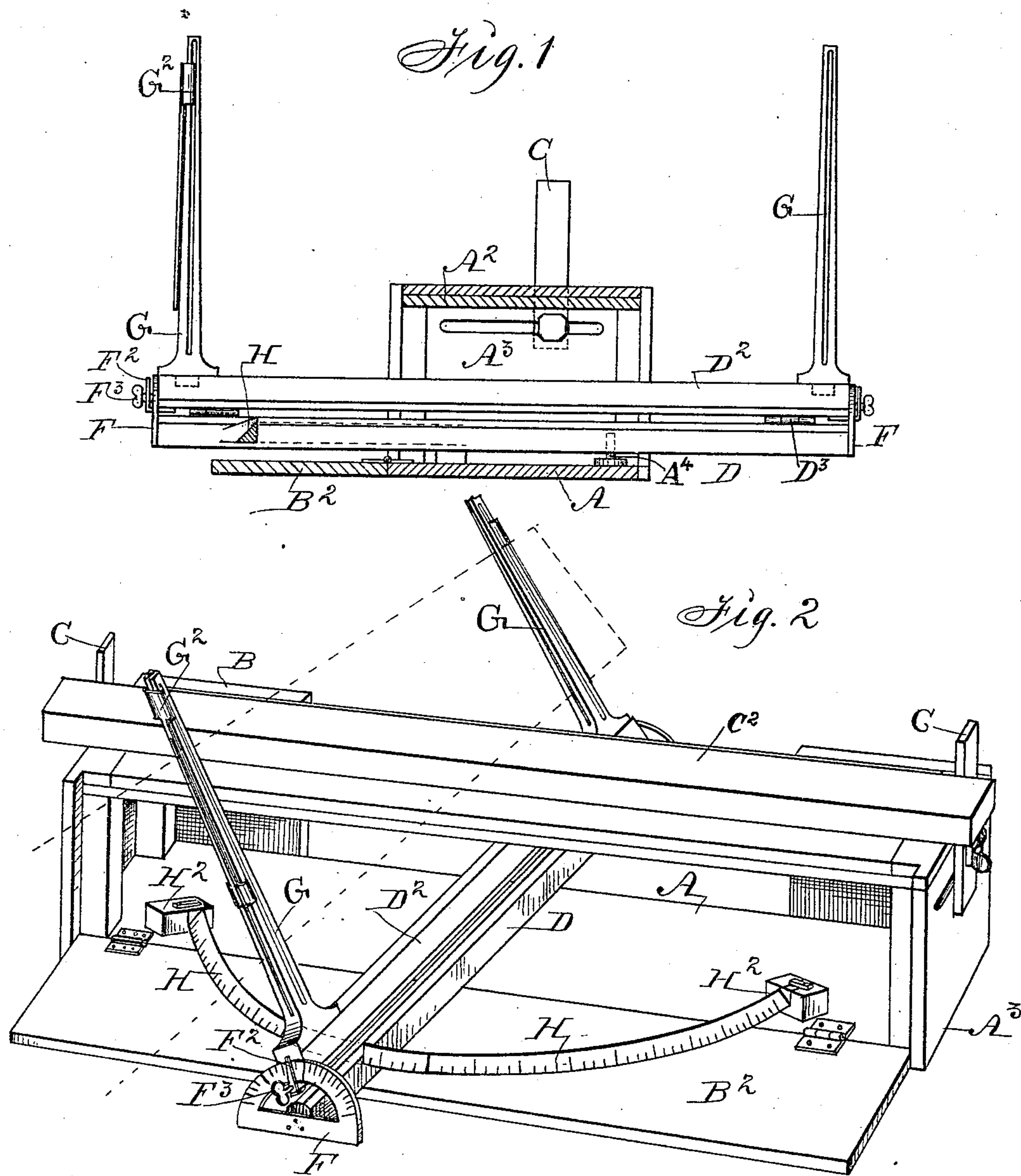


(No Model.)

J. E. BUNDY.
MITER BOX.

No. 426,767.

Patented Apr. 29, 1890.



Witnesses:

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UNITED STATES PATENT OFFICE.

JESSE E. BUNDY, OF SAN RAFAEL, CALIFORNIA.

MITER-BOX.

SPECIFICATION forming part of Letters Patent No. 426,767, dated April 29, 1890.

Application filed June 7, 1889. Serial No. 313,430. (No model.)

To all whom it may concern:

Be it known that I, JESSE E. BUNDY, a citizen of the United States of America, and a resident of San Rafael, in the county of Marin and State of California, have invented a new and useful Miter-Box, of which the following is a specification.

My object is to facilitate sawing a kerf across a piece of wood at any angle desired, and also at the same time inclining the kerf vertically at any degree desired.

My invention consists in the construction and combination of saw-guides, a guide-carrier, quadrants, and a box, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a transverse sectional view of the box, showing the guides and guide-carrier connected therewith. Fig. 2 is a perspective view of the complete machine in position, as required, for practical use in supporting a piece of wood and applying a saw to cut a kerf in the wood.

A is the bottom, A² the top, and A³ the ends, of a box made of wood, of any size desired. The rear side is closed at its end portions by fixed pieces B.

B² is a door hinged to the front edge of the bottom A.

C are posts adjustably connected with the ends A³ by means of clamping-bolts extended through horizontal slots in such a manner that they can be placed in position to support a piece of wood C², placed on top of the box, as shown in Fig 2.

D is the base of the guide-carrier, pivoted to the bottom A by means of a post A⁴, so that it can be placed at any angle desired.

D² is a section of the carrier hinged on the top of the base D by means of hinges D³. The pieces D and D² are straight bars of equal length.

F are quadrants fixed to the ends of the carrier pivoted on the top of the base A, and F² are pointers fixed to the ends of the hinged part D². F³ are set-screws that extend through the pointers and into the ends of the hinged part D² in such a manner that the pointers can be clamped against the quadrants F to bind the hinged part D², as required, to retain it in a fixed position.

G are slotted posts detachably connected with the hinged section D² of the carrier by means of mortises and tenons, or in any suitable way, in such a manner that they will project vertically in the same plane, and adapted to admit a saw to be extended through them, as indicated by dotted lines in Fig. 2.

G² is an auxiliary guide made of steel plate and adjustably connected with one of the guides G in such a manner that it can be raised and lowered relatively to the saw, as required, to aid in keeping the saw moving in a straight line while in operation.

H is a quadrant made of metal and angular in its cross-section. It is detachably connected with the base A of the box by means of sockets H², fixed on top of the base in such a manner that they will admit and retain the ends of the quadrant after it has been extended through a mortise formed in the pivoted base D of the guide-carrier, and also, as required, to retain the quadrant in concentric position with the center of motion of the pivoted carrier. Buttons pivoted on top of the sockets are turned aside to admit the ends of the quadrant, and then replaced to fasten the ends.

In the practical use of my miter-box thus constructed the guide-carrier D can be set at any angle desired relative to the quadrant H by adjusting it horizontally, and the saw-guides G inclined vertically by adjusting the hinged part D² of the carrier, and when adjusted as desired, and a piece of molding or wood of any shape is placed on top of the box and against the posts C and a saw extended through the slotted guides, the wood can be readily cut to produce a miter-kerf of any diagonal and vertical angles required, and when the machine is not in use all the detachable parts can be placed inside of the box and the hinged door closed to protect them.

I claim as my invention—

1. In a miter-box, the combination of a pivoted saw-guide carrier formed in two parts of equal length and the upper part hinged to the top of the lower, and saw-guides attached to the end portions of the hinged part to extend vertically, and a quadrant attached to one or each end of the pivoted carrier, and a quadrant fixed to the base and extended through a mortise in the pivoted saw-guide

carrier, for the purpose of guiding a saw diagonally and also vertically at the same time.

2. An open-sided box, a saw-guide carrier D D², pivoted to a box, a quadrant H, attached to the box or base and extended through a mortise in the end of the saw-carrier, quadrants F and pointers F², attached to the ends of the guide-carrier, and saw-guides G, attached to the same carrier, constructed, arranged, and combined to operate in the manner set forth.

3. A miter-box comprising an oblong box having one of its sides open at its central portion and a door hinged to its base on the other side, adjustable posts attached to the

ends of the box, a saw-guide carrier in the form of a bar pivoted on top of the bottom of the box, a bar hinged on top of the pivoted bar, quadrants and pointers attached to the ends of the carrier, slotted saw-guides attached to the carrier to project vertically, and a quadrant extended through a mortise in the carrier and attached to the box in a concentric position to the pivoted carrier, arranged and combined to operate in the manner set forth, for the purposes stated.

JESSE E. BUNDY.

Witnesses:

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