

T. E. MOON.
DOOR SUPPORTING CLAMP.
APPLICATION FILED JAN. 26, 1912.

1,054,019.

Patented Feb. 25, 1913.

Fig. 1.

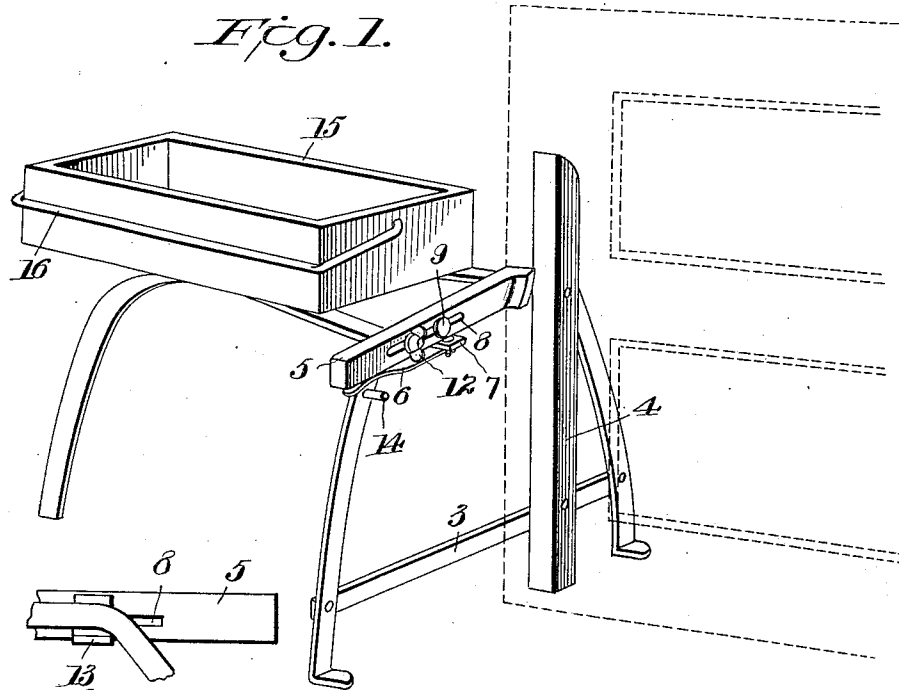


Fig. 4.

Fig. 2.

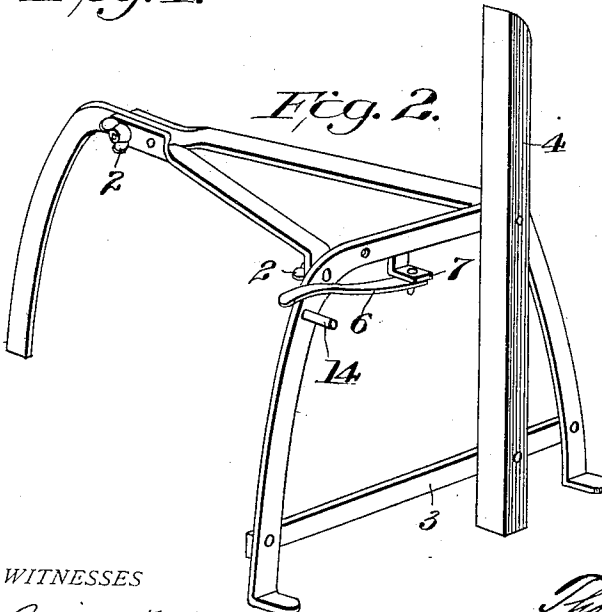
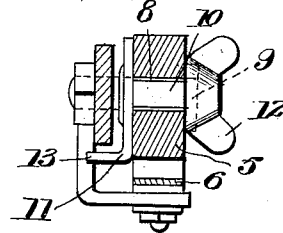


Fig. 3.



WITNESSES

Reina J. Finotti,

W. Wallace Nairn Jr.

INVENTOR

Thomas Edward Moon
By *Julius Edward*
Attorney

UNITED STATES PATENT OFFICE.

THOMAS ELWOOD MOON, OF SABINA, OHIO, ASSIGNOR OF ONE-HALF TO FREDERICK GALLAHER, OF SABINA, OHIO.

DOOR-SUPPORTING CLAMP.

1,054,019.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, THOMAS ELWOOD MOON, a citizen of the United States, residing at Sabina, in the county of Clinton and State of Ohio, have invented certain new and useful Improvements in Door-Supporting Clamps, of which the following is a specification.

My invention relates to devices for supporting doors or window sashes while they are being trimmed or fitted with hinges and the object of the invention is to provide a portable device of simple and inexpensive construction by which the door or window will be firmly held while resting on an edge.

The invention also has for its object the provision of simple and easily operated means for securing and releasing the door or window, to provide means for adjusting the clamp to the thickness of the door or window, to provide means for holding the workman's tools, and generally to improve the construction and increase the efficiency of apparatus of the stated class.

The invention consists in certain novel features which will be hereinafter first fully described with reference to the accompanying drawings and then particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of the device as it appears when holding a door; Fig. 2 is a similar view of the frame with the tool holder and the movable clamping jaw removed; Fig. 3 is a detail cross section taken through the movable jaw and adjacent parts on the axis of the bolt carrying the stop plate; and, Fig. 4 is a detail rear elevation of a portion of the frame.

My improved apparatus comprises a preferably triangular upstanding frame composed of steel bars possessing some resiliency and secured together by suitable bolts and wing nuts, as indicated at 2. The resiliency of the bars forming the frame causes it to grip the floor upon which it is placed without injuring the same and be thereby held against slipping. The side of the frame forming the base of the triangle, in the illustrated form, constitutes the front of the device and is reinforced by a brace 3, secured to and extending between the legs, and a vertical post or bar 4 is secured rigidly to the said brace and the top cross bar of the frame to constitute the fixed jaw of the clamp. The movable jaw 5 is in the form of

a bar or lever pivotally mounted on the frame, and engaged on its under side by a spring 6 which is secured to a lug or bracket 7 on the frame, as shown most clearly in Fig. 2. The jaw 5 is constructed with a longitudinal slot 8 through which projects the fulcrum pin or bolt 9 fixed in the upper cross bar of the frame. A bolt 10 also extends through the slot 8 and carries a stop plate or bracket 11 on its inner or rear end between the frame and the jaw, as shown most clearly in Fig. 3, a wing nut 12 being mounted on the outer or front end of the bolt to bear against the jaw and thereby secure the bolt and the stop plate at any desired point along the slot. The stop plate has a rearwardly projecting lip 13 at its lower end which is adapted to impinge against the supporting leg of the frame, as shown most clearly in Fig. 4, and thereby prevent the jaw moving directly away from the work. It will be readily understood that by adjusting the stop plate along the jaw more or less outward movement of the jaw will be permitted and the device thereby adapted to clamp doors or windows of various thicknesses.

A pin 14 on the frame below the jaw serves as a stop to limit the downward movement of the handle end of the jaw.

Secured on top of the frame is a box or receptacle 15 adapted to receive the tools or materials needed by the workman and equipped with a bail or other form of handle 16 by which the device may be carried from place to place.

The use of the device will be readily understood. Pressure is applied to the outer end of the movable jaw, that is the end remote from the fixed jaw, so as to move the same downward against the force of the spring. It will be observed that the portion of the supporting leg of the frame against which the stop plate impinges is inclined downwardly and away from the fixed jaw. Said stop plate is adapted to ride down said inclined portion of the leg when the outer end of the movable jaw is depressed whereby said movable jaw is withdrawn from the fixed jaw. The jaws will be thus separated sufficiently to admit the door or window between them. When the movable jaw is released said stop plate will ride up said inclined portion, under the influence of the spring, with the result that said movable

jaw will be advanced toward said fixed jaw for clamping the work against the latter. The door or window will thus be supported firmly edgewise on the floor without the use
5 of nails or other devices which would injure the floor. The workman has access to all points of the door so that his work may be done easily and expeditiously. The movable jaw may be operated by the foot, leaving
10 the hands free to manipulate the door. The frame with the box thereon may be utilized as a trestle for sawing lumber or other purposes. It also serves as a bench or seat upon which the workman may stand
15 or sit while nailing on casing or capping over doors or windows, setting mortise locks, etc. The device is light and may be easily moved from place to place, it is strong and will hold the door firmly, and is free of
20 complicated constructions so that it may be produced at a slight cost and it is not apt to get out of order.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—
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1. A door-supporting clamp comprising a frame, a fixed jaw mounted thereon, a movable jaw having sliding pivotal connection with said frame, the latter having a
30 portion inclined away from said fixed jaw, a stop plate carried by said movable jaw and adapted to ride along said inclined portion of the frame, and a spring bearing upon the movable jaw and tending to hold the
35 same in an advanced position.

2. A door-supporting clamp comprising a frame, a fixed jaw thereon, a movable jaw having sliding pivotal connection with said frame to coöperate with the fixed jaw, and a stop secured on the movable jaw to engage
40 the frame for guiding the outward sliding movement of said jaw in a curved direction.

3. A door-supporting clamp comprising a frame, a fixed jaw disposed vertically on one end of the frame, a jaw having a longitudinal slot, a pivot projecting from the frame
45 through said slot whereby the slotted jaw is mounted to coöperate with the fixed jaw, a bolt fitted in and adjustable along said slot, and a stop plate carried by said bolt 50 and having a rearwardly projecting lip adapted to impinge against the frame and thereby limit the outward lateral movement of the jaw.

4. A door-supporting clamp comprising a 55 frame, a fixed jaw thereon, a movable jaw having sliding pivotal connection with said frame to coöperate with the fixed jaw, and a stop secured on the movable jaw to engage
60 the frame for guiding the outward sliding movement of said jaw in a curved direction, said stop being adjustable to accommodate work of various thicknesses.

In testimony whereof I affix my signature, in presence of two witnesses.

THOMAS ELWOOD MOON.

Witnesses:

J. H. BURRIS,
WILL BURRIS.