O. E. JOHNSON.

DOOR SUPPORTING CLAMP.

APPLICATION FILED FEB. 25, 1915.

1,165,975. Patented Dec. 28, 1915.

Fig. 1.

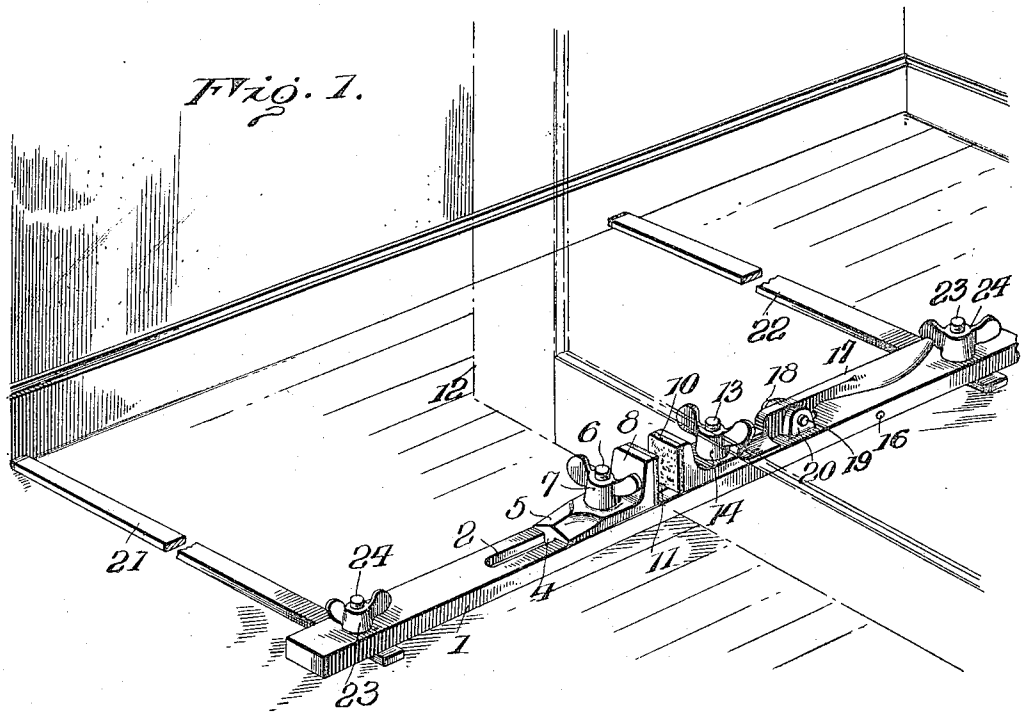


Fig. 2.

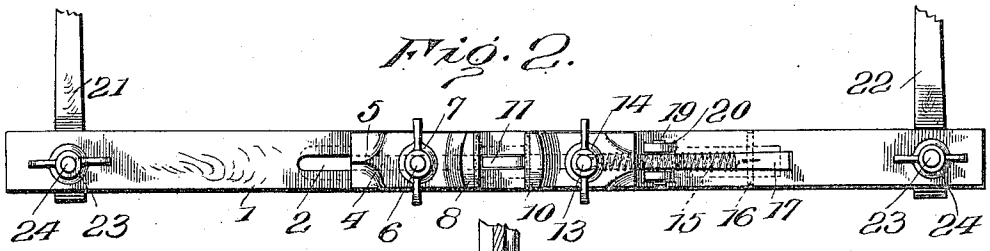
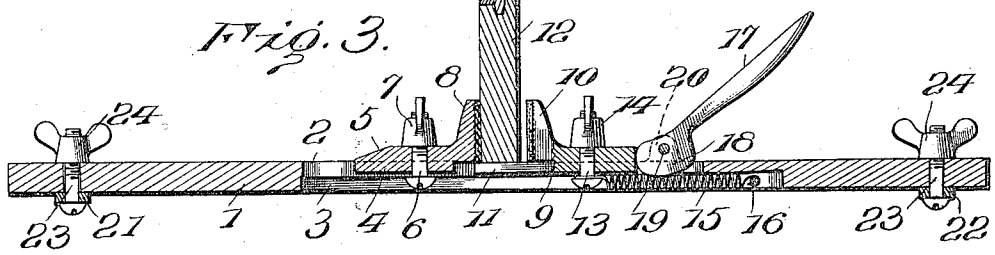


Fig. 3.



Inventor

Witnesses

W. A. Williams.

Chas. P. Wright.

O. E. Johnson.

By E. B. Hoeffing

Attorney

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ORION E. JOHNSON, OF CEDAR RAPIDS, IOWA, ASSIGNOR TO W. A. NUNEMAKER AND V. A. TOBEY, BOTH OF CEDAR RAPIDS, IOWA.

DOOR-SUPPORTING CLAMP.

1,165,975. Specification of Letters Patent. Patented Dec. 28, 1915.

Application filed February 25, 1915. Serial No. 10,514.

To all whom it may concern:

Be it known that I, ORION E. JOHNSON, a citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Door-Supporting Clamps, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to certain new and useful improvements in door supporting clamps for supporting a door in such a position that the edge thereof can be readily planed or the same can be painted; the object being to provide a door clamp which is exceedingly simple and cheap in construction and one in which the clamping jaws are adjustable so that the same can be adjusted to accommodate doors of different thicknesses.

Another object of the invention is to provide a door clamp with a spring-returned jaw arranged in the path of a cam lever so mounted, that when the lever is rocked upon its pivot, the jaw will be moved toward the opposite jaw so as to clamp the door securely, said cam lever being so mounted in respect to the jaw that the pivot thereof is on a line with the jaw so that the same will be held in any position in which it is placed.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawing—Figure 1, is a perspective of my improved door clamp, showing a door secured in position therein; Fig. 2, is a top plan view of the clamp; and Fig. 3, is a longitudinal vertical section through the same.

Like numerals of reference refer to like parts in the several figures of the drawings.

In carrying out my invention, I employ a base 1 of any desired length, which is preferably rectangular in cross section and is provided with a longitudinal slot 2 in its top communicating with a longitudinal recess 3 formed in the under side of the base 1.

Extending into the slot 2 of the base is a tongue 4 of a jaw 5 which is secured in adjusted position thereon, by a bolt 6 and wing nut 7; the head of the bolt working within the recess formed in the under side of the base so as to allow the jaw to be moved back and forth and by tightening the wing nut, the same will be locked in adjusted position. The clamping face of the jaw is provided with a felt pad 8 so as to prevent the same from injuring the door when placed in position upon the face, as will be later described.

In the opposite end of the slot 2 is a tongue 9 of a jaw 10, said tongue being provided with an extension 11 adapted to extend under the door 12 when arranged in position upon the base so as to prevent the jaw from being lifted; the weight of the door holding the jaw in its proper position within the slot. This jaw is slidably mounted upon the base and is provided with a bolt 13 the head of which, works in the recess; said bolt carrying a wing nut 14 and it will be seen that this jaw is slidably mounted and can be locked in its adjusted position by the wing nut. The jaw 10 is also provided with a felt pad on its gripping face so as to prevent the door from being injured when the same is clamped between the coöperating jaws in order to hold the door in such a position that the same can be readily operated upon.

The jaw 10 is free to move on the base and is normally held away from the jaw 8 by a coil spring 15 one end of which, is connected to the head of the screw 13 and the opposite end is secured to a pin 16 arranged across the recess.

It will be seen by this construction that the jaws are normally held in open position so that the door can be readily placed between the same and in order to provide means for forcing the movable jaw 10 into engagement with the door when arranged upon the base, I provide a lever 17 having a cam portion 18 said lever being pivotally mounted upon a pin 19 arranged in spaced lugs 20 extending upwardly from the base, the fulcrum of said lever being in a horizontal plane with the central portion of said jaw so that when the lever is swung upon its pivot, the cam portion will move the jaw toward the opposite jaw so as to clamp the door and by mounting the lever in this manner, it will be held in its adjusted position.

Pivotally connected to the ends of the base 1 are feet 21 and 22 which are adapted to be swung outwardly into the position shown in Fig. 1, so as to hold the base the proper distance away from the wall so as to allow the door to be operated on without any danger of the wall being injured, and this

is of especial advantage when the edge of the door is being planed as the carpenter can plane the edge of the door without any danger of his plane striking the wall. These feet also prevent the base from slipping.

The feet are preferably mounted upon bolts 23 carrying wing nuts 24, which can be readily turned so as to clamp the feet in their adjusted position.

The tongue 4 of the jaw 5 is cut away adjacent the gripping portion of the jaw to receive the extension 11 of the tongue 10, so that when the jaw 10 is forced into engagement with the side of the door, the side will extend into this cut away portion under the jaw 5.

From the foregoing description, it will be seen that I have provided a door-supporting clamp which comprises a base having an adjustably mounted jaw and a movably mounted jaw which is forced toward the adjustably mounted jaw by a cam lever so mounted that the cam portion of the lever coöperates with the end portion of the jaw so as to force the jaw against the door.

I claim:

1. A door clamp, comprising a base having a recess formed in its under side and a slot in its top communicating with said recess, jaws provided with tongues slidably mounted in the slot of said base, bolts carried by said jaws, provided with heads arranged within the recess of said base, thumb nuts carried by said bolts, a spring arranged in said recess having its free end connected to one of said jaws for holding said jaw spaced from the opposite jaw, and a cam lever arranged in the path of travel of said spring-actuated jaw for forcing said jaw toward the opposite jaw.

2. A door clamp, comprising a base having a longitudinal slot formed therein, jaws slidably mounted on said base provided with tongues extending into said slot, means for holding the tongues of said jaws within said slot, the tongue of one of said jaws being provided with an extension arranged flush with the face of said base and in vertical alinement with the door to be clamped, means for locking one of said jaws in adjusted position upon said base, and means for actuating the other jaw.

3. In a door clamp, the combination with a base having a recess formed in its under side and provided with a slot in its top communicating with said recess, a pair of jaws provided with tongues arranged upon said base, the tongues of said jaws extending into the slot formed therein, the tongue of one jaw being provided with an extension upon which the door is adapted to rest, a spring for holding one of said jaws out of engagement with the opposite jaw, and a cam lever for forcing the spring-actuated jaw toward the other jaw.

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

ORION E. JOHNSON.

Witnesses:
W. A. NUNEMAKER,
FRANK L. NUNEMAKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."