F. T. ROBINSON.

DOOR FASTENER.

APPLICATION FILED MAR. 15, 1921.

1,429,536. Patented Sept. 19, 1922.

FIG. 1

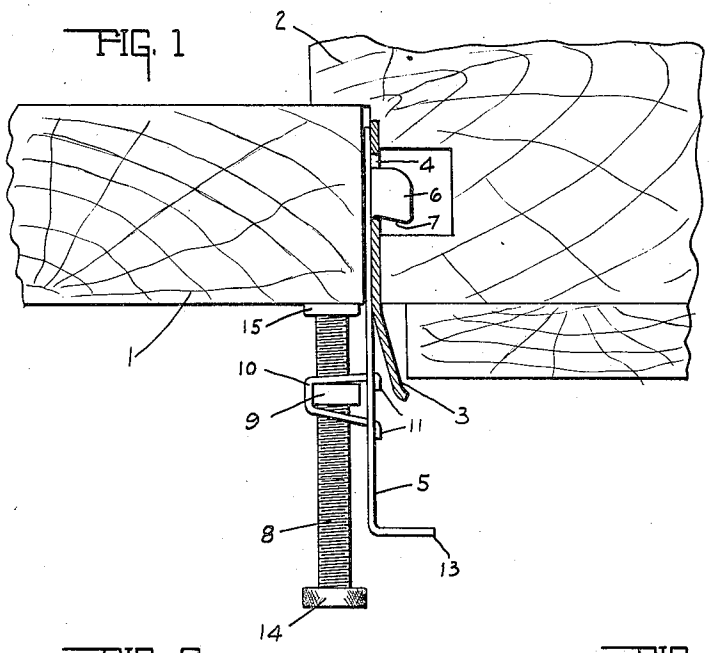


FIG. 2

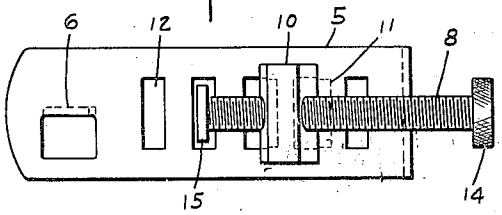


FIG. 3

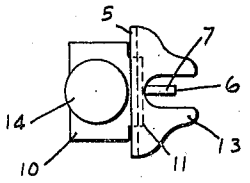


FIG. 4

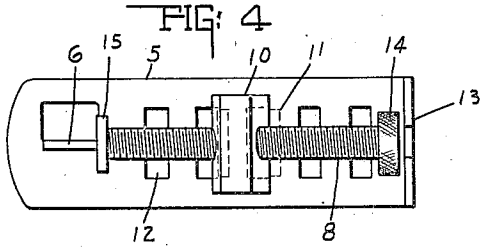


FIG. 6

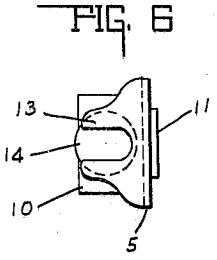
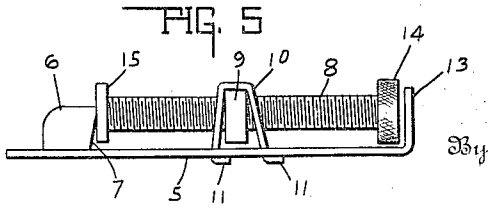


FIG. 5



Inventor:
FRANK T. ROBINSON,

By

Attorney

Patented Sept. 19, 1922. 1,429,536

UNITED STATES PATENT OFFICE.

FRANK T. ROBINSON, OF LOUISVILLE, KENTUCKY, ASSIGNOR OF ONE-HALF TO CASCA T. HOWLAND, OF PETERSBURG, VIRGINIA.

DOOR FASTENER.

Application filed March 15, 1921. Serial No. 452,539.

To all whom it may concern:

Be it known that I, FRANK T. ROBINSON, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Door Fasteners, of which the following is a specification.

This invention relates to improvements in door fasteners, the main feature of the invention being the provision of a locking member adapted to be introduced between the edge of the door and the door casing and having parts for interlocking with the door and casing to prevent the opening of the door until such time as the fastening device is released.

A further feature of the invention is the provision of means for adjustably connecting a locking bolt with the frame of the fastener so that doors of varying thickness may be accommodated.

A further feature of the invention is in so constructing the parts of the fastening device that they may be readily assembled and secured together in compact formation when not in use.

Other objects and advantages will be hereinafter more fully set forth and pointed out in the accompanying specification.

In the accompanying drawings, which are made a part of this application,

Figure 1 is a detail sectional view through a door and its casing showing the fastening mechanism applied to use for securing the door in closed position,

Figure 2 is a side elevation of the fastening mechanism removed from the door,

Figure 3 is an end elevation thereof,

Figure 4 is a side elevation showing the position of the parts in assembled relation, as when the fastening means is not in use,

Figure 5 is an edge elevation of the parts shown in Figure 4, and

Figure 6 is an end elevation thereof.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates a door of any approved construction and 2 the casing or jamb therefor, said casing carrying a latch plate 3 through which is formed a slot 4 for the reception of the usual form of door bolt.

In order to securely lock the door in closed position and render it impossible for the door to be opened from the outside of the room a flat plate or body portion 5 of a fastening member is introduced between the edge of the door and the face of the casing prior to closing the door, said plate having a laterally extending tongue 6 preferably integral therewith and struck therefrom, the struck-out portion of the metal being bent at right angles to the face of the plate, and if desired one edge 7 of the tongue may be disposed at an angle so that when the tongue is introduced through the slot 4 the edge 7 will overhang the face of the latch plate thereby aiding in retaining the plate in engagement with the latch plate until such time as the door is closed.

After the door is closed it is locked in closed position by means of a bolt 8 which is threaded through a nut 9, said nut being entered between the arms of a bracket or clip 10, and by extending the clip over one edge of the nut and over the opposite faces thereof, the nut will be held against rotation on the bolt when the bracket is connected with the plate 5 and the bolt 8 rotated. The bracket 10 is held in position on the bolt 8 by passing the bolt through the side arms of the bracket the inner ends of said arms having lateral extensions 11 which pass through slots 12 in the plate 5, and by providing a plurality of the slots 12 the bracket may be adjusted lengthwise of the plate so that the fastening means may be used in connection with doors of varying thicknesses. The outer end of the plate 5 is preferably provided with a laterally extending wing 13 so that it may be readily grasped for holding the plate in engagement with the latch plate until such time as the door may be closed.

In applying the fastening device to use the tongue 6 is first entered through the slot 4 in the latch plate 3 and the door then swung to closed position after which the extensions 11 of the bracket 10 are introduced through a pair of the slots 12, the positioning of the bracket depending upon the thickness of the door. The bolt 8 is then rotated by imparting rotating action to the milled-head 14 at the outer end of the bolt, such rotating action being continued until

the clamping member 15 at the inner end of the bolt is forced against the face of the door 1, and as the tongue 6 is interlocked with the latch plate 3, so as to hold the plate 5 against longitudinal movement, the door will be held in closed position until such time as the bolt is turned in the opposite direction for releasing the same from the door.

When the fastening mechanism is not in use the bolt 8, together with the bracket carried thereby, is placed on the opposite side of the plate 5 from the position the bolt occupies when in locking position and the extensions 11 engaged with a pair of the slots 12, and by turning the bolt 8 the clamping member 15 is forced against the edge of the tongue 6, the bolt being securely held in engagement with the plate 5, and as the bolt rests between the tongue 6 and wing 13 the fastening device will occupy but a minimum amount of space.

In applying the device to use the door 1 is swung to open position, or until it is cleared of the casing 2 and the plate 5 then placed over the latch plate 3 and the tongue entered through the slot 4 of the latch plate. The door is then again swung to closed position and the extensions 11 engaged with a pair of the slots 12 of the plate 5 and when the bolt is rotated in one direction the clamping member 15 is securely locked against the face of the door. As access cannot be had to any of the parts of the fastening device from the exterior of the door 1 it will be impossible to open the door without forcibly tearing the latch plate 3 from its fastening, consequently the door will be held securely locked until such time as the bolt 8 is operated to release the fastening member. All of the parts of this device are made of metal, and in view of their simplicity the device can be very cheaply manufactured and will be indestructible from use, and in view of the manner in which the parts may be assembled, when not in locking position, the device will occupy but a minimum amount of space and can be carried in a pocket conveniently, or in a grip or other receptacle.

Having thus fully described my said invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a door fastener the combination with a door, a casing therefor, and a latch plate having a slot therein, of a plate having a plurality of transversely extending slots therethrough, a tongue on said plate adapted to enter the slot in the latch plate, a locking bolt, a bracket carried by the locking bolt having lateral extensions adapted to engage the slots in the second plate, and a nut between the arms of said bracket for causing said bolt to travel lengthwise when rotated.

2. A door fastener of the class described, comprising a plate having a plurality of elongated transversely extending slots therethrough, a tongue integral with said plate, a locking bolt, a bracket carried by the locking bolt, said bracket having paralleling arms, and said arms having lateral extensions at their free ends adapted to engage the slots in said plate, and means associated with said bracket for causing the bolt to travel lengthwise when rotated.

3. A door fastener comprising a plate having a plurality of slots therethrough, a tongue integral with said plate adjacent one end thereof, a wing at the opposite end of the plate, a locking bolt, a substantially U-shaped bracket associated with said locking bolt and having means at its free ends for engagement with the slots in the plate, and means between the arms of the bracket for causing said bolt to travel lengthwise when rotated.

4. The combination with a door structure and casing associated therewith, and a latch plate having a slot therethrough, of a locking plate adapted to enter between the edge of the door and the casing, a tongue on the locking plate adapted to enter the slot in the latch plate, a substantially U-shaped bracket, means for adjustably connecting the bracket with the locking plate, a locking bolt extending through said bracket, and a nut between the arms of the bracket for causing the bolt to move lengthwise when rotated.

5. A door fastener comprising a locking plate having a plurality of slots therethrough, a tongue struck from parts of said plate and extended at right angles thereto, said tongue having an inclined edge, a locking bolt, a bracket associated with said locking bolt, a nut associated with the bracket for causing the bolt to move lengthwise when rotated, and means on said bracket adapted to engage the slots in the locking plate from one side of the plate when the bolt is used for locking purposes, and adapted to enter the slots from the opposite side of said plate and position the end of the bolt for causing the same to engage said tongue when rotated in one direction.

In witness whereof, I have hereunto set my hand and seal at Louisville, Kentucky, this 10th day of March, A. D. nineteen hundred and twenty-one.

FRANK T. ROBINSON. [L. S.]

Witnesses:
C. T. HOWLAND,
P. J. POTTER.