July 31, 1951 M. D. DORION 2,562,301

DOOR SECURING DEVICE

Filed March 11, 1949

Fig. 1.

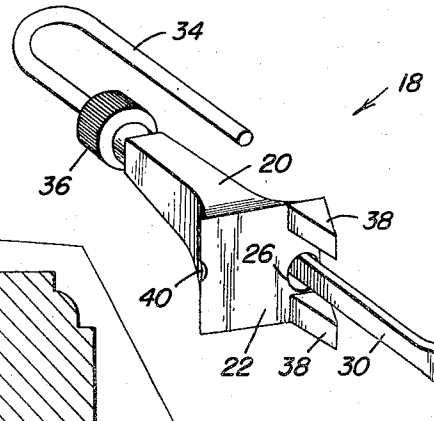


Fig. 2.

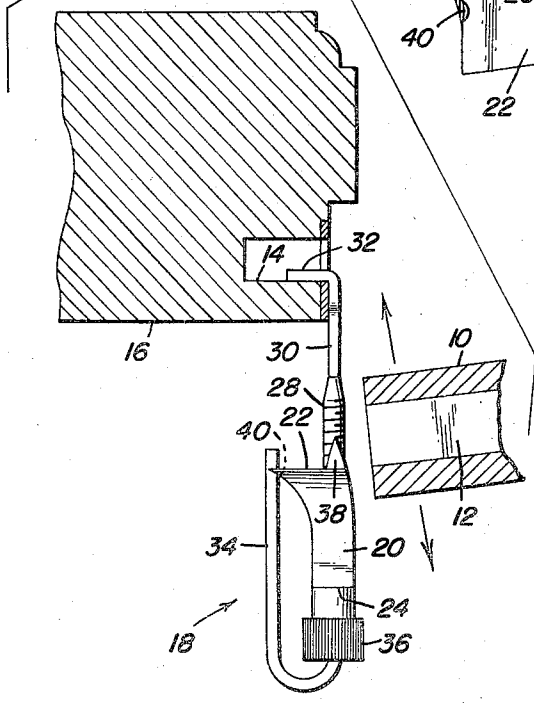


Fig. 3.

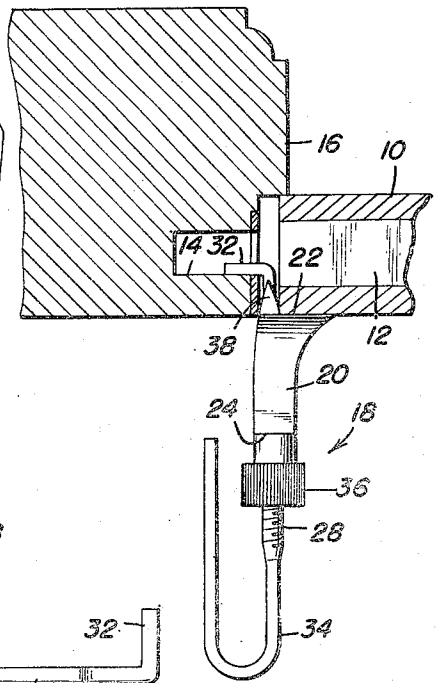
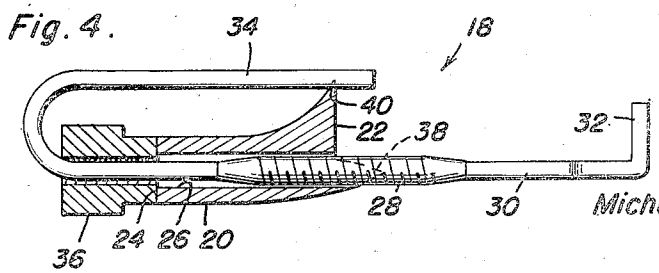


Fig. 4.



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DOOR SECURING DEVICE

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2 Claims. (Cl. 292—293)

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This invention relates to new and useful improvements and structural refinements in securing devices for doors, and the principal object of the invention is to provide a device of the character herein described, such as may be conveniently and effectively employed in substitution for, or in addition to a conventional door lock, for firmly and securely retaining the door in its closed position.

In particular, the invention concerns itself with devices employing what may be called a pressure exerting member engageable with the marginal edge portion of the door, a locking bolt slidable in the member and provided with an extension receivable in the usual latch recess of the door frame, together with actuating means in the form of a nut on the locking bolt whereby the pressure exerting member may be clamped against the door for the purpose of preventing opening of the latter.

An important feature of the invention resides in the specific structural arrangement of the pressure exerting member and locking bolt, together with means on the member for preventing of rotation or other displacement thereof, while another feature of the invention resides in the provision of means for retaining the pressure exerting member and locking bolt in a predetermined relative position, so that the entire device may be conveniently and easily applied to the door and frame.

Some of the advantages of the invention lie in its simplicity of construction, in its durability, and in its adaptability to economical manufacture.

With the above more important objects and features in view and such other objects and features as may become apparent as this specification proceeds, the invention consists essentially of the construction and arrangement of parts as shown in the accompanying drawings in which;

Figure 1 is a perspective view of the invention;

Figure 2 is a cross-sectional view showing a door, a door frame and the invention as being applied to the latter;

Figure 3 is a cross-sectional view, similar to that shown in Figure 2, but with the invention installed and the door secured; and

Figure 4 is a longitudinal cross-sectional view of the invention.

Like characters of reference are employed to designate like parts in the specification and throughout the several views.

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Referring now to the accompanying drawings in detail, the reference character 10 designates a conventional door provided with a lock mechanism 12, which includes a projectable and retractable latch (not shown) receivable in a suitable recess 14 provided in the door frame 16.

The invention consists of a door securing device designated generally by the reference character 18, this embodying in its construction an elongated pressure exerting member 20, which is formed with what will be hereinafter referred to as a flat inner end surface 22, at one end, and a flat outer end surface 24 at the opposite end, as will be clearly apparent.

Moreover, the member 20 is provided with a longitudinally extending, circular bore 26, to slidably and rotatably receive a screw-threaded locking post 28, one end of the latter being formed integrally with a flat strip-like extension 30 terminating in an angulated detent 32. On the other hand, the relatively opposite end of the bolt 28 is provided with an integral handle 34, this preferably having a U-shaped or a J-shaped configuration, as shown.

A securing nut 36 is freely rotatable on that portion of the handle 34 immediately adjacent the bolt 28, this nut being operatively engageable with the screw-threaded bolt itself, and also being engageable with the outer end surface 24 of the member 20. Finally, it is to be noted that a pair of tapered prongs 38 are provided on the flat inner surface 22 of the member 20, above and below the bolt 28, as shown.

When the invention is placed in use, the free end portion of the handle 34 is engaged with the keeper notch 40 provided on the member 20, this being achieved by first sliding the bolt 28 outwardly in the bore 26 and rotating the bolt so that the handle 34 is alined with the notch, whereupon the bolt is slid inwardly in the bore 26 so that the free end portion of the handle is received in the notch 40, as illustrated in Figures 2 and 4.

By virtue of this arrangement relative rotation of the bolt 28 and member 20 will be prevented, so that the device may be conveniently handled while the detent 32 of the bolt extension 30 is placed in the latch recess 14 of the door frame 16, while the door is partially open, as shown in Figure 2.

The door 10 may then be closed, it being understood that sufficient space exists between the door and the frame to accommodate the extension 30, after which the member 20 may be slid along the bolt 28 toward the door and may be

rotated on the bolt through approximately 180°, to a position illustrated in Figures 1 and 3. The nut **36** may then be engaged with the screw-threaded bolt **28**, and it will be found that by tightening the nut, the flat inner surface **22** of the member **20** will be urged in engagement with the marginal edge portion of the door, so that opening of the door will be effectively prevented.

As the member **20** is caused to exert pressure on the door **10** by tightening the nut **36**, the prongs **38** will be forced into the space between the door and the door frame, whereby the member **20** will be prevented from rotating or otherwise becoming displaced during the final stages of tightening of the nut **36**.

It is believed that the advantages and use of the invention will be clearly apparent from the foregoing disclosure, and accordingly, further description thereof at this time is deemed unnecessary.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that minor changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

Having described the invention, what is claimed as new is:

1. For use with a door and a door frame formed with a latch recess, a door securing device comprising an elongated pressure exerting member having a flat inner end surface adapted to engage a marginal edge portion of a door, said member being provided with a longitudinal bore, a screw-threaded locking bolt slidable and rotatable in said bore, a flat extension provided at the inner end of said bolt and terminating in an angulated detent, said extension being receivable between the door and the frame for the door and said detent being receivable in the latch recess of the door frame, a handle secured to the outer end of said bolt, a securing nut positioned on the bolt and engageable with the outer end of said member whereby the inner end of the latter is urged against the door to prevent opening of same, said member being formed with a keeper notch at the edge of the inner end of said member, said handle having a reversely extending portion parallel to said bolt, and said reversely extending portion being engageable with said notch whereby rotation of said member relative to said bolt can be prevented.

2. For use with a door and a door frame formed with a latch recess, a door securing device comprising an elongated pressure exerting member having a flat inner end surface adapted to engage a marginal edge portion of a door, said member being provided with a longitudinal bore, a screw-threaded locking bolt slidable and rotatable in said bore, a flat extension provided at the inner end of said bolt and terminating in an angulated detent, said extension being receivable between the door and the frame for the door and said detent being receivable in the latch recess of the door frame, a handle secured to the outer end of said bolt, a securing nut positioned on the bolt and engageable with the outer end of said member whereby the inner end of the latter is urged against the door to prevent opening of same, a pair of tapered prongs projecting from said flat end surface above and below said extension, said prongs being receivable between the door and the frame, said member being formed with a keeper notch at the edge of the inner end of said member, said handle having a reversely extending portion parallel to said bolt, and said reversely extending portion being engageable with said notch whereby rotation of said member relative to said bolt can be prevented.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
605,809	Plimpton	June 14, 1898
635,530	Duck	Oct. 24, 1899
1,073,238	Huston	Sept. 16, 1913