May 7, 1935. J. RIEBE 2,000,191

DOOR STAY

Filed Aug. 10, 1934

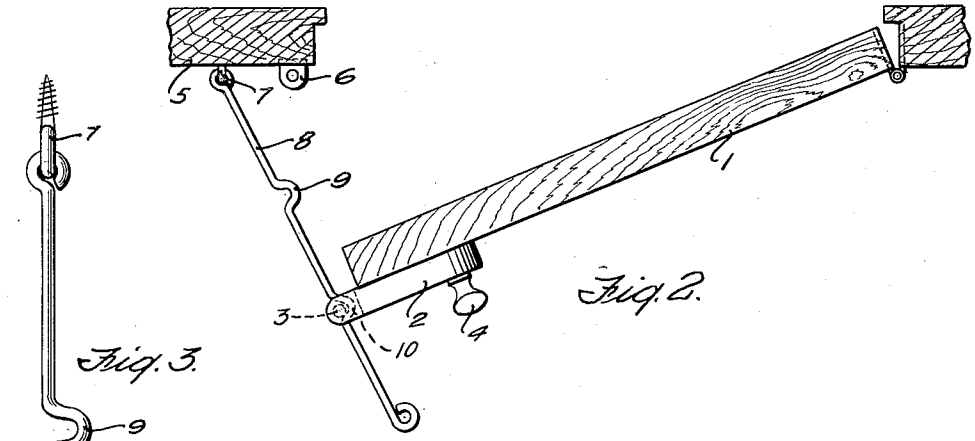


Fig. 2.

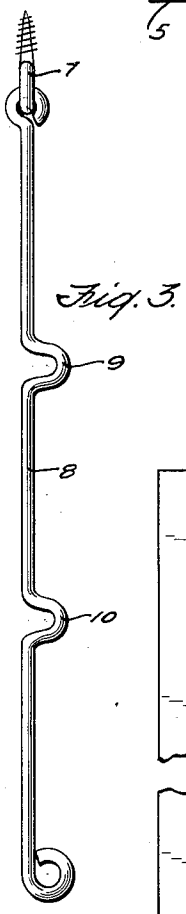


Fig. 3.

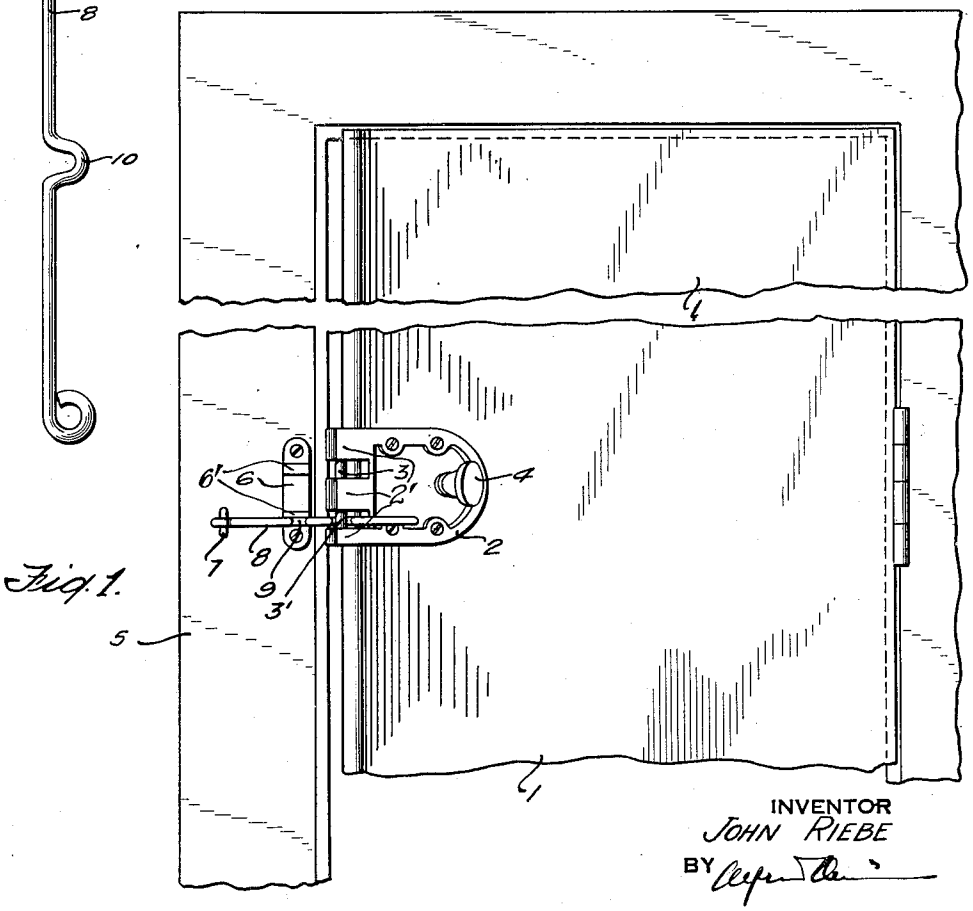


Fig. 1.

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DOOR-STAY

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1 Claim. (Cl. 292—266)

My invention relates to devices for holding a door ajar to prevent it from being accidentally closed, as for instance by a strong draft.

The particular object of the present invention is to produce a device of this kind which when in operative position, that is to say, while holding the door ajar, can not be disengaged or released from said position by a person from the outside, provided the staying member or brace is adjusted to a position, where the door is not held too far ajar.

For this purpose, my device is so constructed that the staying member or brace when placed in operative position cooperates with the bolt or either one of two bolts of a door-lock, such for instance as the "Segal" lock, which is provided on the inside of the door, where the bolts of the lock can be moved to open or shut position by a knob, whereas from the outside of the door said bolts can be operated only by a person possessing the proper key to the lock. In this way, when the staying member or brace is engaged by one of the bolts of the lock, as will be the case when the door is being held ajar, the said staying member can not be disengaged from its operative position from the outside, so that the door will be quite safely held ajar without the risk of anyone being able to enter unlawfully or without being specially admitted by someone on the inside.

For a fuller understanding of my invention, I refer to the annexed drawing on which, by way of illustration, I have shown a preferred embodiment of my invention.

On this drawing, Fig. 1 is a view of a portion of a door and door frame seen from the inside, with my device shown in operative position; Fig. 2 is a transverse sectional view, while Fig. 3 is an enlarged detail view of the door-stay, or brace.

The door shown at 1 in Figs. 1 and 2 has fastened to it on the inside the lock 2, which, as shown, has spaced lugs 2' projecting beyond the edge of the door and two small locking bolts 3, 3' extending through said lugs for operation by a knob 4. On the door-jamb or door-frame 5 there is fastened a keeper 6 having lugs 6' which are accommodated within the spaces between the lugs 2' when the door is closed and which are apertured to receive the bolts 3, 3'.

On the door-jamb or frame 5 there is fastened at 7 a screw-eye, on which is swivelled a rigid member 8, above referred to as door-stay or brace, which when not in use, is loosely suspended from the eye 7.

As shown in Fig. 3, the rigid member 7 which in the embodiment shown is formed from a length of heavy round wire, is bent at two places, indicated at 9 and 10, spaced a certain distance apart, so as to form substantially U-shaped open loops, the centers of which are disposed in line, or substantially in line, with the centers of the straight portions of the member 7 extending to either side of said loops.

Now, if it is desired to keep the door standing ajar so as to prevent it from being blown shut, or otherwise accidentally closed, the bolts of the lock 2 are first withdrawn so as to enable the door to be opened. Thereupon, the member 8 is raised to a horizontal position and is moved in the direction toward the lock 2 until one of the open loops (9 or 10) is entered within the space between the two lowermost lugs 2' of the lock in alignment with the lower bolt 3' of the lock. Then, when the bolts 3, 3', by a corresponding turn of the knob 4 are snapped shut, the member 8 will be firmly held in its position to hold the door ajar and can be released again only, when the bolts 3, 3' are withdrawn. Since this can be done only by means of the knob 4 on the inside, or by a person in possession of a key for the particular door-lock, it will be apparent that the door will be held safely ajar, without the danger of any unauthorized person being able to enter, unless the door were held ajar so far that someone could reach the knob 4 by passing his hand around the edge of the door. Therefore, the location of the open loops 9 and 10 in the rigid member 8 is so selected as to prevent such an occurrence. In this connection it will be observed that the inner end of the slot or space between the two lowermost lugs 2' of the lock 2 is defined by the outer edge or wall of the lock casing and that said inner end of said slot is spaced from the adjacent side of the bolt 3' by an amount such that it constitutes a stoplimiting movement of the member 8 toward the lock so that it is not possible by such movement of said member to effect disengagement of the loops 9 or 10 thereof from the bolt 3' once the said loop 9 or 10 has been alined with said bolt and the latter has been projected to its locking position. It will further be observed in this connection that due to the member 8 being held against movement from its operative position toward the lock, and due to the centers of the loops 9, 10 being disposed in line, or substantially in line, with the axes of the straight portions of said member 8 between said loops, any opening or closing force exerted on the door is transmitted by the bolt 3' to the member 8 in line with the straight portions of said mem-

ber, whereby said member is best adapted to resist any such force.

It is evident that the member 8 may be formed from any suitable material and may be of any desired cross-section, as long as it is sufficiently rigid to function as a brace and can be provided with the open loops to cooperate with the bolts of the door-lock in the manner described. Therefore, while I have described my invention in detail, with reference to the drawing, I do not, of course, limit myself to the construction as shown.

I claim:

In combination with a hinged door and its frame, a lock on the door including a casing having a pair of lugs projecting therefrom beyond the edge of the door and defining a slot therebetween the inner end of which is defined by the outer side wall of the lock casing, a bolt slidable in said lugs across said slot, a keeper member in the form of a rod pivoted at one end to the door frame and having formed therein a substantially U-shaped open loop for insertion within the slot of the lock with the open side of the loop disposed outwardly, the bolt being projectible through said loop to secure the keeper member to the door, the keeper member being straight on either side of said loop and the center of said loop being disposed substantially in line with the axes of said straight portions, and the inner end of said slot being spaced from the adjacent side of said bolt by an amount to maintain the center of said loop substantially alined with the axis of said bolt when the latter is in a locking position extending through said loop, whereby the keeper member is held against being disengaged from the bolt by lateral movement of said keeper member toward the lock and whereby any opening or closing force exerted upon the door is transmitted by the bolt to the keeper member substantially directly in line with the straight portions of the keeper member.

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