W. N. THOMAS.

BOX STRIKE FOR LOCKS.

APPLICATION FILED JAN. 12, 1914.

1,182,229. Patented May 9, 1916.

Fig. 1.

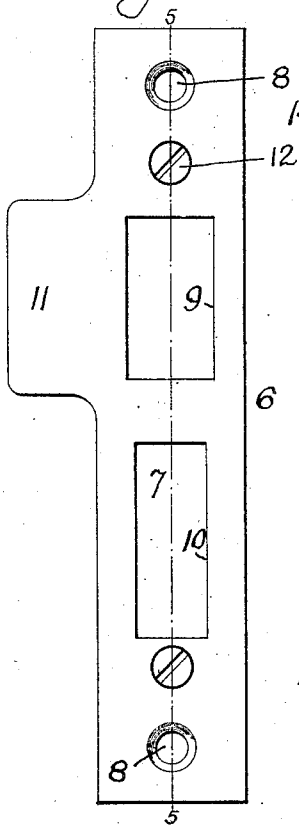


Fig. 2.

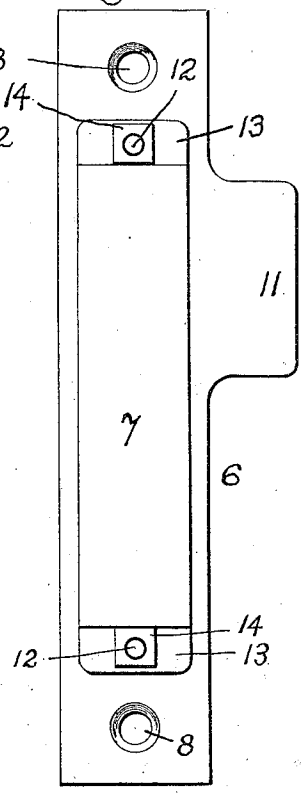


Fig. 3.

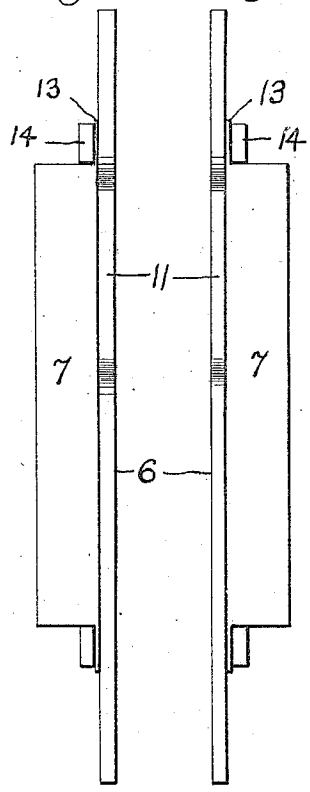
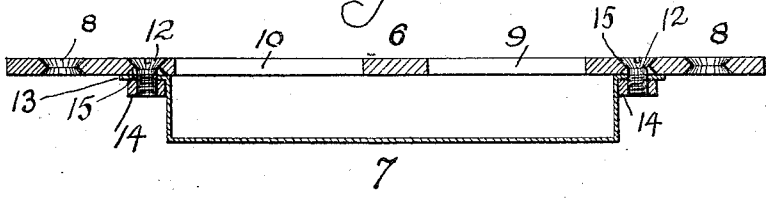


Fig. 4.

Fig. 5.



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BOX-STRIKE FOR LOCKS.

1,182,229. Specification of Letters Patent. Patented May 9, 1916.

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To all whom it may concern:

Be it known that I, WILLIAM N. THOMAS, a citizen of the United States, residing in New Haven, county of New Haven, State of Connecticut, have invented certain new and useful Improvements in Box-Strikes for Locks, of which the following is a full, clear, and exact description.

This invention relates to box strikes for locks, and its primary object is to provide a box strike particularly adapted for locks having a latch bolt and a dead bolt, which box strike is reversible so that it can be used in connection with an inwardly swinging door or an outwardly swinging door. More particularly, it is aimed to provide a box strike of the kind stated, in which the box portion may be applied to the plate portion at either face of the latter so that when the parts are properly assembled the laterally projecting lip for the latch bolt may project outwardly from the door frame when the door is to swing outward, or inwardly from the door frame when the door is to swing inward, without the necessity of inverting the lock on the door.

To these and other ends, the invention consists in the novel features and combinations of parts to be hereinafter described and claimed.

In the accompanying drawing, Figure 1 is a front elevation of a box strike embodying my improvements, Fig. 2 is a rear elevation of the same, Fig. 3 is an edge view of Fig. 1, looking from the left, Fig. 4 is a similar view showing the strike reversed, *i. e.*, with the box portion at the opposite face of the plate, and Fig. 5 is a section on line 5—5 of Fig. 1.

Referring to the drawing, the box strike consists of the main or plate portion 6 and the box portion 7. The plate 6 is provided with screw holes 8, which are countersunk at both ends, so that when the strike is applied to the door jamb with either face outermost, the heads of the attaching screws will lie flush with the outer surface of the plate. The plate is also provided with a latch bolt opening 9, a dead bolt opening 10, and laterally projecting flange or lip 11, associated with the latch bolt opening. The box portion 7 of the strike is detachably secured to the plate portion by means, such as the screws 12. This box portion is preferably constructed of sheet metal, as distinguished from the cast metal from which the plate portion is preferably constructed. In the form shown, the box portion is made from a single sheet metal plate or blank, suitably bent up into box-like form, and having flanges 13 at the respective ends by means of which the box portion is secured to the plate, the screws 12 being passed through the flanges 13, preferably in the manner shown in Figs. 2 and 5. At the rear of the strike, the screws 12 are provided with nuts 14.

The screw openings 15 in the plate 6, through which the screws 12 are passed, are countersunk at both faces of the plate, so that when the box portion is applied to either face, the heads of said screws will lie flush with the outer surface of the strike. The box portion may be readily removed from the plate by unscrewing the screws 12, the heads of which are provided with the usual screw driver nicks. In the particular form shown, the nuts 14 are of rectangular shape and so arranged that one side lies against, or in close proximity to, the adjacent wall of the box portion, as shown in Fig. 5, whereby the nut is prevented from turning as the screw is turned by the screw driver. When the box portion has been detached from one side of the plate, it may be readily applied to the other side of the plate in the same relation, so that the strike may be adapted to either an inwardly swinging door or an outwardly swinging door. The two different adjustments are shown in Figs. 3 and 4 respectively.

It will be obvious that in the case of a lock having a latch bolt and a dead bolt, an ordinary box strike if constructed for an outwardly swinging door will not serve in the case of an inwardly swinging door unless it is inverted, and this makes it necessary to invert the lock on the door which is very inconvenient and objectionable, even when practicable. By my improvements, however, this disadvantage is entirely obviated. The plate 6 may be readily placed on the door frame with the lip 11 projecting outwardly (for an outwardly opening door), or it may be turned over in a horizontal plane and placed on the door frame with the lip 11 projecting inwardly (for an inwardly opening door). In one case, one face of the plate 6 is outermost, and in the other

case, said face is innermost, but, in both cases, the box portion is so located as to form a closure back of the bolt openings in the mortise cut in the door frame.

Without limiting myself to the construction shown, I claim:—

1. A strike for locks, comprising a plate having a plurality of bolt openings and a laterally projecting latch bolt lip associated with one of said openings, a box portion formed and adapted for location back of one of said openings, and means for securing said box portion in position at either face of said plate; substantially as described.

2. A strike for locks, comprising a plate having a plurality of bolt openings and a laterally projecting latch bolt lip associated with one of said openings, a box portion adapted to form a closure back of all of said bolt openings, and screws for securing said box portion in position at either face of said plate; substantially as described.

3. A strike for locks, comprising a plate portion having a plurality of bolt openings and a laterally projecting latch bolt lip associated with one of said openings, said plate also having screw openings therein countersunk on opposite faces of the plate, a box portion applicable to either face of said plate portion, and means for holding the plate portion and box portion in assembled relation; substantially as described.

4. A box strike, comprising a plate portion having a plurality of bolt openings and a laterally projecting latch bolt lip associated with one of said openings, said plate portion also having screw openings countersunk on opposite faces thereof, a box portion having a rim to engage either face of said plate portion, and means to secure said box portion in position at either face of said plate portion whereby the latch bolt lip may project outwardly from the door frame for an outwardly opening door, or inwardly from the door frame for an inwardly opening door, without the necessity of inverting the strike; substantially as described.

5. In a reversible box strike, the combination of a plate portion having a latch bolt opening with an associated flange or lip and a dead bolt opening, said plate portion adapted to be mortised in the jamb of the door with either face outermost, and closure means located back of said bolt openings and applicable to either face of said plate portion whereby said strike may be reversed without changing the relation of the bolt openings; substantially as described.

6. A reversible box strike, comprising a plate portion having openings at opposite ends for the passage of screws to secure it to the door jamb, said screw openings being countersunk at both faces of said plate portion, said plate portion having a latch bolt opening with an associated flange or lip and a dead bolt opening, a box portion having a flanged rim and located back of at least one of said bolt openings, and a screw for holding the flanged rim of said box portion in contact with the plate at either face of the latter whereby the strike may be reversed and adapted to an inwardly swinging door or to an outwardly swinging door by turning said plate portion face for face, and changing the box portion from one face to the other without changing the relation of the bolt openings; substantially as described.

7. In a reversible box strike, the combination of a plate portion having screw openings countersunk on opposite faces thereof, said plate portion having a latch bolt opening with an associated lip or flange and a dead bolt opening, a box portion extending back of both bolt openings, and provided with end flanges disposed at the same face of the plate as the box portion proper, and means to secure said flanges detachably to said plate portion at either face of the latter, whereby the strike may be adapted to an inwardly swinging door or to an outwardly swinging door without inverting the bolt openings; substantially as described.

In witness whereof, I have hereunto set my hand on the 9th day of January, 1914.

WILLIAM N. THOMAS.

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