(No Model.)

J. T. STONE.

DOOR LATCH OR BOLT FASTENING.

No. 543,908. Patented Aug. 6, 1895.

Fig. 1.

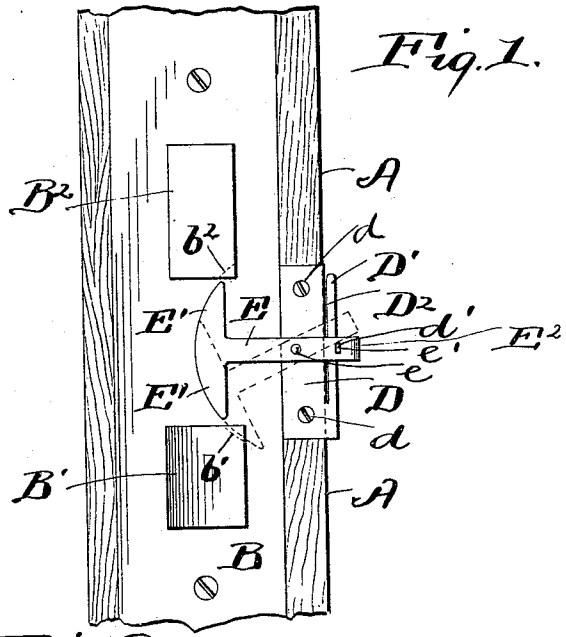


Fig. 2.

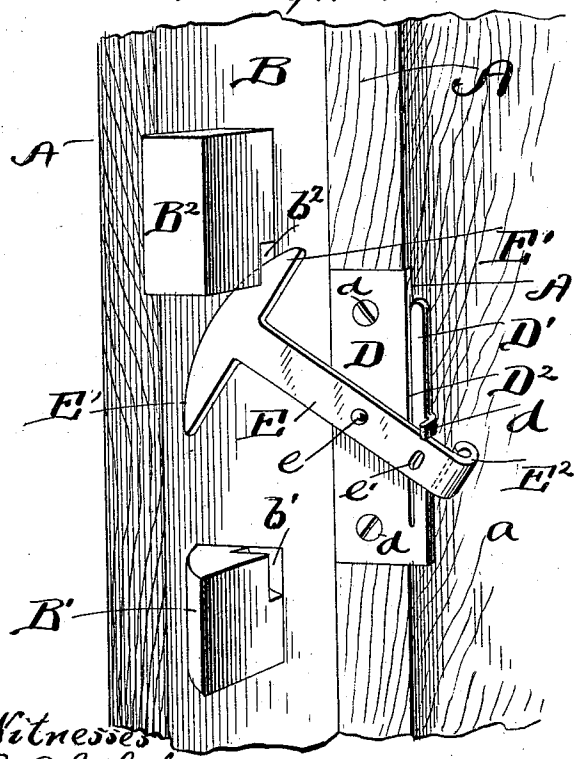
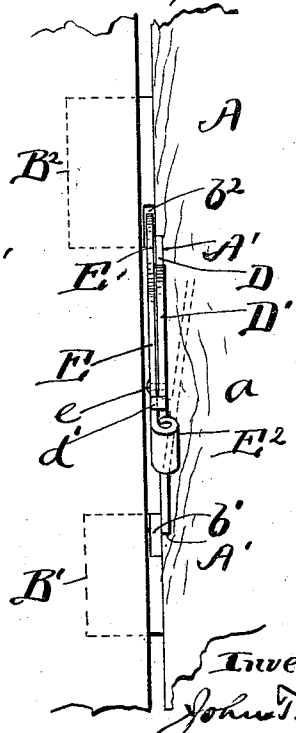


Fig. 3.



Witnesses:
E. B. Gilchrist
Crowell

Inventor:
John T. Stone
By M. D. Leggett & Co.
his attorneys.

UNITED STATES PATENT OFFICE.

JOHN T. STONE, OF OAKLAND, CALIFORNIA.

DOOR LATCH OR BOLT FASTENING.

SPECIFICATION forming part of Letters Patent No. 543,908, dated August 6, 1895.

Application filed April 18, 1895. Serial No. 546,197. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. STONE, of Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Door-Bolt or Door-Latch Fastenings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in door-bolt or door-latch fastenings capable of locking the bolt or latch of a door-lock in its operative position in such a manner that the door-bolt or door-latch, when the same is fastened in its operative position by my improved fastening device, can only be actuated from the inner side of the door; and the invention consists in the peculiarities of construction and combinations of parts hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation of the edge of the lock-bearing portion of the door, exhibiting the selvage or edge-plate of the mortise-lock with which the door is provided and the application of my improved door-latch or door-bolt fastening device. The bolt or latch locking member of the fastening device in said figure is shown in its inoperative position in solid lines and is shown in dotted lines in a position wherein it locks the door-latch in the operative position of the latter. Fig. 2 is an enlarged view in perspective of the lock-bearing portion of the door provided with my improved fastening device that in said figure is shown in a position wherein it secures the bolt in the operative or locking position of the latter. Fig. 3 is an elevation of the inner side of the lock-bearing portion of the door and the adjacent jamb of the door-casing, exhibiting the bolt and latch of the door-lock in their operative position, with the locking member of my improved fastening device in a position wherein it secures the bolt in its operative or shot position.

Referring to the drawings, A designates the edge of a door; *a*, the inner side of the door; B, the selvage or edge plate of a mortise-lock with which the door is provided; B′, the latch of the lock; B^2, the bolt of the lock; D, a plate arranged edgewise to the selvage of the door-lock between the latch and bolt and between the selvage and inner side of the door, said plate D being shown seated within a recess A′, formed in the edge of the door, so as to bring the face of the plate flush with said edge of the door, as shown in Fig. 3, and the plate is shown removably secured to the edge of the door by means of screws *d*. Plate D might, however, be integral with the selvage or edge plate of the door-lock.

A vertically-tilting latch E is shown pivoted or fulcrumed at its central portion, as at *e*, to the face of plate D and centrally between the latch and bolt of the door. Latch E, at the end that is adjacent to the bolt and latch, is shown enlarged upwardly and downwardly, as at E′, and the arrangement of parts is such that said end of the latch, when the latter is in its normal or inoperative position, which is a horizontal position in the case illustrated, shall be out of engagement with the latch and bolt, as shown in solid lines, Fig. 1; but said end of the latch shall, upon actuating the latch from the inner side of the door in one direction, be adapted to engage a recess b^2, formed in the bolt B^2 of the lock, as shown in Figs. 2 and 3, and, upon actuating the latch in the opposite direction, shall come into engagement with the recess *b*′, formed in the latch of the door-lock, as shown in dotted lines, Fig. 1 Latch E, of course, extends beyond the inner side of the door a suitable distance to enable the operator to catch hold of the same preparatory to actuating the tilting latch from an inoperative to an operative position, or vice versa.

Means for positively retaining latch E in its inoperative position are provided, and consist, preferably, of a spring-catch D′, located at the inner side of the door and formed, preferably, by employing a plate D, that projects a suitable distance beyond the inner side of the door, as shown in Figs. 1 and 2, and providing said plate with a slot or slit D^3, extending from the upper edge of the plate downwardly and a suitable distance below the fulcrum of latch E, said spring-catch, upon the side adjacent to latch E, being provided with a laterally-projecting lug or member *d*′, that is adapted to engage a hole *e*′ in latch E, and the arrangement of parts is such that member *d*′ shall be adapted to engage hole *e*′ in the in-

operative position of latch E, as shown in solid lines, Fig. 1. Of course it will be observed that catch D′ must, in order to accommodate the actuation of latch E from its inoperative to an operative position, be bent laterally in the direction required to disengage its lug or member *d′* from the hole in the latch. Latch E is provided with a stop E^2, adapted when the latch is in its operative position to prevent the latch from being tilted in the one direction, and another stop is provided for limiting the movement of the latch when the latter is in its operative position in the opposite direction. Member *d′* of latch E constitutes one of said stops, and a curl, in which the handle-forming end of latch E terminates, constitutes the stop E^2, said end of the latch being adapted to engage the lower edge of member *d′* when latch E is in one of its operative positions, as shown in Fig. 2, and being adapted to engage the upper edge of member *d′* when the latch is in the other operative position, as shown in dotted lines, Fig. 1, and stop E^2 being adapted to prevent the handle-forming end of the latch from entering the space between the edge of the door and adjacent jamb of the door-casing. Of course it will be observed that stops E^2 and *d′* are instrumental in locking or retaining the tilting latch in its operative position and that spring-catch D′, in order to accommodate the movement of latch E from an operative to an inoperative position, must be bent laterally in the direction required to enable the removal of its member *d′* from its obstructing position.

What I claim is—

1. In a door-bolt or door-latch fastening, the combination with a plate adapted to be secured to the edge of the door, a vertically-tilting latch pivoted to said plate, said tilting-latch being adapted to fasten the door-bolt or door-latch in the operative position of the latter, and the handle-forming end of the latch being provided with a hole, of a spring-catch formed upon the aforesaid plate and provided with a lug or projecting-member arranged to engage the aforesaid hole in the inoperative position of the fastening-latch, substantially as set forth.

2. In a door-bolt or door-latch-fastening, the combination of the plate D adapted to be secured to the edge of the door and slotted or slitted downwardly from its upper edge, as at D^2, to form a spring-catch D, and the latter being provided with a laterally-projecting lug or member *d′*, and vertically-tilting latch E pivoted to the aforesaid plate and provided with hole *e′* and stop E^2, all arranged and operating substantially as shown, for the purpose specified.

3. In a door-bolt or door-latch-fastening, the combination with a plate D adapted to be secured to the edge of the door and slotted or slitted vertically, as at D^2, to form a spring-catch D, and the latter being provided with a laterally-projecting lug or member *d′*, of the vertically-tilting latch E pivoted, at its central portion, to the aforesaid plate and provided with hole *e′* and stop E^2, and the latch, at the end adapted to engage the bolt and latch of the door-lock, being enlarged upwardly and downwardly, as at D′, all arranged and operating substantially as shown, for the purpose specified.

In testimony whereof I sign this specification, in the presence of two witnesses, this 10th day of April, 1895.

JOHN T. STONE.

Witnesses:
C. H. DORER,
L. WARD HOOVER.