O. W. STOW,

Latch for Doors.

No. 164,780. Patented June 22, 1875.

Fig. 1.

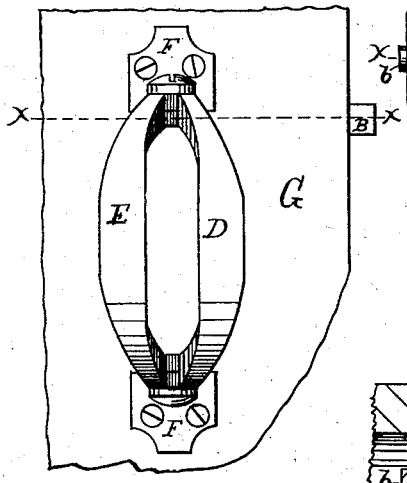


Fig. 2.

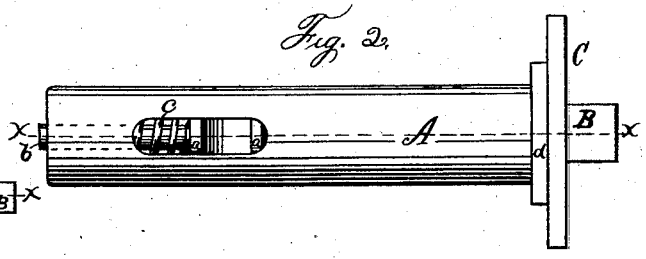


Fig. 3.

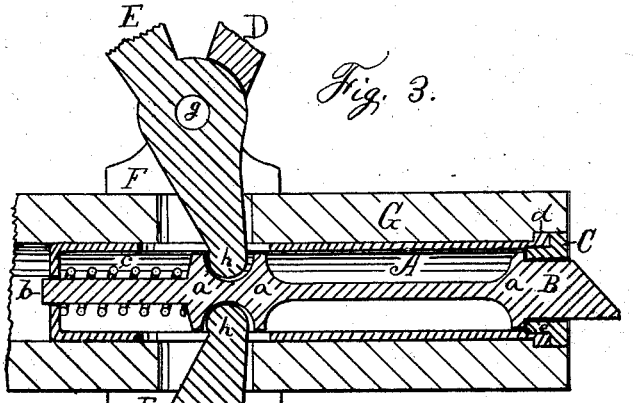


Fig. 4.

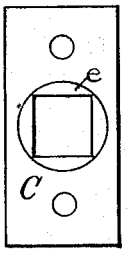


Fig. 5.

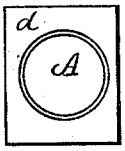
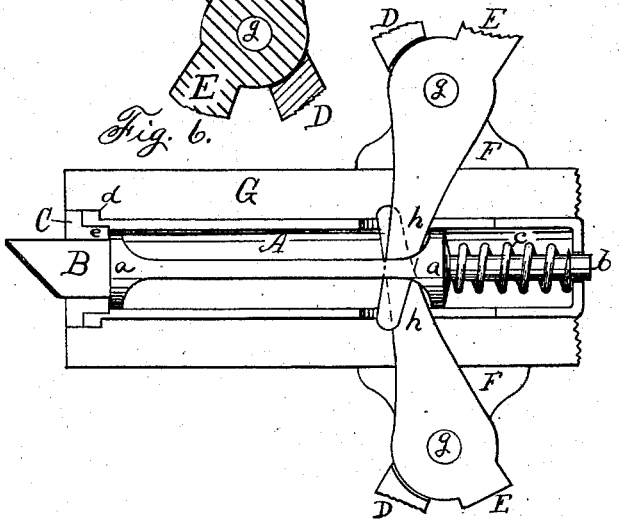


Fig. 6.



Witnesses.
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UNITED STATES PATENT OFFICE

ORSON W. STOW, OF PLANTSVILLE, CONNECTICUT.

IMPROVEMENT IN LATCHES FOR DOORS.

Specification forming part of Letters Patent No. **164,780**, dated June 22, 1875; application filed March 9, 1875.

To all whom it may concern:

Be it known that I, ORSON W. STOW, of Plantsville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Door-Latches, of which the following is a specification:

My invention consists in the peculiar construction, arrangement, and combination of devices for producing a cheap and firm latch that is conveniently operated, all as hereinafter described.

In the accompanying drawing, Figure 1 is a front elevation of a latch-handle which embodies my invention. Fig. 2 is a front elevation of a latch-bolt and its casing which embody my invention. Fig. 3 is a horizontal section of said latch, taken on lines *x x* of Figs. 1 and 2. Figs. 4 and 5 are views of detached parts of said latch; and Fig. 6 is a sectional view, similar to Fig. 3, but showing a modification of the manner of connecting the operating-levers.

A designates the barrel or cylindrical casing, and B the latch-bolt, which is provided with two or more cylindrical portions, *a a a*, which fit the interior of the barrel A. The rear end of the spindle B is reduced, so as to form a small shaft, *b*, which slides through a hole at the rear end of the barrel A, and around which shaft *b* is a spiral spring, *c*, for projecting the bolt B forward.

Fig. 5 shows a view of the front end of the barrel A, upon which there is a square plate, *d*, which, when let into the door G, will prevent the barrel from turning in its place.

A back side view of the exterior plate C is shown in Fig. 4. This plate is provided with screw-holes, for securing it to the door G, and with a circular hub, *e*, through which is a square hole, of a proper size to fit the square portion of the spindle or bolt B. This circular hub *e* is of such size as to fit the mouth of the barrel A, and when secured in place, as shown in Fig. 3, it holds the barrel and bolt in place. D designates a stationary handle, secured rigidly to plate or plates F F. E designates a lever-handle, having its fulcrum at *g*, from which fulcrum an arm, *h*, extends into the door G, and through a slot at one side of the barrel A, and engages with a recess or notch upon one side of the bolt B, as shown in Fig. 3. A similar handle and lever, D E *h*, is also placed upon the opposite side of the door, and is connected with the bolt in like manner.

By moving the outer arm of the lever E *h* toward the edge of the door, the arm *h* acts immediately, and without the intervention of other parts, upon the bolt B, to draw it into the barrel A, and when the lever is released the spring *c* causes the spindle and lever to regain their former position. The lever E *h* is operated by grasping both handles D E and compressing them together.

The device shown in Fig. 3 is fitted for a particular thickness of door; but, if it is desired to make a latch that may be fitted to doors of various thickness, a modification similar to that shown in Fig. 6 may be employed, and in which the inner arms of the operating-levers run through the bolt, and are placed one a little above the other, so as not to interfere.

I claim as my invention—

1. The latch-bolt B and its casing A, recessed at the side, in combination with the twin handles E *h* and D, the latter of which is stationary, and the former hung on a vertical axis, its outer arm E swinging laterally to and from its fellow, and its inner arm *h* within the recess at the side of the casing, all substantially as described, and for the purpose set forth.

2. The barrel A, having the square end plate *d*, in combination with the latch-bolt B and fastening-plate C, having the hub *e*, which fits within the mouth of the barrel, all substantially as described.

ORSON W. STOW.

Witnesses:

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