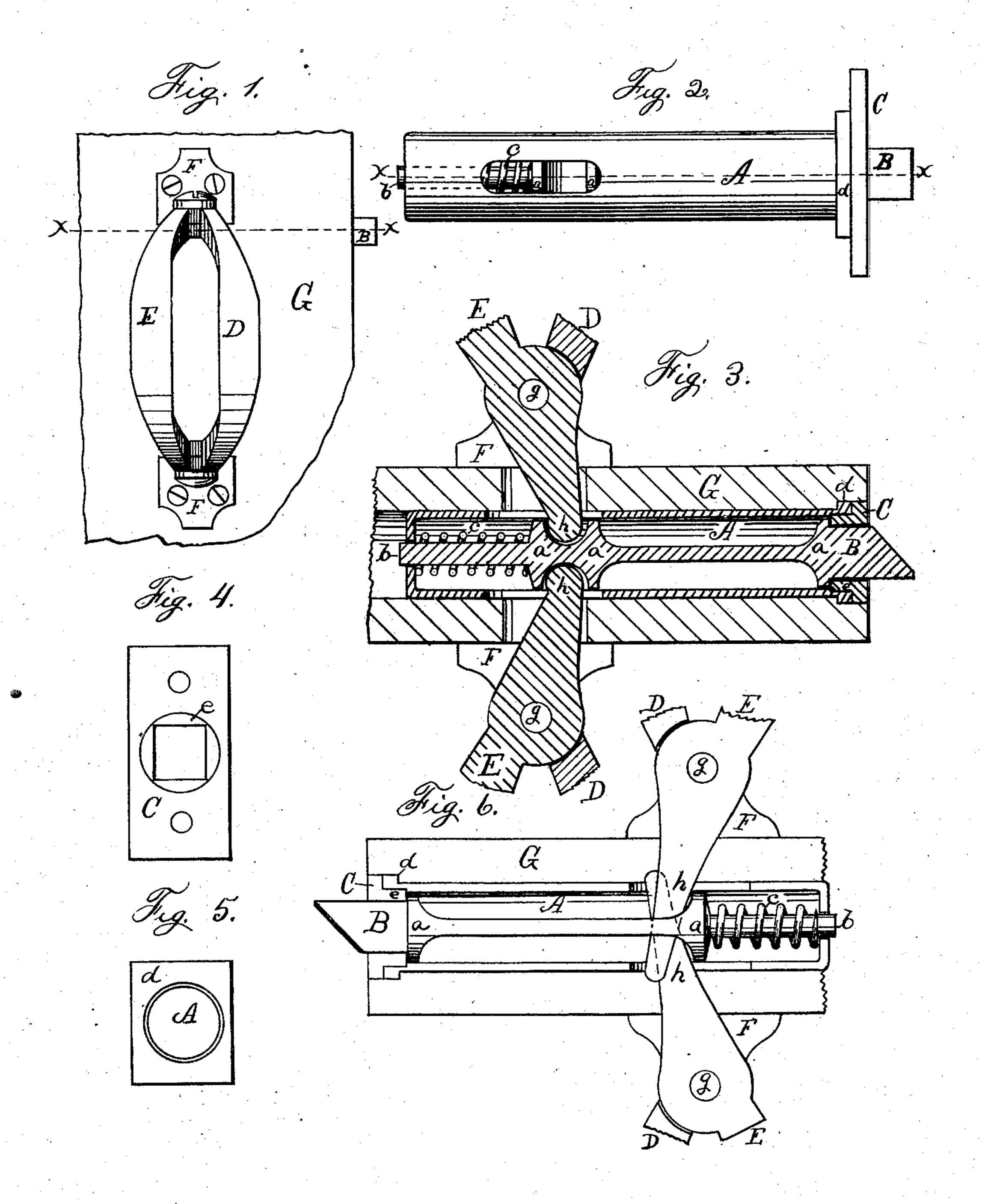
## O. W. STOW, Latch for Doors.

No. 164,780.

Patented June 22, 1875.



Witnesses. & p. Cowl Jus. D. Patten

Formator. Orson W. Stow. By James Shepard, atty.

## 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 desig-

nates 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,  $D \to h$ , 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:

E. B. Holcomb, E. M. Holchkiss.