

G. D. Whitmore,

Latch,

No 55,187,

Patented May 29, 1866.

Fig 1

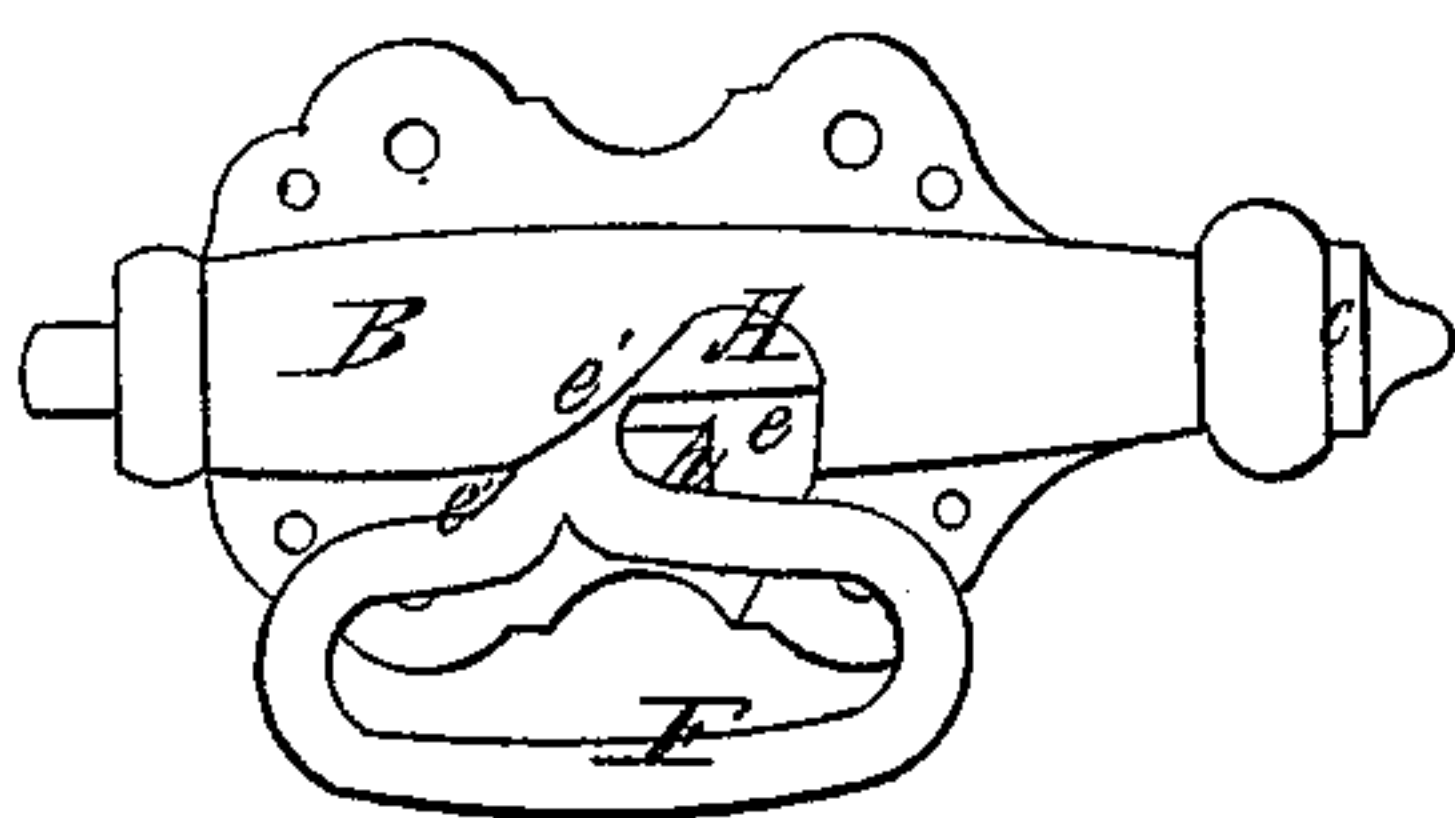


Fig 4

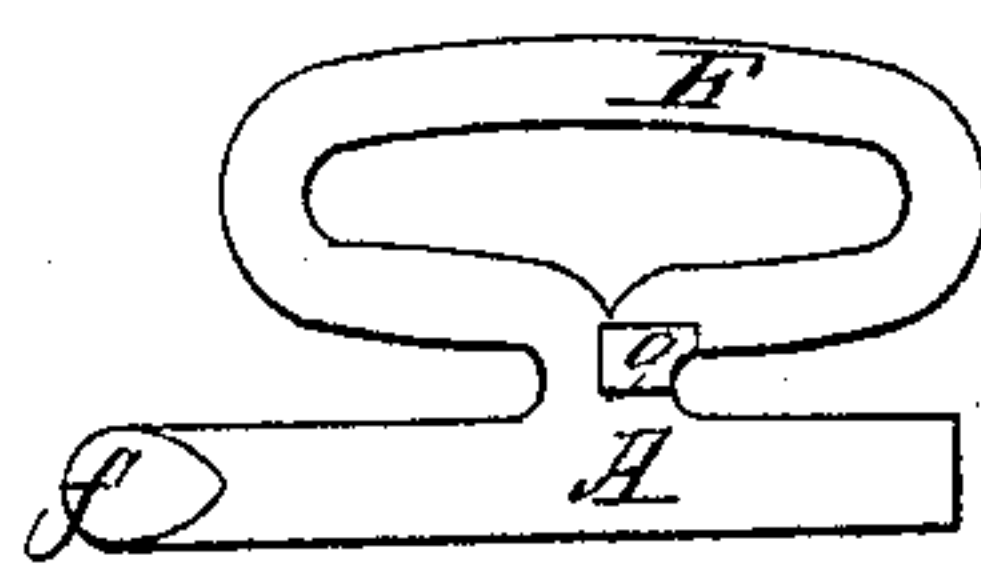


Fig 5

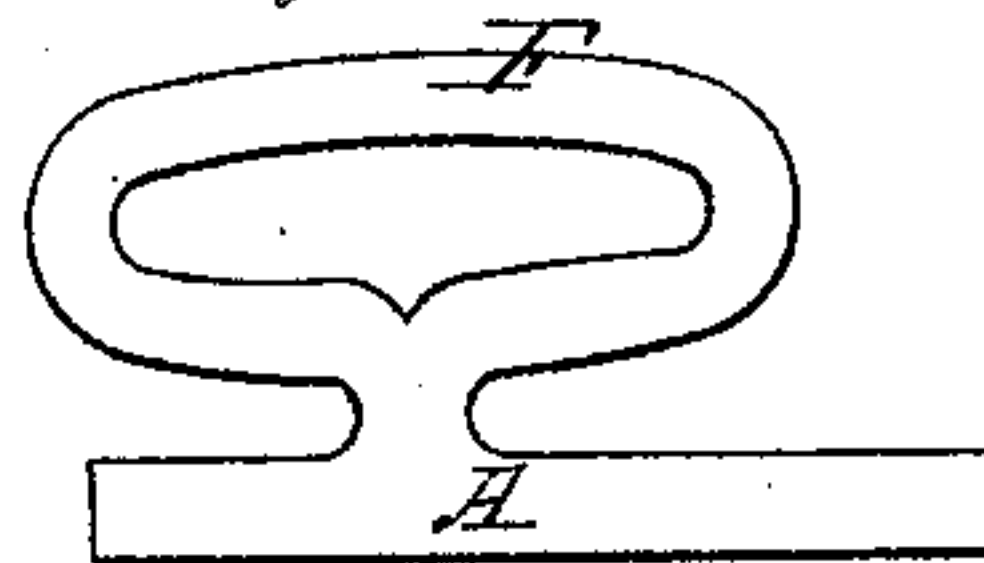


Fig 2

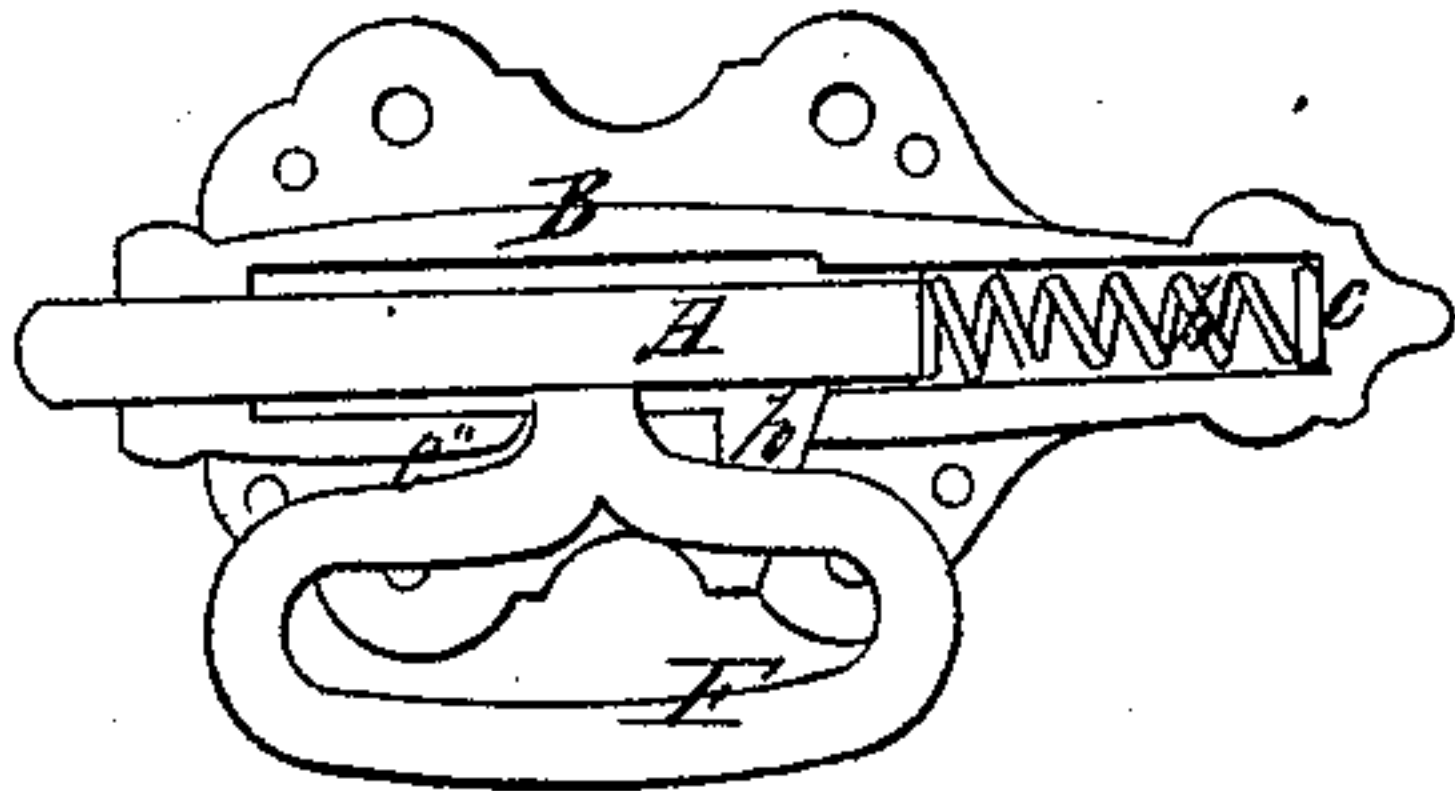


Fig 6

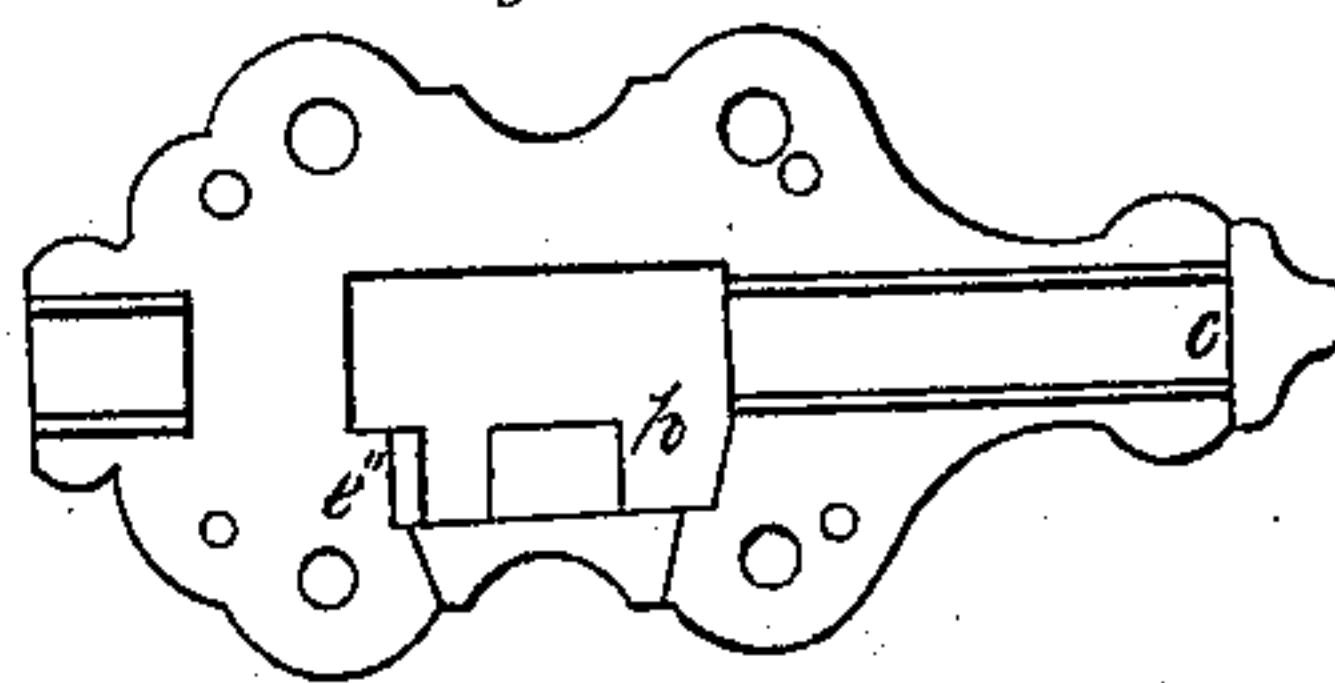
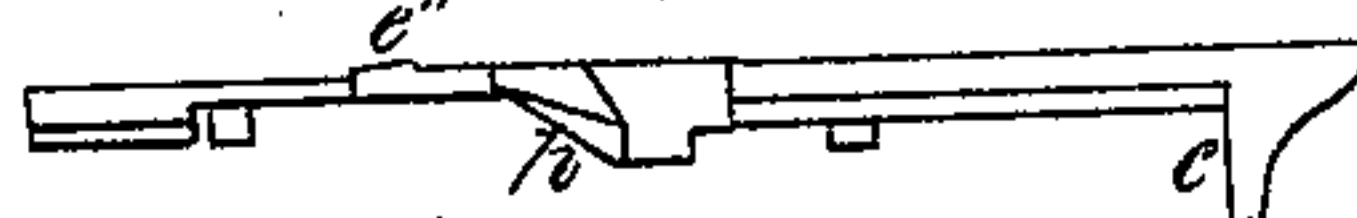


Fig 3



Fig 7



Witnesses:

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UNITED STATES PATENT OFFICE.

GILBERT D. WHITMORE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SPRING-BOLTS.

Specification forming part of Letters Patent No. 55,187, dated May 29, 1866; antedated May 20, 1866.

To all whom it may concern:

Be it known that I, GILBERT D. WHITMORE, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Spring-Lock for Doors; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front view of the said lock; Fig. 2, a longitudinal section, and Fig. 3 a transverse section, of it. Fig. 4 is an inner side view, and Fig. 5 a top view, of its bolt. Fig. 6 is a front view, and Fig. 7 a horizontal section, of its lock-plate and its catch.

This invention, with the exception of its mechanism for fastening back its bolt or holding it in a retracted state, is substantially like the blind-fastener for which Letters Patent No. 40,972, and dated December 15 of the year of our Lord 1863, have been granted to me. Consequently my present invention is a spring-bolting apparatus or lock, consisting of the said blind-fastener and a mechanism, substantially as hereinafter described, or its equivalent, for maintaining the bolt in a retracted state at such times as may be desirable.

In the drawings, A denotes a cylindrical bolt, arranged within a tubular case, B, which, when the apparatus is in use, is to be secured to a door. A helical spring, b, arranged within the case, and between the closed end c thereof and the rear extremity of the bolt, serves to press the bolt forward.

An inclined slot or curved opening, e, is made in the front plate of the bolt-case, and formed as shown in Fig. 1. A handle, F, shaped as exhibited in the drawings, projects from the upper side of the bolt and through the said inclined slot e, the curved side e' of which, with the spring, serves to press the handle down toward a vertical position whenever it is against the lower fastening-flange, e'', of the bolt-case. By seizing the handle and pulling it upward not only will the bolt be caused to recede, but

afterward the door to which the lock may be affixed may be pulled open, the pull or force exerted on the handle thus being made to serve two purposes.

The outer end of the bolt is beveled, as shown at f, in order that on closing the door such beveled end, by acting against the bolt-catch fastened in the door-frame, may effect the rearward movement of the bolt necessary for it to enter the catch.

The mechanism for maintaining the bolt in a retracted state consists not only of a catch, g, projecting from the bolt, but an additional catch, h, formed in the back plate of the lock-case, the same being so arranged that after the bolt may have been drawn back entirely within the case a little further movement of it will be requisite to effect the snapping together of the two catches or their being brought into such relations with one another as to estop the bolt from being shot forward by the spring on release of the hand from the handle.

With my invention or spring-lock, made as described, the bolt can be fastened back by the occupant of an apartment preparatory to leaving the same and closing the door. Were it not for the mechanism for so holding the bolt back it would be liable to so lock the door as to prevent it from being opened by any one except he be within the apartment or the door of which the lock may be fixed.

I claim—

The improved spring-lock as made not only with the bolt-retaining mechanism or catches g h, but with the handle F and the inclined or cammed slot e, arranged together, and with the bolt and the case and the spring of the bolt, substantially as described.

G. D. WHITMORE.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.