# H. S. Smith,

## Door Bolt.

No. 37,646. Patented Feb. 10, 1863.

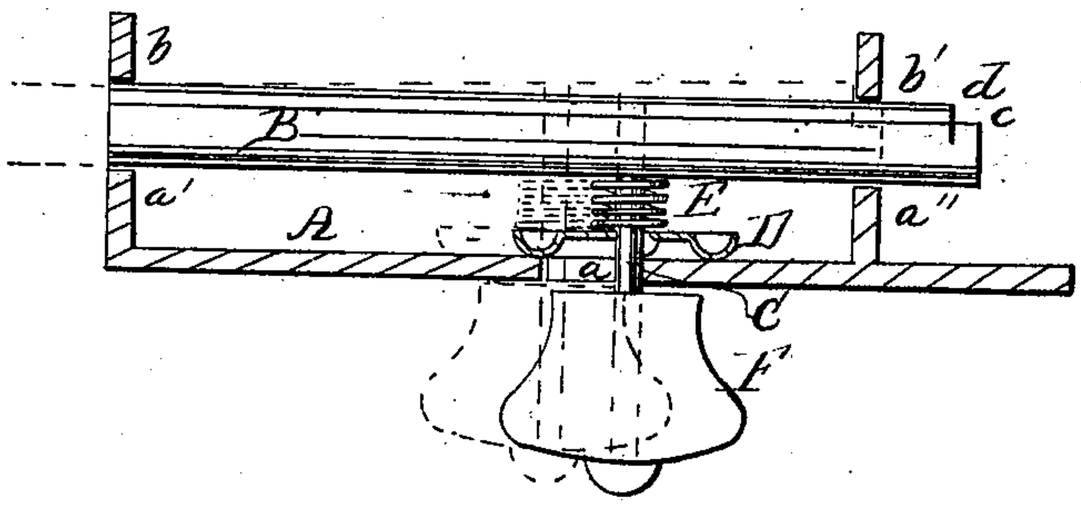
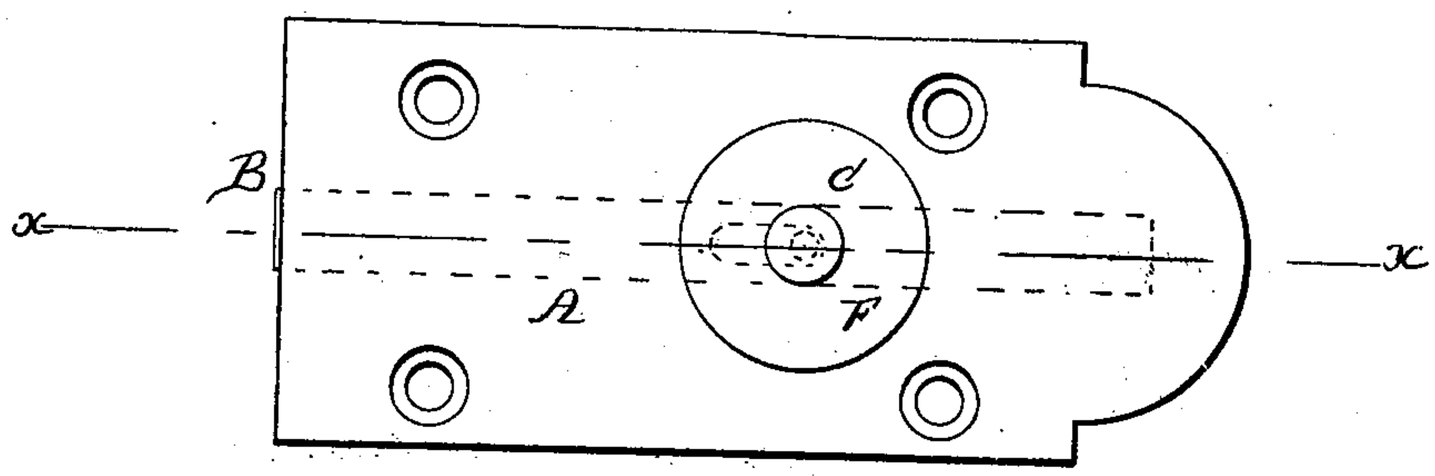



Fig: 1.

Fig: 2.




Witnesses:

M. S. Partridge

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Inventor:

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# UNITED STATES PATENT OFFICE.

H. S. SMITH, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN DOOR-BOLTS.

Specification forming part of Letters Patent No. **37,646**, dated February 10, 1863.

*To all whom it may concern:*

Be it known that I, H. S. SMITH, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Flush-Bolts; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, an outer or face view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in providing the bolt with a shoulder near its back end, and having a spring applied to the spindle of the knob of the bolt in such a manner that, when the bolt is shoved forward to its fullest extent the spring will force the shoulder of the bolt backward beyond the edge of the hole or bearing in which the shouldered end of the bolt works, and thereby cause the bolt to be retained in a forward position, forming a lock or fastening for the bolt, the bolt being disengaged or freed from the bearing aforesaid by drawing outward the knob previous to shoving it back.

The object of the invention is to obtain a simple lock or catch to retain or hold the bolt in a forward position when engaged or fitted in its eye or nosing, and one which will not add in an appreciable degree to the cost in the manufacture of flush-bolts.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a plate, which may be of iron, brass, or any suitable metal, and has a slot, *a*, made in it longitudinally at the center of its width. At the inner side of this plate A there are two plates, *a' a''*, which project from it at right angles, and have each a hole, *b b'*, in them, through which a bolt, B, passes and is allowed to slide freely. In the back part of the bolt, near its end, there is made a notch, *c*, which forms a shoulder, *d*, as shown in Fig. 1, and this shoulder, when the bolt is shoved forward, will just pass within the hole *b'*, near the shouldered end of the bolt.

C represents a spindle or rod which passes through the slot *a* in the plate A, and is attached to the bolt B, and D is a washer or slide which is fitted on the spindle or rod C and covers the slot *a* at the inner side of the plate A. On the spindle or rod C, between the bolt B and the washer D, there is a spiral spring, E, and there is also placed on said spindle or rod, at the outer side of plate A, a knob, F.

From the above description it will be seen that the bolt B is moved by applying the hand to the knob F, and it will also be seen that when the bolt is shoved forward to its fullest extent the spring E will shove the bolt B a little back, so that the shoulder *d* will extend back of the hole *b'*, in the plate *a''*, as shown in red in Fig. 1, and the bolt will be prevented from moving casually back. To move back the bolt, the knob F is pulled a little outward from the plate A, so that the shoulder *d* may enter the hole *b'*, and the knob F and bolt B are then shoved back.

The whole arrangement is extremely simple, and does not add materially to the cost of construction.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The notch *c* in the bolt B, in combination with the spring E, fitted on the knob-spindle or rod C, the above parts being used in connection with the plate *a' a''* A, and all arranged to operate as and for the purpose set forth.

H. S. SMITH.

Witnesses:
M. S. PARTRIDGE,
G. W. REED.