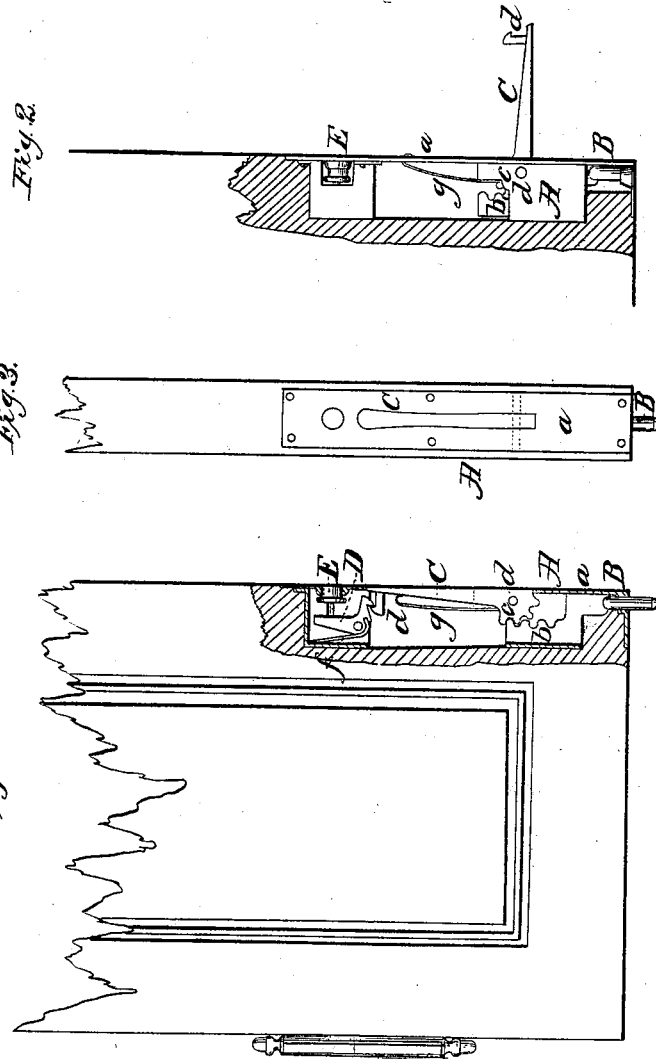


C. Chevallier,

Door Bolt.

N^o 49,085.

Patented Aug. 1, 1865.



Witnesses:

*Theo. Surg.
M. M. Livingston.*

Inventor:

Chas. Chevallier

UNITED STATES PATENT OFFICE.

CHAS. CHEVALLIER, OF BROOKLYN, NEW YORK.

DOOR-BOLT.

Specification forming part of Letters Patent No. 49,085, dated August 1, 1865.

To all whom it may concern:

Be it known that I, CHAS. CHEVALLIER, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Bolt for Folding Doors, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a sectional face view of a door with my bolt attached to it when the bolt is locked. Fig. 2 is a similar view of the same when the bolt is open or withdrawn from the socket. Fig. 3 is an end view of the same when the bolt is locked.

Similar letters of reference indicate corresponding parts.

This invention consists in a bolt provided with a toothed rack which gears in a toothed segment at the end of a folding lever, in combination with a spring-catch, in such a manner that when the bolt is pushed out the folding lever lies flush with the front plate of the case which contains the bolt, and is locked by a spring-catch, thereby keeping the bolt firmly in position and preventing it from dropping down spontaneously or from being pushed down or raised by unauthorized persons, and when it is desired to withdraw the bolt from its socket the spring-catch can be made to release the folding lever by pressing a button in the front plate, and said folding lever forms a convenient handle by which the bolt can be withdrawn from its socket with considerable force.

A represents a case, made of sheet metal or any other suitable material, and intended to be let into the edge of the door to which the bolt is to be attached, so that the front plate, *a*, of said case is flush with the edge of the door, as shown in Figs. 1 and 2 of the drawings. The case A forms the guide for the bolt B, the shank *b* of which forms a toothed rack that gears in a toothed segment, *c*, at the end of a lever, C. This lever has its fulcrum on a pivot, *d*, and it is fitted into a recess in the front plate of the case, so that the same, when it is turned into the position shown in Figs. 1 and 3 of the drawings, lies flush with the surface of the front plate. In this position the

head of the bolt projects through the end of the case into its socket, and the door is locked.

The lever C, when turned in, is held by a spring-catch, D, the hooked end of which drops over a nose, *d*, projecting from the inner surface of the lever, as shown in Figs. 1 and 2 of the drawings. Said spring-catch is made in the form of a bell-crank, which has its fulcrum on a pivot, *e*, and a spring, *f*, has a tendency to keep the hooked end of the same locked with a nose, *d*, of the folding lever. The vertical arm of the spring-catch D bears against a button, E, which slides in a suitable socket secured to the inner surface of the front plate, *a*. By pressing on this button this hooked end of the catch is disengaged and the lever C is released and allowed to follow the action of a spring, *g*, which has a tendency to force the same out.

When it is desired to withdraw the bolt from its socket the button E is forced in, and thereby the lever C is caused to fly out sufficiently far to afford a convenient hold for the hand, and by turning said lever to the position shown in Fig. 2 the bolt is withdrawn from its socket and the door is open.

By means of the lever C considerable force can be brought to bear on the bolt, so that the same can be withdrawn from its socket even if it should stick pretty hard. Furthermore, when the bolt is locked by the lever C the front plate is perfectly flush, and the bolt is not permitted to move spontaneously, which it does sometimes when turned up. Neither can the bolt be raised by unauthorized persons in order to force an entrance before the door is unlocked and one-half of the same folded back to allow the lever C to swing out.

This bolt can be manufactured at a comparatively low price, and it is superior in appearance and in the convenience of its operation to bolts of the ordinary construction.

I claim as new and desire to secure by Letters Patent—

A bolt the shank of which forms a toothed rack, and which operates in combination with a folding lever, C, spring-catch D, and button E, substantially as and for the purpose set forth.

CHAS. CHEVALLIER.

Witnesses:

M. M. LIVINGSTON,
C. L. TOPLIFF.