

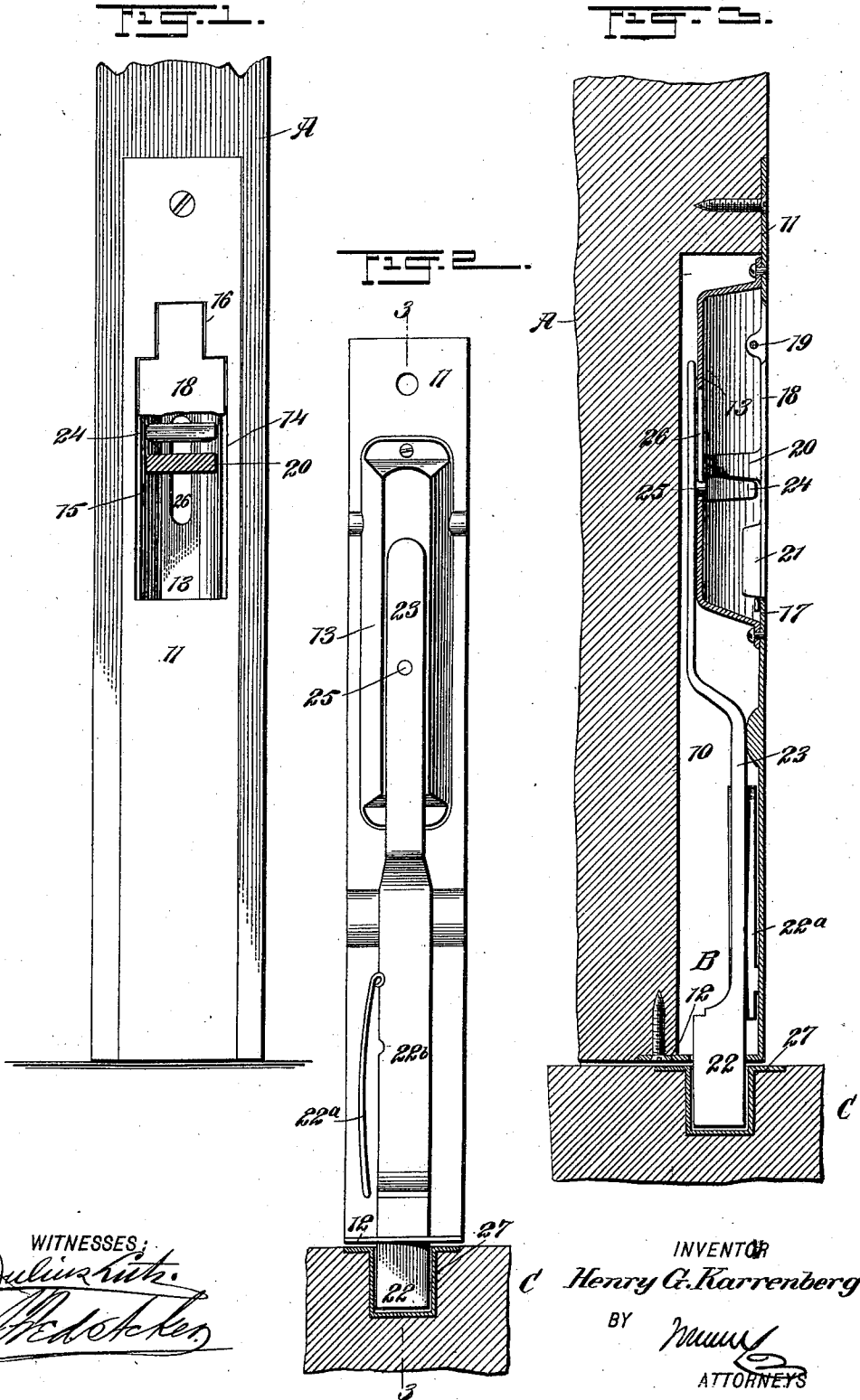
No. 687,032.

Patented Nov. 19, 1901.

H. G. KARREBERG.
FLUSH BOLT.

(Application filed Mar. 20, 1901.)

(No Model.)



UNITED STATES PATENT OFFICE.

HENRY GERHARD KARRENBERG, OF NEW YORK, N. Y.

FLUSH BOLT.

SPECIFICATION forming part of Letters Patent No. 687,032, dated November 19, 1901.

Application filed March 20, 1901. Serial No. 52,073. (No model.)

To all whom it may concern:

Be it known that I, HENRY GERHARD KARRENBERG, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Flush Bolt, of which the following is a full, clear, and exact description.

The purpose of the invention is to so construct a flush bolt that the bolt may be effectually locked in an open or in a closed position and so that the bolt cannot be moved from either position without opening a key-operated lid forming a part of the bolt-casing and whereby should the lid be unlocked the operating medium of the bolt will be protected and concealed while the lid remains closed.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the improved bolt applied to a door, a portion of the lid or cover being broken away. Fig. 2 is a rear elevation of the flush bolt and a section of the well into which the bolt enters; and Fig. 3 is a vertical longitudinal section through a bolt and that portion of the door to which the bolt is applied and also a section through the well which receives the bolt, the section being taken practically on the line 3 3 of Fig. 2.

In the drawings I have illustrated the flush bolt as applied to the bottom portion of a door A, a suitable recess 10 being made in the front edge of the door to receive said bolt; but I desire it to be understood that the bolt may be applied to the upper portion of the door as well. In the construction of the improved bolt B a front plate 11 is employed, and this front plate covers the recess 10 and is countersunk in the front edge of the door, being secured thereto in any desired manner.

The said front plate 11 is provided with a member 12 at one end, which is at an angle to the main body of the plate, and when the bolt is to be applied to the bottom of the door this member 12 closes the bottom of the recess 10,

and when the bolt is applied to the top portion of a door the extension member 12 will close the upper end of the recess 10 made to receive the improved bolt.

A box-casing 13 is secured to the back portion of the front plate 11, or the said box-casing may constitute an integral portion of the said front plate, and the front plate 11 where the box-casing 13 is applied or located is provided with an opening 14, preferably rectangular. The side edges of the box-casing 13 are within the line of the side walls of the opening 14, forming thereby shoulders 15, as is shown in Fig. 1. The opening 14 in the front plate 11 is provided at its upper portion with a reduced extension 16, as is particularly shown in Fig. 1, and the lower edge of the opening 14 is at a point above the bottom of the box-casing 13, as is shown at 17 in Fig. 3. A lid or cover 18 is used to normally close the opening 14, and this lid or cover when in its closed position lies upon the shoulders 15, with its outer face flush with the outer face of the face-plate 11, and the lid or cover is provided with an extension which enters the extension 16 of the opening 14 in the said front plate. The lid or cover 18 is pivotally attached to the front plate by a suitable pivot-pin 19, (shown in Fig. 3,) passed through a suitable knuckle formed in the back of the lid or cover where the upper reduced portion of the lid or cover connects with the main portion or body thereof. The lid or cover is provided with a lug 20 upon its under face, which lug when the lid or cover is closed enters the box-casing 13, as shown in Figs. 1 and 3. Furthermore, the lid or cover 18 is provided at its lower or front end upon its inner face with a lock 21, operated by a key passed through a proper keyhole in the outer face of the lid or cover, and when the lid or cover is in the closed position shown in Figs. 1 and 3 the bolt of the lock when the lock is operated will pass down to an engagement with that portion 17 of the face-plate 11 which extends above the bottom of the box-casing 13, as is particularly shown in Fig. 3.

The bolt 22 is the ordinary slide-bolt and is provided with a shank 23, which extends up at the back of the box-casing 13. This shank 23 is connected by a stem 25 with a thumb-piece 24, which thumb-piece has move-

ment in the box-casing 13, and the stem 25, connecting the thumb-piece 24 with the shank of the bolt, is passed through a longitudinal slot 26, made in the back or inner face of the box-casing 13, as is shown in Figs. 1 and 3. The bolt 22 is adapted to enter a well 27, located in the threshold-strip C, as is illustrated in Figs. 2 and 3. When the bolt 22 enters this well 27 and the lid or cover 18 is closed, the lug 20 on the lid or cover will be immediately above the thumb-piece 24, preventing the said thumb-piece from accidentally moving upward and carrying the bolt 22 from its keeper. On the other hand, when the bolt is carried upward to its full extent, so that the door may be opened and the lid or cover 18 is closed, the lug 20 of the lid or cover will be immediately below the thumb-piece 24, thus preventing the bolt 22 from accidentally entering the well 27 and locking the door closed. It will be observed that the lug 20 of the lid or cover performs its functions whether the lock 21 be operated or not, and conceals and protects the thumb-piece 24 and prevents the same from being tampered with. When the lid or cover 18 is unlocked, it may be readily opened by pressing inward on the upper extension of the lid or cover, and when the lid or cover is opened the thumb-piece of the bolt is as accessible as that of the ordinary flush bolt.

In connection with the bolt 22 a spring 22^a is employed, which is secured in any suitable or approved manner to the inner face of the front plate 11, as shown in Figs. 2 and 3, and the front end of this spring 22^a is adapted to enter notches 22^b, produced in a side edge of the shank 23 of the bolt, and the said spring serves to assist in holding the bolt 22 in either its upper or lower position.

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

1. A flush bolt comprising a face-plate having an opening therein, a box-casing secured to

the face-plate at the rear of the said opening, a bolt provided with a shank, having an extension arranged for sliding movement in the box-casing, a thumb-piece located within the box-casing and attached to the said extension, and a lid or cover for the opening in the casing, such lid or cover being pivoted to a support independent of the bolt and provided with a lug extending within the box-casing and adapted to occupy a position either above or below the thumb-piece for the bolt.

2. A flush bolt provided with a box-casing at its back, in which the thumb-piece of the bolt has sliding movement, a hinged cover for the said casing, provided with a lug which enters the box-casing and is arranged for engagement with the thumb-piece of the bolt, and a locking device for the lid or cover, substantially as described.

3. A flush bolt, and a casing in which said bolt is movable, combined with a portion movably connected with the casing and held from movement with the bolt and arranged for adjustment to position to hold said bolt in either of its positions, substantially as set forth.

4. The combination substantially as described, of a face-plate having an opening, a box-casing fitting against the inner side of the face-plate and having its edges within the line of the walls of such opening forming shoulders, the bolt having a portion projecting within the box-casing and the lid or cover pivoted to the face-plate and arranged when closed to rest against such shoulders and provided on its inner side with a portion to project in the path of the portion on the bolt whereby to lock the bolt from movement substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY GERHARD KARRENBERG.

Witnesses:

WM. H. KINNAIRD,
JOHN L. FLORENCE.