A. D. NEWMAN.

BOLT.

APPLICATION FILED APR. 20, 1917.

1,249,176. Patented Dec. 4, 1917.

Fig. 1.

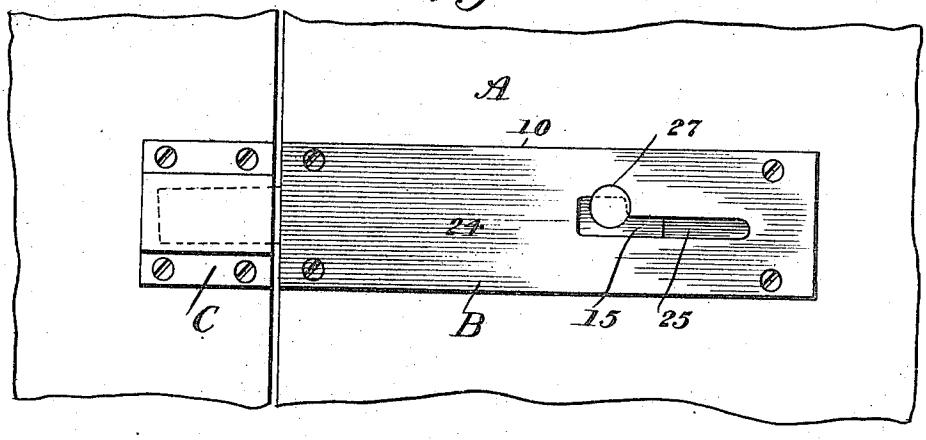


Fig. 4.

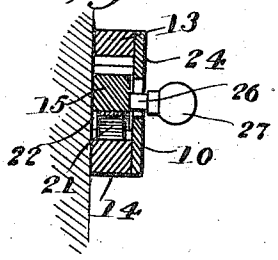


Fig. 2.

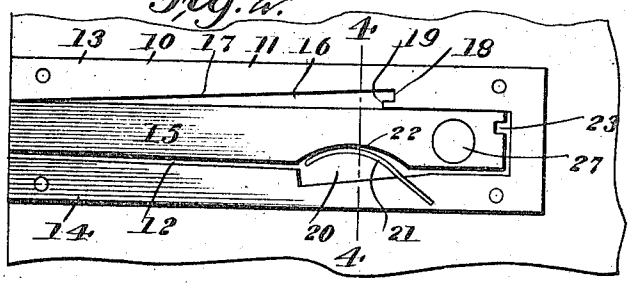


Fig. 3.

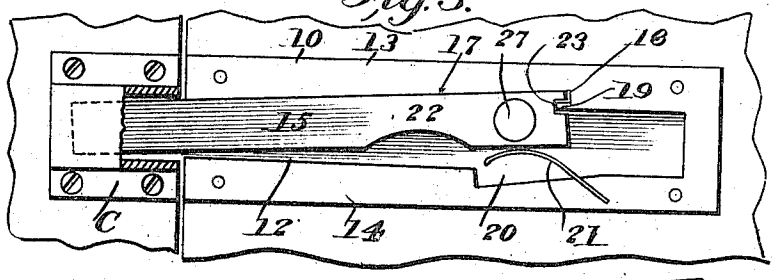
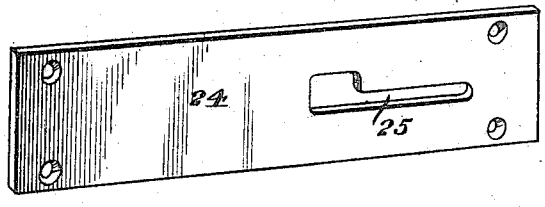


Fig. 5.



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BOLT.

1,249,176. Specification of Letters Patent. Patented Dec. 4, 1917.

Application filed April 20, 1917. Serial No. 163,510.

To all whom it may concern:

Be it known that I, AUGUST D. NEWMAN, a subject of the King of Great Britain, residing at Cangai, New South Wales, Australia, have invented new and useful Improvements in Bolts, of which the following is a specification.

This invention relates to a bolt which may be employed to hold doors, and similar closure members in secured position.

The primary object of the invention is to provide a bolt of this character in which the bolt and casing, therefore are so constructed that as the bolt is moved to locking position within the bolt casing, the bolt is automatically tilted to a position to engage a shoulder within the casing and prevented thereby from being retracted within the bolt casing until released from engagement with the shoulder by a knob on the bolt for this purpose.

Another object of the invention is to provide the bolt casing with a spring which is so arranged therein as to engage the bolt with the shoulder in the casing when the bolt is moved to extended position and also serves to prevent the bolt being accidentally moved to locking position when retracted within the casing.

With these and other objects in view, the invention resides in the novel combination and arrangement of parts, which will be hereinafter described and particularly pointed out in the claim.

The preferred embodiment of the invention has been illustated in the accompanying drawing, although no restriction is necessarily made to the precise details of construction therein shown, as changes, alterations, and modifications, within the scope of the claim may be resorted to when desired.

In the drawing:

Figure 1 is a view in front elevation of a bolt constructed in accordance with the invention and showing the same applied, the bolt being in position to secure the closure member to which it is applied.

Fig. 2 is a view similar to Fig. 1 and showing the cover plate of the casing removed and the bolt in retracted position.

Fig. 3 is a view similar to Fig. 2 showing the bolt in locking position.

Fig. 4 is a vertical transverse section on the line 4—4 of Fig. 2.

Fig. 5 is a detailed view of the cover plate for the bolt casing.

Like characters of reference denote corresponding parts throughout the several views in the drawing.

Referring now to the drawing in detail, the letter A designates a portion of a closure member upon which is mounted the improved bolt B which in Figs. 1 and 3 in the drawing is shown engaged with a keeper C on the frame of the closure member.

The improved bolt B has a casing 10 for connection with the closure member A and includes a block 11 of rectangular shape and having formed therein for the greater portion of its length a longitudinally extending slot 12 opening out through one end of the block to provide the same with arms 13 and 14 receiving therebetween for sliding movement a bolt 15.

The arm 13 of the bolt is recessed, as at 16, to provide the arm with an inclined portion 17 extending from the open end of the slot 12 to a shoulder 18 formed between the ends of the arm by the recess 16 and provided with a lip 19 arranged at right-angles to said shoulder and extending toward the open end of the slot 12.

The arm 14 of the block 11 has formed therein between its ends a recess 20 in which is arranged a leaf spring 21 having an end thereof secured to the arm 14 to cause a portion of the spring to normally extend within the slot 12, so that the extending portion of the spring will be received in a recess 22 in the bolt 15 when the bolt is in retracted position within the casing 10 and serve to yieldably hold the bolt against movement therein.

The bolt 15 which gradually tapers toward its outer end has formed therein at its inner end a recess 23 which when the bolt is in extended or locking position within the casing 10 is adapted to receive therein the lip 19 on the shoulder 18 on the arm 13 as shown in Fig. 3 in the drawing.

The block 11 is provided with a cover plate 24 forming part of the casing 10 and having formed therein an L-shaped slot 25 receiving therein the shank 26 of a knob 27 on the bolt 15 and by means of which the bolt 15 may be slid to extended position within the casing to engage the same with the keeper C and to permit the spring 21 to tilt the bolt 15 within the block and hold the same in position to engage the shoulder 18 to prevent the bolt from being again moved to retracted position within the cas-

ing unless operated by the knob for this purpose.

When the bolt 15 is slid within the casing 10 to extended position the spring 21 which normally serves to prevent such sliding movement of the bolt will tilt the bolt within the casing and cause the bolt to contact with the inclined portion 17 of the arm 13, said inclined portion serving to guide the bolt to a position within the casing in which the lip 19 will be received in the recess 23 in the end of the bolt, thus preventing the bolt from again being drawn within the casing unless the bolt is released from the shoulder and lip against the influence of the spring 21 by operating the knob 27 for this purpose.

From the foregoing description, taken in connection with the accompanying drawing, it is at once apparent that a bolt has been provided for holding closure members in secured position which though simple in construction, is highly efficient for the purpose set forth.

Having thus described the invention, what is claimed as new, is:

A device of the class described comprising a block having a slot therein, a wall of said slot being inclined for a portion of its length, a tapered bolt mounted to slide in said slot and having a recess in an end thereof, a spring on said block normally holding said bolt against sliding movement and to engage the same with the inclined portion of said wall when the bolt is in locking position, a shoulder on said block for contact with the recessed end of the bolt when the bolt is engaged with the inclined portion of said wall, and a lip on said shoulder to extend in the recess in the end of the bolt.

In testimony whereof I affix my signature.

AUGUST DUMPE NEWMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."