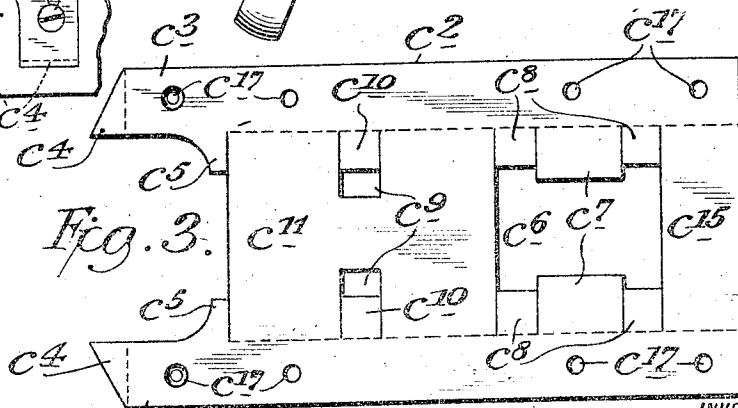
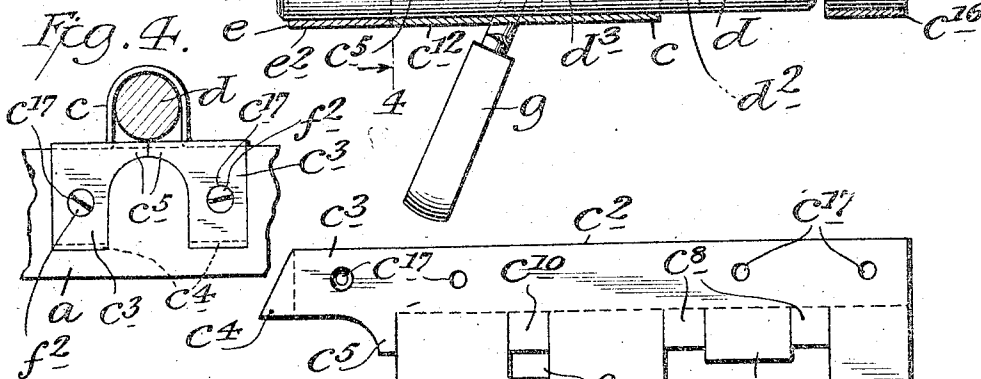
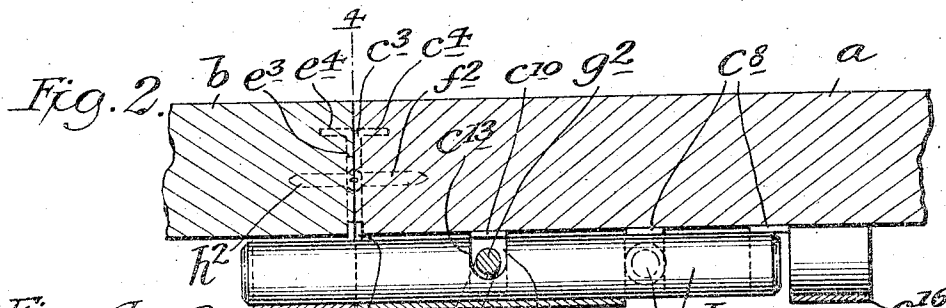
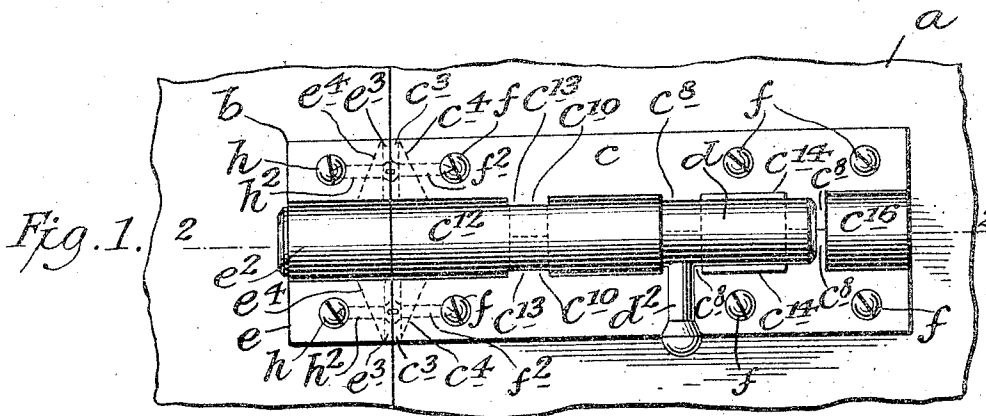


J. SHONE.
DOOR BOLT.

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1,047,315.

Patented Dec. 17, 1912.



WITNESSES

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DOOR-BOLT.

1,047,315.

Specification of Letters Patent.

Patented Dec. 17, 1912.

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To all whom it may concern:

Be it known that I, JAMES SHONE, a subject of the King of Great Britain, and residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Door-Bolts, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to that class of door securing devices which employ a sliding bolt; and the object thereof is to provide a door bolt of this class which may be locked in operative position and which is also provided with improved means for securing it to a door whereby the manipulation of the bolt from the outside of the door or the unlocking of the door from the outside thereof is prevented.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which:—

Figure 1 is an inside view of a part of a door and a part of a door frame and showing my improved lock bolt in operative position; Fig. 2 a section on the line 2—2 of Fig. 1; Fig. 3 a plan view of a metal blank from which the keeper plate of the bolt is formed, and; Fig. 4 a section on the line 4—4 of Fig. 2.

In the drawing forming part of this specification, I have shown at *a* a part of a door and at *b* a part of one side portion of the door frame. I have also shown at *c* a bolt keeper plate for the bolt *d*, said plate being secured to the door in the usual position; and at *e* I have shown the nose or strike plate which is secured to the door frame and provided with a keeper *e*² adapted to receive the end of the bolt.

The keeper or bolt plate *c* is formed from a blank *c*² shown in Fig. 3, said blank being rectangular and oblong in form and being provided at one end with side projections *c*³ ending in tapered members *c*⁴ and provided at their inner edges with inwardly directed tongues *c*⁵. In the end portion of the blank *c*² opposite the side projections *c*³ is a large central opening *c*⁶, centrally of the opposite sides of which are inwardly directed tongues *c*⁷, at the opposite ends of which are inwardly directed and shorter

tongue *c*⁸, and centrally of the body of the blank between the opening *c*⁶ and the end of said blank having the side projections *c*³ are transverse slots or openings *c*⁹ having inwardly directed tongues *c*¹⁰. When the bolt keeper plate *c* is formed or stamped into the desired form from the blank *c*² the part *c*¹¹ thereof in which the slots or openings *c*⁹ and the tongues *c*¹⁰ are formed, forms the keeper *c*¹² of the bolt plate in the top and bottom sides of which are recesses *c*¹³ formed by the slots or openings *c*⁹, while the tongues *c*¹⁰ remain flush with the body of the plate and in the same plane therewith. In this operation the tongues *c*⁷ are also formed into keepers *c*¹⁴ between which the bolt is movable, while the tongues *c*⁸ remain in the same plane as the body of the plate and flush therewith, and the end portion *c*¹⁵ of the blank is formed into the keeper *c*¹⁶ into and through which the bolt is movable. With this construction it will be seen that the tongues *c*⁸ and *c*¹⁰ constitute a back support for the bolt and on which said bolt is movable, and in the above operation the side end projections *c*³ are bent at right angles to the body of the blank and the end portions *c*⁴ thereof at right angles thereto, and in securing the bolt plate *c* to the door the said plate is held in proper position and moved to the right and the tapered members *c*⁴ are driven into the face of the door as clearly shown or indicated in Fig. 2, and the said bolt plate or blank *c*² is provided with screw holes *c*¹⁷ through which are passed screws *f* whereby said bolt plate is secured to the door; and in bending the parts *c*³ at right angles to the body of the blank *c*² the tongues *c*⁵ are also bent at right angles to form back supports for the bolt as clearly shown in Fig. 2, and similar to the supports formed by the tongues *c*⁸ and *c*¹⁰. The nose plate *e* which is secured to the door frame *b* with its keeper *e*² is also formed from a blank in the same manner as the bolt plate *c* and is provided with parts *e*³ and *e*⁴ similar to the parts *c*³ and *c*⁴ of the bolt plate *c* and is connected with the frame by a process similar to that for connecting the bolt plate with the door.

The bolt *d* is provided with a handle *d*² similar to other devices of its class, and formed in one side of said bolt, the back part thereof when said bolt is in operative position as shown in Fig. 2, is a transverse recess *d*³, and when it is desired to lock the

bolt in its operative position, a padlock g is provided and the arm g^2 thereof is passed through the recess d^3 in the bolt and through the recesses c^{13} in the keeper c^{12} . The nose plate e is also secured in place by screws h passed therethrough into the door frame and by another screw or screws h^2 passed through the part e^3 thereof into the door frame and other screws f^2 are passed through the parts c^3 of the bolt plate c into the face of the door, said parts c^3 being provided with screw holes c^{17} similar to the other screw holes in the bolt plate.

It will be understood that the parts e^3 and e^4 of the bolt plate c and the corresponding part or parts e^3 and e^4 of the nose plate e form guards or protectors to prevent cutting through from the outside of the door to interfere with the bolt, and it will also be understood that with the bolt plate c and nose plate e constructed and secured to the door and door frame in the manner shown and described, said bolt plate c and nose plate e will remain in position when the bolt is locked as shown in Fig. 2, even though the screws f and h which hold said bolt and nose plates be removed, said bolt and nose plate being held in position by the parts c^3 and e^3 thereof.

It is customary in making bolt plates of the class shown and described to form the keepers thereon in which the bolt is movable, separately and secure them to said plate, but by forming said bolt plate as herein shown and described from a blank like that shown in Fig. 3, the keepers in which the bolt is mounted or placed are formed integral with said plate, and this construction cheapens the manufacture of said plate and also renders the same more strong and durable as there is no danger of the keepers becoming detached therefrom.

My invention is not limited to the use thereof in connection with a door as shown and described and the same may be employed in connection with gates, or other swinging devices as will be readily understood, and changes in and modifications of

the construction herein shown and described may be made, within the scope of the appended claims, without departing from the spirit of my invention, or sacrificing its advantages.

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

1. In a device of the class described, a bolt and the part carrying and guiding the same, said guiding and carrying member composed of a single plate of sheet metal folded to cause the outer edges of the plate to form the main base of the same, cut portions in said plate coming together to form the main under support of the bolt, integral portions on opposite sides of said cut portions folded to form loops above the main base to receive the bolt, substantially as described.

2. In a device of the class described, a bolt and the part carrying and guiding the same, and a keeper, said guiding and carrying member composed of a single plate of sheet metal folded to cause the outer edges of the plate to form the main base of the same, cut portions in said plate coming together to form the main under support of the bolt, integral portions on opposite sides of said cut portions folded to form loops above the main base to receive the bolt, said bolt plate having at its end adjacent the keeper two parts extending at right angles thereto, and adapted to be secured to the article to which the plate is to be attached, said securing parts being separated at their outer ends but having at their inner ends projections extending inwardly and meeting to form a further support for the underside of the bolt, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 17th day of June 1911.

JAMES SHONE.

Witnesses:

C. E. MULREANY,
F. G. AT LEE.