R. HERLIHY.

DOOR BOLT LOCK.

APPLICATION FILED MAY 17, 1918.

1,294,462. Patented Feb. 18, 1919.

Fig. 1.

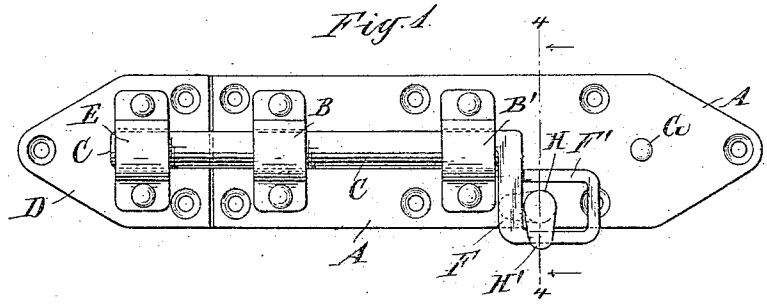


Fig. 2.

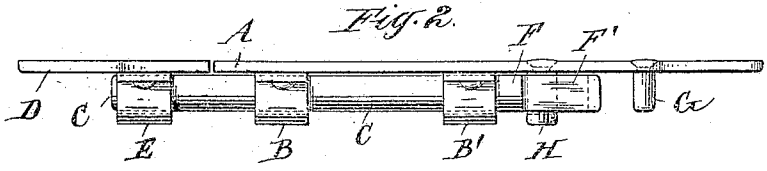


Fig. 3.

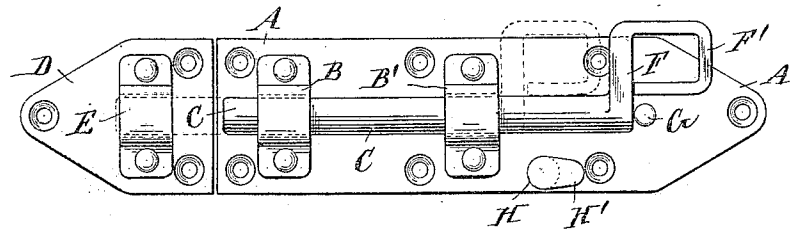
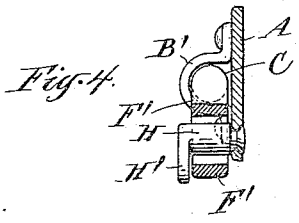


Fig. 4.



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UNITED STATES PATENT OFFICE.

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DOOR-BOLT LOCK.

1,294,462. Specification of Letters Patent. Patented Feb. 18, 1919.

Application filed May 17, 1918. Serial No. 235,076.

To all whom it may concern:

Be it known that I, ROBERT HERLIHY, a citizen of the United States, residing in the city of New York, borough of Manhattan, in the county of New York and State of New York, have invented a certain new and useful Improvement in Door-Bolt Locks, of which the following is a specification.

The invention relates to locking means for doors, gates and the like, comprising a bolt slidably mounted in a housing and adapted to extend across the joint between the door and its post and engage a keeper, and the object of the invention is to provide simple inexpensive means for holding such bolt in the shot or bolted condition, and a further object is to provide means for locking such holding means and insuring against unauthorized or burglarious manipulation of the bolt from the outside.

The invention consists in certain novel features and details of construction and arrangement by which the above objects are attained, to be hereinafter described and claimed.

The accompanying drawings form a part of this specification and show an approved form of the invention.

Figure 1 is a front elevation of the improved door-bolt, in the bolted and locked condition.

Fig. 2 is a corresponding plan or top view.

Fig. 3 is an elevation corresponding to Fig. 1, showing the door-bolt in the unbolted condition.

Fig. 4 is a vertical section taken on the line 4—4 in Fig. 1 and partly in end elevation.

Similar letters of reference indicate the same parts in all the figures.

A is the housing-plate adapted to be secured to a door or post member, carrying housings B B^1 in which is rotatably mounted a cylindrical bolt C adapted to slide axially therein.

E is a keeper mounted on a keeper-plate D and adapted to be secured to the other door-member and receive the front end of the bolt C when the bolt is shot.

On the rear end of the bolt is an arm F extending radially therefrom and preferably bent to form a rectangular loop F^1 offset from the bolt and in rear thereof, as shown.

The rear housing B^1 is preferably located to be struck by the forward face of the arm F and thus limit the outward engaging movement of the bolt into the keeper E, and G is a stop fixed on the plate A in rear of the bolt and in alinement therewith, adapted to limit the inward unbolting movement.

H is a pin rotatably mounted on the plate A in position to lie within the loop F^1 in rear of the arm F when the bolt has been shot and the loop presented thereto by a partial revolution of the bolt, and serving as a stop for the arm F to prevent the inward unbolting movement of the bolt. The pin is provided with a radially extended head or flange H^1 of such size and shape as to permit the loop to encircle the pin when in the position shown in dotted lines in Fig. 3, in the engaging movement of the loop, and to be turned to lie upon the arm F or other adjacent portion of the loop, as shown in Fig. 1, and prevent the partial rotation of the bolt in the direction to release the loop from the pin and permit the bolt to be withdrawn.

When the bolt is shot and the arm F or loop F^1 engaged with the pin H, and the head H^1 of the latter turned into the engaged position, the bolt is securely locked and insured against accidental or unauthorized release from outside the door.

To release the bolt it is only necessary to turn the head of the pin to lie longitudinally of the loop, lift the latter clear of the pin by a rotatory movement and withdraw the bolt from its keeper. The loop serves as a convenient handle for operating the bolt.

The device is simple, easily operated, adapted to withstand rough usage, is eminently efficient, and may be economically manufactured.

I claim:—

1. In a device of the character set forth, a bolt-plate, a housing thereon, a bolt slidably and revolubly mounted in said housing, a radially offset loop on the rear end of said bolt and extending in the general direction of the length thereof, a pin rotatably mounted on said plate out of alinement with said bolt and adapted to be inclosed in said loop by a partial rotation of said bolt in the bolted position of the latter, and prevent a withdrawal movement of said bolt, and an offset head on said pin adapted in one position to permit such inclosing movement of said bolt and loop and in another position to engage and extend within said loop and prevent the partial rotation of said bolt.

2. In a device of the character set forth, a bolt-plate, a housing thereon, a bolt slidably and revolubly mounted in said housing, a radially offset loop on the rear end of said bolt and extending in the general direction of the length thereof, a pin rotatably mounted on said plate out of alinement with said bolt and adapted to be inclosed in said loop by a partial rotation of said bolt in the bolted position of the latter, and prevent a withdrawal movement of said bolt, an offset head on said pin adapted in one position to permit such inclosing movement of said bolt and loop and in another position to be received in and engage said loop and prevent the partial rotation of said bolt, and a stop on said plate located in axial alinement with said bolt and adapted to limit the withdrawal movement of said bolt.

In testimony that I claim the invention above set forth I affix my signature.

ROBERT HERLIHY.

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