

No. 856,214.

PATENTED JUNE 11, 1907.

A. J. BERGER.
DOOR LOCK.

APPLICATION FILED JAN. 28, 1907.

Fig. 3.

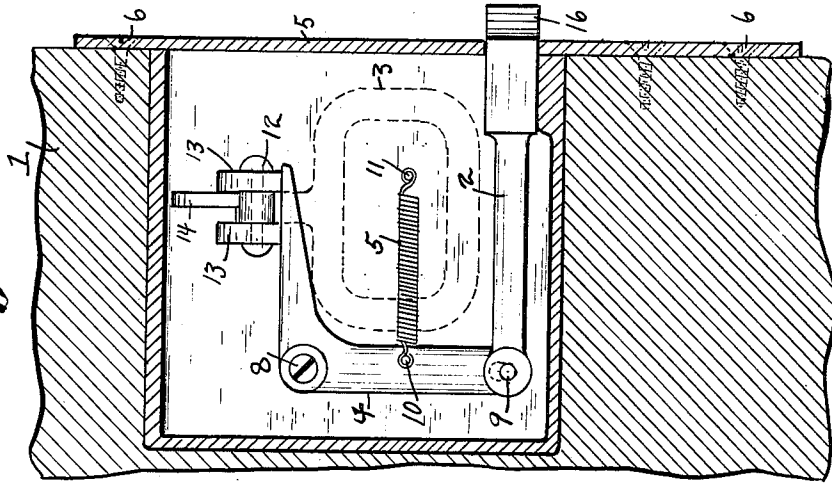


Fig. 2.

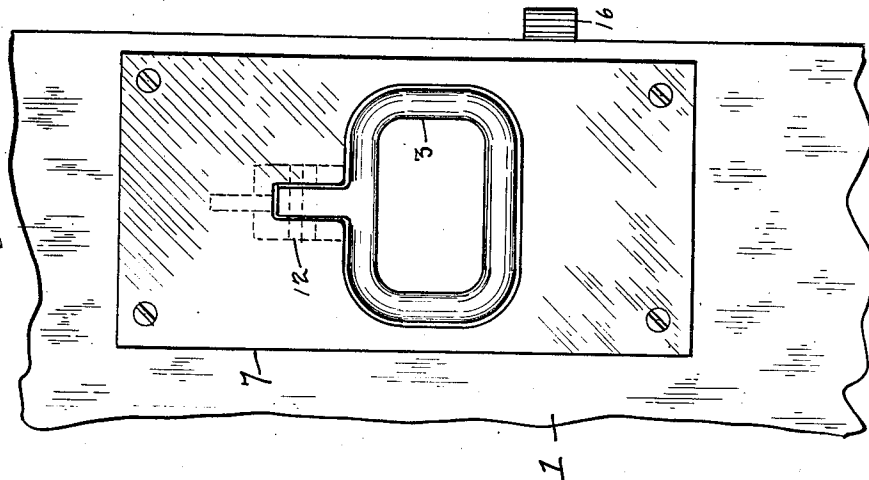
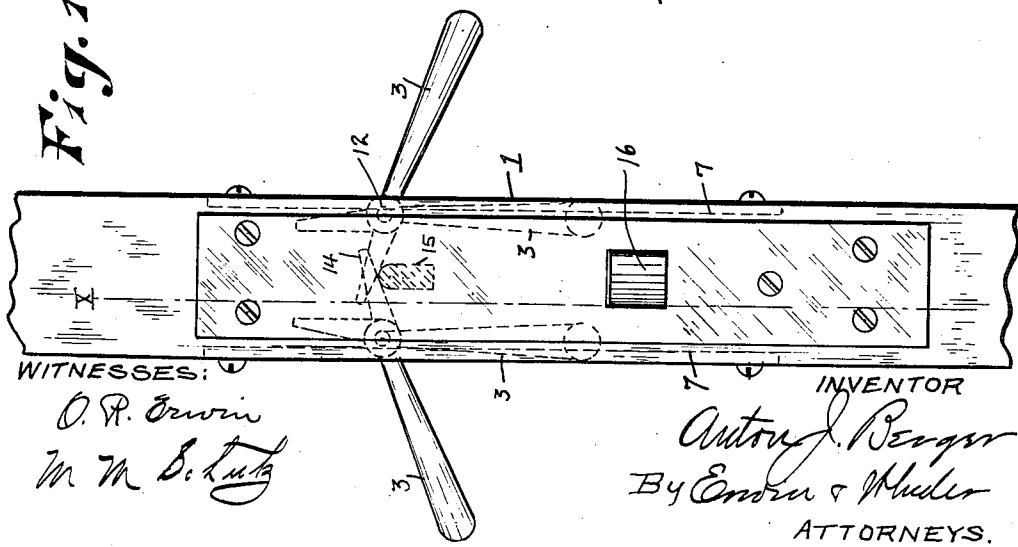


Fig. 1.



WITNESSES:
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DOOR-LOCK.

No. 856,214.

Specification of Letters Patent.

Patented June 11, 1907.

Application filed January 28, 1907. Serial No. 354,447.

To all whom it may concern:

Be it known that I, ANTON J. BERGER, a citizen of the United States, residing at the city of Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Door-Locks, of which the following is a specification.

My invention relates to improvements in that class of door fasteners in which a door is retained in its closed position by spring actuated sliding bolt which bolt is adapted to be automatically thrown back as the door is closed by contact of its protruding beveled end with the side of a retaining plate, while said bolt is thrown forward into locking engagement with such retaining plate by the recoil of the actuating spring.

The object of my invention is among other things, first, to provide a suitable operating handle as a substitute for the knob heretofore used by which the sliding bolt will be drawn back out of engagement with the retaining plate by simply drawing rearwardly upon such handle and the necessity of turning the handle as the door is opened is avoided. Second, to provide a bolt operating device which when not in use may be folded down parallel with or within the surface of the door, and third, to provide a more simple and efficient means for operating the door retaining bolt and one which will also be less liable to get out of order than those heretofore used.

My invention is further explained by reference to the accompanying drawings in which,

Figure 1 represents the edge of a door provided with my improved fastening, part of which is indicated in dotted lines. Fig. 2 is a front view of my device in connection with a door, and Fig. 3 is a vertical section thereof drawn on line $x-x$ of Fig. 1.

Like parts are identified by the same reference figures throughout the several views.

1 represents the door, 2 the door retaining bolt, 3 the operating handle, 4 an elbow crank lever by which motion is communicated from the operating handle 3 to the bolt preparatory to opening the door.

5 represents a bolt actuating spring by which the bolt is automatically thrown out into its locking position.

5 is an inclosing case for the actuating mechanism which is secured in a recess of the door in the ordinary manner by the screws 6.

7 is a plate upon which the operating han-

dle is pivotally supported in contact with the elbow crank lever, a similar plate 7 not shown is located upon the opposite side of the door. The elbow crank lever is pivotally supported from an inclosing case 5 by the bolt 8 and is pivotally connected at its lower end with the reciprocating bolt 2 by the pin 9. The actuating spring 5 is connected at one end with the elbow crank lever 4 by a pin 10 and at its opposite end to the inclosing case 5 by the pin 11.

The handle 3 is pivotally connected with the plate 7 by the bolt 12 and handle supporting lugs 13. Thus it will be obvious that when the outer end of the handle 3 is raised, the lug 14 which is formed integrally with said handle, will be brought in contact with the upper arm 15 of the elbow crank lever, whereby the lower arm of said lever will be thrown toward the left, and whereby the bolt 2 will be drawn out of engagement with the retaining plate of the door which is supported from the door casing in the ordinary manner, while by a rearward pull upon the handle 3 the door will be opened. When, however, the door is swung into its closed position the beveled end 16 of the bolt will contact with the door retaining plate whereby said bolt will be automatically thrown inward until the door has reached its closed position when by the recoil of said spiral spring 5 said bolt will be thrown outward and into engagement with the retaining plate. It will be understood that both sides of the door are provided with similar handles 3 as shown in Fig. 1 and that both handles 3 are adapted to act in like manner upon the elbow crank lever as the door is opened. Thus it will be obvious as previously stated that the same movement of the handle which is required in drawing the door open will simultaneously disengage the bolt from its retaining plate.

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

In a door lock the combination of a bolt inclosing case, a reciprocating bolt inclosed in said case, an elbow crank lever pivotally supported at the angle of its respective arms from said inclosing case, means for pivotally connecting one of the arms of said lever with one end of said reciprocating bolt, spring actuated means for normally retaining said bolt in its extended locking position, two

door operating handles pivotally supported
from the respective walls to said bolt in-
closing case at right angles to said elbow
crank lever, the inner pivotally supported
5 ends of said handles being adapted as their
outer ends are raised to contact with the
free arm of said elbow crank lever, whereby
said lever is turned upon its supporting
pivot and said bolt is withdrawn from its

locking position, all substantially as and for to
the purpose specified.

In testimony whereof I affix my signature
in the presence of two witnesses.

ANTON J. BERGER.

Witnesses:

JAS. B. ERWIN,
JOHN H. NOLL.