(Model.)

W. GERWIEN.

SLIDING DOOR LOCK.

No. 315,761. Patented Apr. 14, 1885.

Fig. 1.

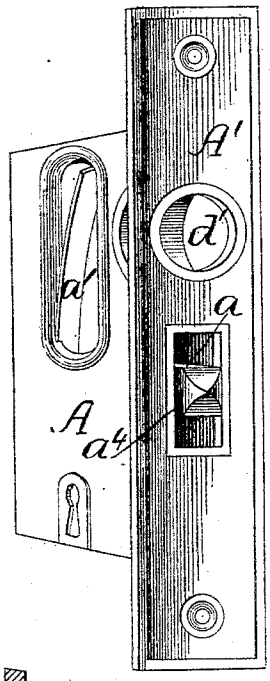


Fig. 2.

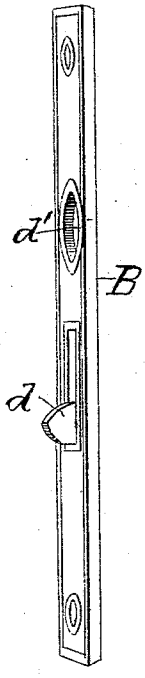


Fig. 3.

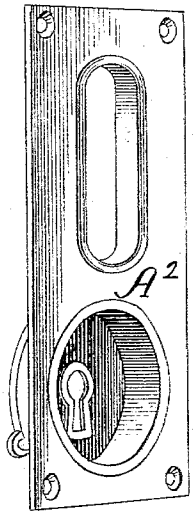


Fig. 4.

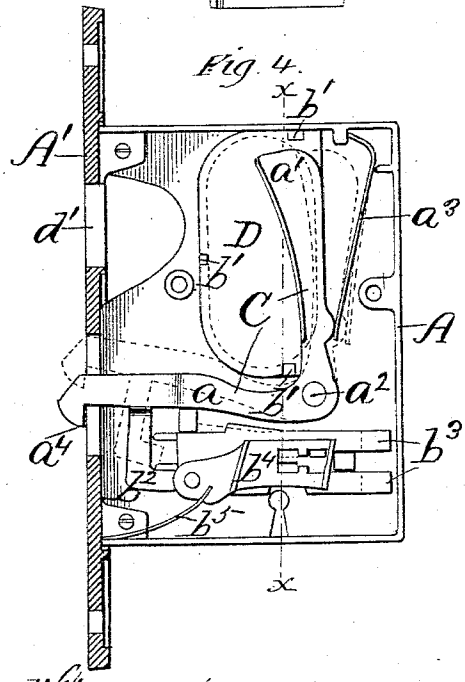
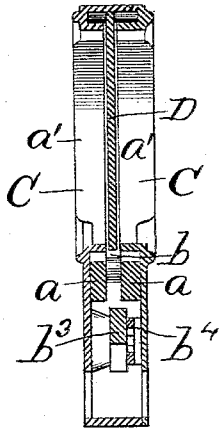


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM GERWIEN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO JOHN R. SCOTT, OF SAME PLACE.

SLIDING-DOOR LOCK.

SPECIFICATION forming part of Letters Patent No. 315,761, dated April 14, 1885.

Application filed October 28, 1884. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM GERWIEN, of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Door-Locks, of which the following is a full, clear, and exact description, that will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates more especially to improvements in that class of locks used on sliding doors; and it consists of certain novel features in the construction and combination of parts, as will be hereinafter more fully set forth and claimed.

Figure 1 is a view in perspective of a lock embodying my improved features; Fig. 2, a detached view of the striking-plate. Fig. 3 shows the escutcheon-plate; Fig. 4, a side elevation of a lock with the cap of the lock-case removed, exposing the interior construction; and Fig. 5, a vertical transverse section in the plane *x x*, Fig. 4.

Referring to the drawings, A represents the lock-case, A′ the face-plate, A^2 the escutcheon, and B the striking, plate.

The angular latch-bolt C consists of the horizontal part *a* and the vertical part *a′*. This latch-bolt is adapted to have a pivotal movement on the pin a^2, as shown in Fig. 4.

By inserting the fingers in the elongated openings in the escutcheons and lock-case and pressing back on the vertical part *a′* of the latch-bolt the same is brought to the unlocked position indicated by the dotted lines in Fig. 4. When the pressure of the fingers is relaxed, the spring a^3 automatically returns the angular latch-bolt to a normal or locking position. The end of the latch-bolt projecting through the face-plate is provided with the catch a^4. The vertical part of the latch-bolt is provided with the dividing-slot *b*, in order to permit of the insertion of one edge of the division-plate D, that closes the opening in the lock-case, which is necessary, as it permits of the lock being manipulated from either side and shuts out the view from one room to the other. The plate D is removably retained in place by the posts *b′*, fitting into notches in the edge of the same, and also by frictional contact with the latch-bolt and the case-cap. The under side of the latch-bolt is provided with the downwardly-projecting right-angled hook b^2, which the ward-bolt b^3 is adapted to engage with, and thereby prevents the projecting catch end of the latch-bolt from being raised until properly released by the use of a key. The tumbler b^4 is returned to a normal position by the spring b^5. The striking-plate B is provided with the catch *d*, with which the companion catch a^4 is adapted to engage when the doors are closed. By providing the parts with these two catches it permits of both being made very short, dividing the length between the two, and thus leaving but a very little projection to obstruct the way. The catches are also beveled and rounded off, so that there is but little danger of clothing being caught or torn; but a slight movement of the latch-bolt is required in order to release it from engagement with the catch on the striking-plate, when the doors may be made to slide clear back into the jamb, no projecting knobs or handles being in the way. The face-plate is provided with the opening *d′*, and the lock-case with a corresponding recess, which permits of the insertion of a finger, in order to start the door when it is flush with the jamb.

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

In a door-lock, the combination, with the lock-case A, of the removable division-plate D and the angular latch-bolt C, provided with the slot *b*, substantially as and for the purpose set forth.

WILLIAM GERWIEN.

Witnesses:
L. M. FREEMAN,
J. B. DONALSON.