

J. M. REISS.
SAFETY CATCH FOR CYLINDER LOCKS.
APPLICATION FILED JUNE 26, 1912.

1,045,323.

Patented Nov. 26, 1912.

Fig. 1.

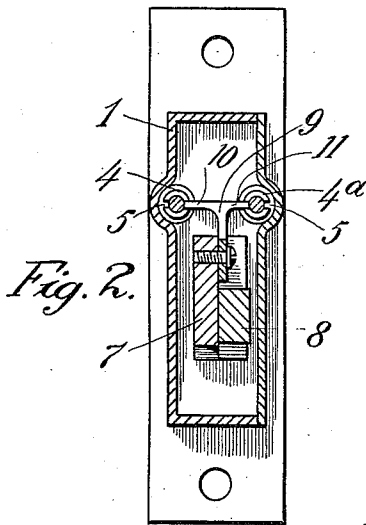
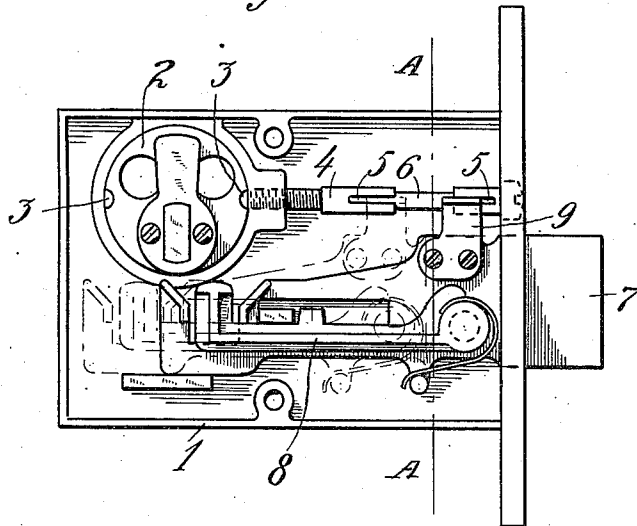


Fig. 2.

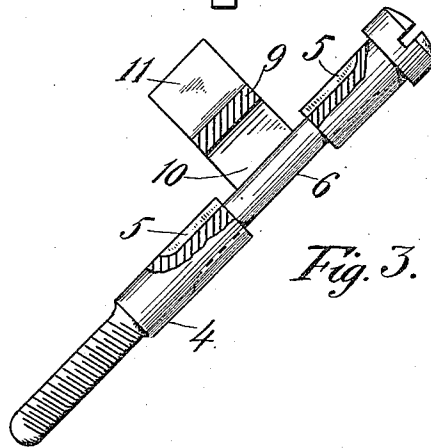


Fig. 3.

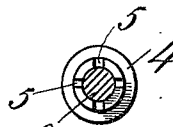


Fig. 4.

WITNESSES:

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SAFETY-CATCH FOR CYLINDER-LOCKS.

1,045,323.

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To all whom it may concern:

Be it known that I, JOSEPH M. REISS, a subject of the Emperor of Austria-Hungary, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Safety-Catches for Cylinder-Locks, of which the following is a specification.

My invention relates to a door lock, and has particular reference to a lock of the cylinder type.

The cylinder in a lock of this construction is provided with peripheral screw threads adapted to engage a threaded perforation in the casing of the lock. A longitudinal groove is also made on the periphery of said cylinder, and the end of a retaining screw is caused to engage this groove for the purpose of holding the cylinder against rotatory movement.

The object of my invention is to provide means for normally locking the said retaining screw against turning, in order to make it impossible for an intruder to withdraw the screw and to remove the cylinder, for the purpose of opening the door, without the aid of a key.

The object and advantages of my invention are clearly set forth in the following description and illustrated in the appended drawing, of which:

Figure 1 is a side elevation of a cylinder lock embodying my invention. The cover of the casing is removed in order to disclose the operating mechanism. Fig. 2 is a cross-sectional end view of the lock, taken substantially on line A—A of Fig. 1, and Figs. 3 and 4 are enlarged detail views of the retaining screw.

The lock shown is of a well known make, and comprises a casing 1 perforated to receive a threaded cylinder 2, grooved at 3 for engagement with a retaining screw 4. Said screw is made with one or more grooves 5, and the central portion 6 of this grooved part of the screw is turned down until its periphery registers with the bottom of the groove 5.

The bolt of the lock, 7, and the spring latch or fence 8, are both of common construction, and are operated from the cylinder 2 in the usual, well known manner. On the said bolt 7 is rigidly mounted a T-shaped bracket 9, an extremity 10 of which is positioned to ride in the groove 5, as readily seen in the drawing.

In Fig. 1 the bolt is shown projected, and the retaining screw 4 is held against rotation by the T-bracket. The retracted position of the bolt is shown in dotted outline in this view, and it is noticed that the retaining screw also in this position is held against rotation by the said T-bracket.

Referring now to Fig. 3, the T-bracket 9 is shown positioned substantially in the center of the reduced portion 6 of the screw, and this combination occurs when the bolt is in the middle of its travel. It is readily understood by anyone versed in the art, that the bolt can only be carried to this central position by operating the lock in the proper manner, that is by inserting and turning a key which fits the lock.

As shown, it is not possible to turn the retaining screw unless the bolt is carried to its central position. Consequently it is not possible to unscrew the cylinder unless the bolt first has been carried to its central position, thereby permitting the retaining screw to be sufficiently withdrawn to operate the cylinder.

Door locks of this type are made to operate both right and left, as conditions require, and two retaining screws are therefore employed, one on each side of the casing. The casing has also an aligned perforation in each side wall for the insertion of the cylinder from opposite sides, and the latter carries two grooves 3, diametrically opposite, all as well known to the art.

The T-bracket 9 is made with a second extremity 11, disposed in the opposite direction relative to the extremity 10, and the said member 11 is positioned for engagement with the second retaining screw 4^a. My device thus operates on both retaining screws at the same time, thereby holding the cylinder against rotation no matter from which side the latter is inserted.

I claim:

1. In a door-lock, the combination with a lock-bolt, a cylinder, and a cylinder retaining screw; of means on said bolt for engagement with said screw, the devices being so related that the screw is locked against rotation at the extremes of the travel of said bolt, and free to rotate when the bolt is at the center of its travel.

2. In a door-lock, the combination with a lock-bolt, a cylinder, and a cylinder retaining screw; of recesses in said screw; and means fixed on said bolt for engagement

with said recesses, said means actuated by the travel of the bolt to lock the screw against rotation at both extremes and to release the screw when the said bolt is centrally positioned.

3. In a door-lock, the combination with a cylinder and a lock-bolt; of a grooved retaining screw having a reduced space central of its grooved portion; and means cooperating with said bolt for engaging said grooved portion, said means operating to lock said screw against rotation at the extremes of the bolt travel and to release the screw when the bolt reaches the center of its travel.

4. In a door-lock, the combination with a cylinder and a lock-bolt; of a grooved retaining screw having a reduced space central of its grooved portion; and means on said bolt positioned for engagement with said grooved portion, whereby the said screw is normally held against rotation, and released only when the bolt reaches the center of its travel.

5. In a door-lock, the combination with a cylinder and a lock-bolt; of a grooved retaining screw having a reduced space central of its grooved portion; and a bracket rigid on said bolt, said bracket having a tongue riding in said grooved portion when the bolt is at either extreme, and registering with said reduced space when the bolt is at the center of its travel.

6. In a reversible door-lock, the combination with a lock-bolt, a cylinder and a pair of retaining screws mounted for engagement with said cylinder; of means on said bolt for simultaneous engagement with said screws, said means operated by the travel of the bolt to lock said screws against rotation at both extremes, and to release the screws when the bolt is at the center of its travel.

In testimony whereof, I have hereunto affixed my signature.

JOSEPH M. REISS.

Witnesses:

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