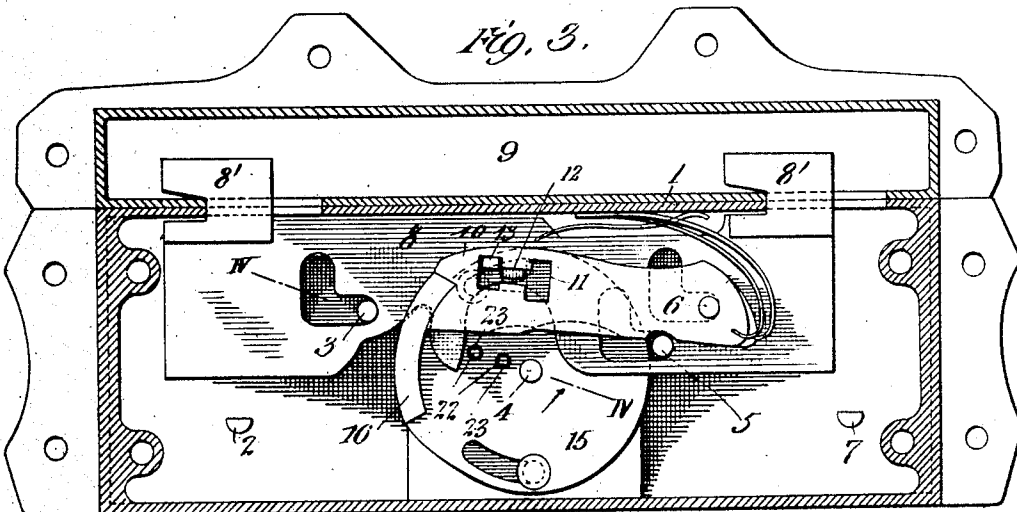
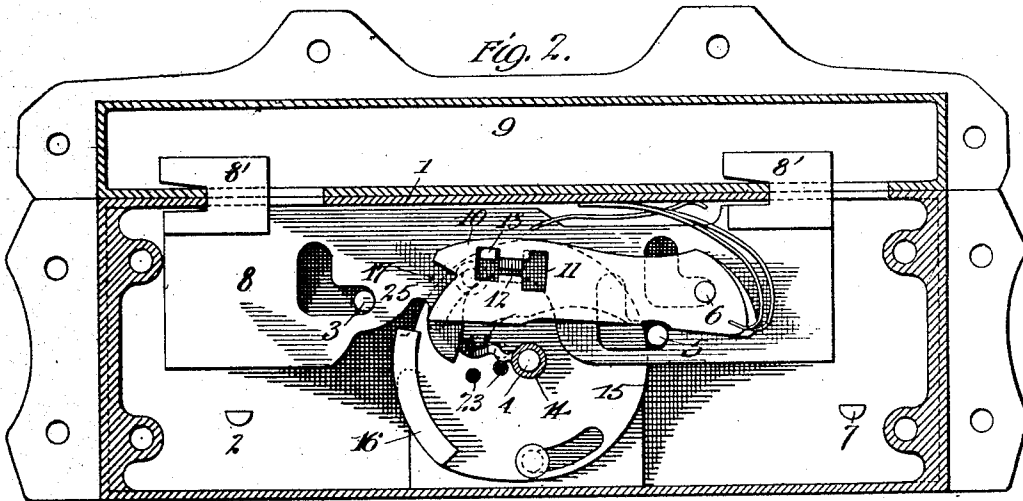
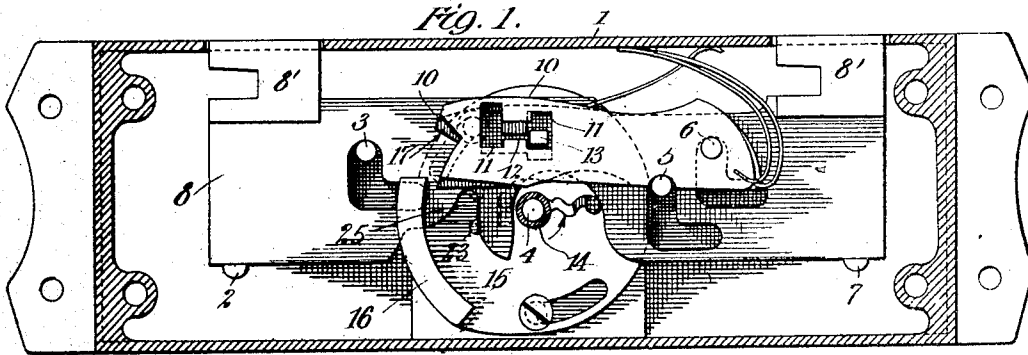


No. 892,649.

PATENTED JULY 7, 1908.

J. CARLSON.
LOCK.

APPLICATION FILED MAR. 2, 1908.



Witnesses.
Frank S. Ober
Charles A. ...

Fig. 4.

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UNITED STATES PATENT OFFICE.

JOHN CARLSON, OF JERSEY CITY, NEW JERSEY.

LOCK.

No. 892,649.

Specification of Letters Patent.

Patented July 7, 1908.

Application filed March 2, 1908. Serial No. 418,680.

To all whom it may concern:

Be it known that I, JOHN CARLSON, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Locks, of which the following is a full, clear, and exact description.

My invention relates to locks, particularly of that class having tumblers and used in a great variety of relations, for example, on doors, trunks, chests, desks, drawers, and other articles and purposes. While I have shown the present invention applied to a lock of this class, the invention is not limited thereto, being applicable to paracentric locks if desired.

The purpose of the present invention is to provide a lock operating in exactly the usual way with an ordinary key or keys under ordinary circumstances, but which is capable of being put into a condition where it is not responsive to such ordinary key, this effect being accomplished by another entirely separate and differently constructed key, which, however, may be insertible through the same keyhole. A lock of this character would be particularly applicable to club-houses, boarding-houses, and similar relations where a considerable number of persons are supplied with keys to obtain ingress at their pleasure, but where under certain conditions, for example, at the late evening hours, it is important to have free ingress restricted to a limited number of persons who are responsible or in authority.

With this object in view, my invention consists in providing means by which a lock can be rendered unresponsive to its ordinary key until another special key has been inserted.

I have illustrated the invention applied to an ordinary form of tumbler lock, and have made use of a tumbler retaining device which is thrown by a special key.

The invention is particularly pointed out in the appended claims, reference being had to the accompanying description and drawings which illustrate my preferred embodiment of the invention.

In the drawings: Figure 1 is a sectional view of a lock embodying the principles of my invention; Fig. 2 is a similar view with the bolt in its thrown or locking relation; Fig. 3 is a similar view showing the tumbler retaining device in operation; and Fig. 4 is a

detail sectional view on the line IV—IV of Fig. 3.

Referring to the drawings in which like parts are designated by the same reference sign, 1 indicates a frame or casing having pins or studs 2, 3, 4, 5, 6 and 7, rigidly projecting therefrom. These pins constitute holding and guiding means for the operative parts, and it is evident that any other equivalent means may be used in lieu thereof.

8 designates the bolt having locking dogs 8', coöperating with a keeper 9, and 10 denote tumblers each having pairs of notches 11 joined by a gating or slot 12 through which a stud 13 on the bolt is adapted to pass when the tumblers have been exactly set in a predetermined relation. The tumblers are put in this relation and the bolt thrown by a key 14 which fits over pin 4 and coöperates with the tumblers, and with the bolt in an ordinary manner which is well understood by those skilled in the art. The tumblers therefore constitute a means which can be displaced by a certain form of key, for normally retaining the bolt against movement. These features do not, in themselves, constitute any part of my present invention.

The means which I have referred to as a tumbler retaining device or tumbler retainer, comprises, in its preferred form, a circular plate or disk 15 having a wing 16 which can be displaced by rotating the plate to a position where it intercepts any movement of said tumblers. For this purpose the tumblers may be cut away as shown at 17, so as to receive the wing or device 16 in locking relation.

The tumbler retaining device or tumbler retainer, having been brought into a relation where it holds the tumblers against movement, cannot be returned or released from such position or relation, except by a special key. I have illustrated a key 20 having an end face 21, which may be analogous to the outline of an ordinary paracentric key. With the particular form of key shown there would be provided spring studs pins or bits 22, spring impelled to enter holes 23 in the part 15, and which must be displaced to exactly the right distance to permit movement of such part 15. The arrangement, length, number, and other characteristics of the spring studs pins or bits 22 can be varied and made as complicated as desired. The key 20 is insertible over the same pin 4 as the key

14, and when properly manipulated to depress the bits 22, is capable of turning disk 15 on its axis and releasing the tumblers. The lock can then be operated in the usual way
5 by its ordinary key.

It may be noted that the wing 16 not only engages the tumblers 10 to prevent their movement but also has a direct engagement with a notch 25 in the bolt to prevent move-
10 ment of the latter. This of course is a feature giving additional security.

What I claim, is:

1. In a lock having a single key-hole, a bolt, tumblers for retaining said bolt against
15 movement, and a device rotatable on a fixed axis coincident with the axis of said key-hole, for engaging said tumblers and preventing upward movement thereof to release the bolt, said device being displaceable into such
20 relation by a special key inserted through said key-hole.

2. In a lock having a single key-hole, a bolt, tumblers pivoted to said bolt for retaining such bolt against movement, a device
25 rotatable on a fixed axis for engaging the free extremities of said tumblers to prevent upward movement thereof, and spring studs for retaining said device against movement, said bits being displaceable to permit move-
30 ment of said device only by a special key inserted through said key-hole.

3. In a lock having a single key-hole, a bolt, tumblers for retaining said bolt against movement, a device including a circular disk
35 or plate revoluble on an axis coincident with

the axis of said key-hole, pins displaceable in a direction parallel to said axis for retaining said plate against movement and adapted to be displaced by a special key inserted through said key-hole, and means on said
40 plate for engaging the extremities of said tumblers to prevent releasing movement thereof.

4. In a lock having a single key-hole, a bolt, means adapted to be displaced by a
45 certain form of key for retaining said bolt against movement, a plate revoluble on an axis coincident with the axis of said key-hole, a wing on said plate adapted to engage said means to prevent releasing movement
50 thereof, and spring-impelled pins displaceable in a direction parallel to said axis for retaining said plate against movement, said pins being adapted to be displaced to release
55 said plate, by a special key.

5. In a lock having a single key-hole, a bolt, tumblers for retaining the bolt against movement, a device adapted to be displaced by a special key for directly engaging said
60 tumblers to prevent their bolt-releasing movement, and pins displaced by the said key for normally restraining said device against movement.

In witness whereof, I subscribe my signature, in the presence of two witnesses.

JOHN CARLSON.

Witnesses:

WALDO M. CHAPIN,
MAY BIRD.