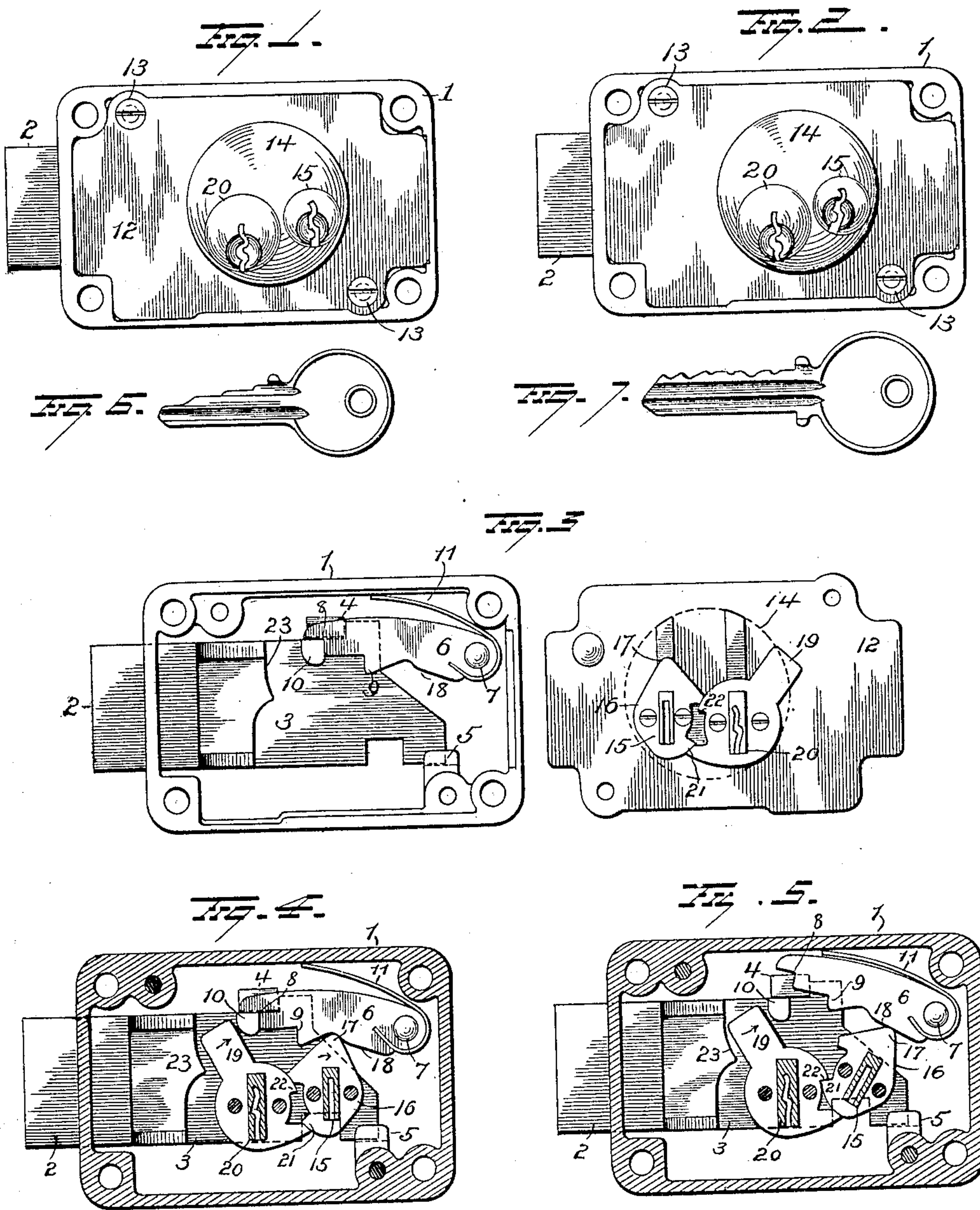


No. 869,533.

PATENTED OCT. 29, 1907.

W. H. TAYLOR.  
LOCK.

APPLICATION FILED JUNE 24, 1907.



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# UNITED STATES PATENT OFFICE.

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## LOCK.

No. 869,533.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed June 24, 1907. Serial No. 380,465.

*To all whom it may concern:*

Be it known that I, WARREN H. TAYLOR, of Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in locks particularly adapted for safe deposit and other boxes or compartments wherein two keys are required to unlock the lock, and it consists in a lock of the type provided with two pin tumbler locks, one of which when operated releases the bolt from its dogging means and leaves the other lock free to be actuated to retract the bolt.

My invention further consists in a lock having a single cylindrical nose or cylinder and two pin tumbler locks mounted therein one of said locks operating to release the bolt from its dead locking means thus leaving the bolt free to be retracted by the other lock.

A further object is to provide a lock comprising a bolt, a pin tumbler lock for actuating the bolt, and a second pin tumbler guard lock for actuating the deadlocking mechanism of the bolt, the construction being such that the position of the key slot in the hub of the guard lock indicates at a glance whether the bolt is properly guarded or deadlocked.

My invention further consists in the parts and combinations of parts as will be more fully described and pointed out in the claims.

In the accompanying drawings Figure 1 is a view in front elevation of my improved lock showing the bolt in its locking position and the owners key hub deadlocked by the guard key hub. Fig. 2 is a similar view showing the position of the key slot in the guard key hub, when the latter has been actuated by the guard key. Fig. 3 is a view of the lock the face plate being removed and turned so as to show the arms on the inner ends of the key hubs. Fig. 4 is a view in horizontal section showing the normal position of the parts when the bolt is deadlocked and the retracting lock guarded; Fig. 5 is a similar view showing the guard lock off; Fig. 6 is a view of the guard key and Fig. 7 a view of the bolt retracting or owners key.

1 represents a lock case, and 2 the locking bolt mounted to slide therein. The head of the bolt rests in a slot in one end of the case, and its stem 3 is guided in its movements by the shoulders 4 and 5, the latter of which overhands the stem and holds it to its seat against the closed face of the lock.

6 is a deadlocking lever pivotally mounted on post 7, and provided with two shoulders 8 and 9 the former of which engages stud 10 on bolt 2 when the latter is in

its locking position, and the latter engaging the stud 10 when the bolt is retracted, thus limiting the inward throw of the bolt. Lever 6 is normally retained in contact with stud 10 by spring 11.

12 is the removable plate of the lock, secured to the lock casing by screws 13. This plate carries the single cylindrical nose 14, which latter projects through a hole in the door and is the only part of the lock visible from the outside. Mounted in this nose or cylinder are two pin tumbler locks of the well known type now in general use. Mounted on the inner or rear end of the hub of the guard pin tumbler lock 15, is the arm 16, the end 17 of which, rests adjacent to the cam surface 18 on lower edge of dead locking lever 6, and when the hub of this lock is turned by the guard key, the end of the arm 16 moving in contact with the cam surface, raises lever 6, and moves the shoulder 8 out of the path of movement of the stud 10 on bolt 2. This arm 16 is also provided on its side adjacent to arm 19 on the bolt retracting lock 20, with a shoulder 21, which, when the hub of the guard tumbler is turned to release the deadlocking lever 6, is moved into contact with shoulder 22 on arm 19 so that when arm 19 is turned by the owners key, the engagement of the shoulders throws the hub of the guard lock and the arm of the latter, back to their normal position. Arm 19 rests in contact with stud 10 and when its hub is turned to the right retracts the bolt, and when turned to the left, engages the inner edge of the head of the bolt, and throws the latter to its locking position. Just as soon as the bolt reaches its locking position the dead locking lever falls behind the stud 10 and again dead locks the bolt. From this it will be seen that in order to release the bolt it is absolutely essential to first actuate the guard lock which operates to remove the dead locking lever 6 out of the path of movement of the stud 10 on bolt 2. As the arm on the hub of the bolt retracting lock rests between stud 10 and shoulder 23 at inner end of the head of the bolt, it will be seen that until the dead locking lever has been moved by the guard key, out of the path of movement of stud 10, the retracting lock is deadlocked, and remains so until the dead locking lever has been moved by the guard lock.

In the present instance I have shown the guard key so constructed that it may be withdrawn after it has been turned to release the dead locking lever 10, thus permitting the custodian or guard to anticipate the calls of the regular users of the boxes during rush hours, and put the boxes in condition to be opened by the owners keys. In the event one or more owners fail to come as expected, his or their boxes will be left with the guard off and this condition will be indicated at a glance by the inclined, or tell-tale position of the slot of the guard lock. When a lock is so left unguarded,



it can be reset by introducing the guard key and turning the latter to the left.

If desired the bittings of the guard key may be so made that the key cannot be withdrawn except when  
5 the guard lock is in its normal position.

In the operation of the lock, the custodian or guard first introduces the guard key and turns same to the right, which operates to lift the dead locking lever. After this has been done, the owner introduces his  
10 key and turns it also to the right, which movement retracts the bolt, and throws the hub of the guard lock back to its normal position. The owners key cannot be withdrawn while the box is unlocked, and by turning it to the left, the bolt will be projected, thus lock-  
15 ing the box and deadlocking the bolt actuating lock. After the box has been locked it can only be released by first releasing the bolt and bolt retracting lock, by the guard key as above explained, and then retracting the bolt by the owners key.

20 It is evident that many slight changes might be resorted to in the relative arrangement of parts shown and described without departing from the spirit and scope of my invention hence I would have it understood that I do not wish to confine myself to the exact  
25 construction and arrangement of parts shown and described, but,

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

1. In a lock the combination with a bolt and a lever for deadlocking same, of a pin tumbler mechanism for  
30 disengaging the deadlocking lever from the bolt, and pin tumbler mechanism for retracting the bolt.

2. In a lock the combination with a bolt, and means for deadlocking same, of a pin tumbler mechanism for  
35 actuating the deadlocking means, and a pin tumbler mechanism for retracting the bolt and also for restoring the hub of the first mentioned pin tumbler mechanism to its normal position.

3. In a lock the combination with a bolt, and a dead locking lever for same, of bolt retracting pin tumbler  
40 mechanism normally dogged by the bolt, and pin tumbler mechanism for actuating the bolt deadlocking lever, whereby when the lever releases the bolt, the latter may be retracted by the bolt retracting pin tumbler mechanism.

4. In a lock the combination with a casing having a  
45 projecting cylindrical nose, and a bolt and dead locking lever within said casing, of two pin tumbler mechanisms mounted in said nose, one of said mechanisms operating to retract the bolt, and the other to actuate the bolt dead locking lever.  
50

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

WARREN H. TAYLOR.

Witnesses:

SCHUYLER MERRITT,  
E. M. CROZIER.