

W. CONEY.

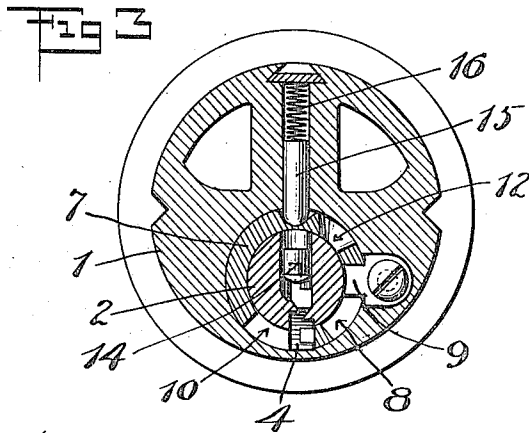
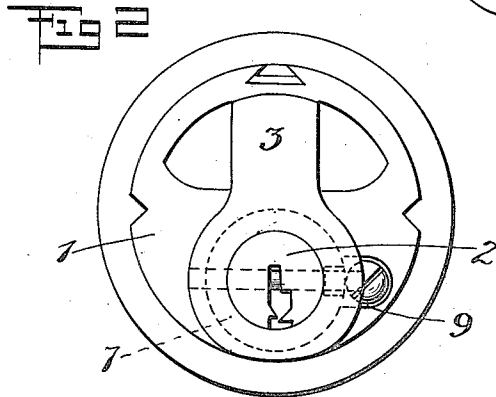
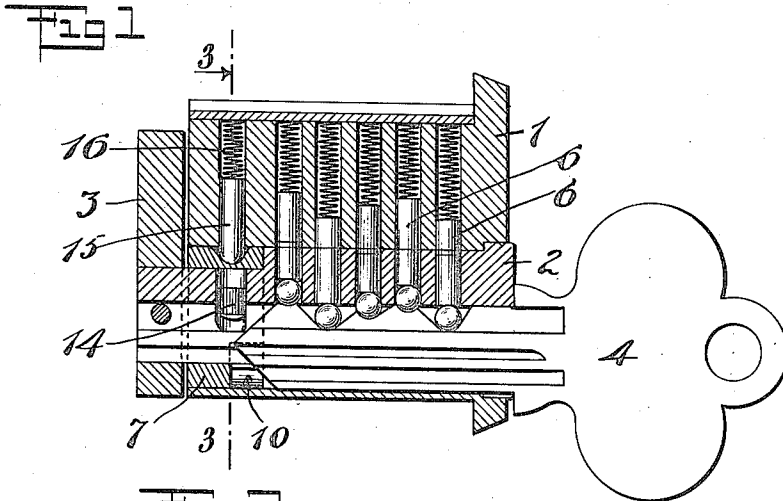
LOCK.

APPLICATION FILED MAY 24, 1915.

1,170,481.

Patented Feb. 1, 1916.

2 SHEETS—SHEET 1.



Witness  
C. J. Hachenberg

Inventor,  
William Coney,  
By his Attorneys  
Mitchell & Alley.



# UNITED STATES PATENT OFFICE.

WILLIAM CONEY, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE AMERICAN  
HARDWARE CORPORATION, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF  
CONNECTICUT.

## LOCK.

1,170,481.

Specification of Letters Patent.

Patented Feb. 1, 1916.

Application filed May 24, 1915. Serial No. 29,976.

*To all whom it may concern:*

Be it known that I, WILLIAM CONEY, a citizen of the United States of America, residing at New Britain, county of Hartford, State of Connecticut, have invented a new and useful Lock of which the following is a specification.

My invention relates to locks, the object being to provide a self-contained or unitary means whereby by the use of a suitable key the lock may be rendered inoperative as against another key.

This object I attain by an exceedingly simple and effective means, as will hereinafter be made clear.

In the accompanying drawings: Figure 1 is a relatively enlarged view in longitudinal section of a pin cylinder lock equipped with my invention. Fig. 2 is a view of the inner end thereof. Fig. 3 is a section on the line 3—3. Fig. 4 is a view similar to Fig. 1, but showing certain parts in a different position. Fig. 5 is a section on the line 5—5. Figs. 6 and 7 are perspective views of details. Fig. 8 illustrates two different keys.

1 is the main body or so called cylinder of the lock.

2 is a rotatable key plug.

3 is the usual cam or roll-back arm at the inner end of the plug. The plug is provided with the usual key-way arranged to receive the keys 4 and 5.

6—6—6 are the usual pin tumblers and followers.

No novelty is claimed as to any of the parts thus far described. The novelty resides in the embodiment of a shut-out device whereby by the use of a suitable key the plug 2 is locked against operation.

4 represents the usual key designed to operate the lock under normal conditions, while 5 represents what I may term the "shut-out" key.

The inner end of the plug 2 just forward of the cam 3 is suitably shaped to receive a sleeve or ring 7 which is rotatable thereon. This sleeve has a recess or slot 8 into which projects a stop lug 9 to limit its rotary movement.

10 is a notch at the forward edge of the ring 7 which is arranged to receive part of the shut-out key 5, said notch being of sufficient width to permit said key to have a limited free turning movement. On the outer

surface of ring 7 is a cupped recess 11 and adjacent thereto is a hole 12 having a beveled wall.

14 is a pin tumbler in the rear end of the plug 2 arranged to line up with the hole 12 in the ring 7, said pin 14 being of such size or shape that it will not escape through the hole 12.

15 is a tumbler pin which I may term a bolt.

16 is a spring normally serving to press the pin 15 toward the tumbler 14, said pin 15 being carried by the cylinder 1 in the same plane as the tumbler sections 6—6 therein and position to cooperate with the cupped notch 11 and hole 12 in the ring 7.

The key 4 as shown in Fig. 1 is of insufficient length to operate the ring 7, but operates the pin tumblers 6 so that when the key 4 is in place the plug 2 may be rotated with entire freedom, the ring 7 standing still, being held in place, for example, by the frictional engagement of the pin bolt 15 standing in the cupped notch 11 (see Fig. 3).

To render the plug non-rotatable I employ the shut-out key 5 which is so constructed as to project under and lift the pin tumbler 14, the said shut-out key being also bitted to release the locking tumblers 6—6. The lower inner end of this key has a shoulder 17 which projects into the notch 10. Now assuming this key 5 is inserted, the part 17 projects into the notch 10 and the upper edge of the key lifts the tumbler 14, the bitting of the key moving the tumblers 6 to the unlocked position, whereupon the shut-out key 5 may be turned. This turning of said key in a clockwise direction causes the ring 7 to turn bodily the plug 2 from the position shown in Fig. 3 to the position shown in Fig. 5. As this ring 7 turns, the beveled wall of the cupped notch 11 in which the bolt pin 15 is shown as standing, presses back the said bolt pin 15 until the latter snaps over into the hole 12 and is supported on the pin tumbler 14—then flush with the adjacent surface of the plug (see Fig. 5). The key 5 may now be turned back so as to align the tumblers 6—6. When the key 5 is now removed the tumbler 14 drops so that the bolt pin 15 will drop down from the position shown in Fig. 5 to a position (not shown) in which the lower end of the bolt pin 15 projects into the bore carrying the

pin tumbler 14. When in this position, obviously, the plug cannot be turned by the insertion of the usual key 4. To unlock or release the plug, the shut-out key 5 may be inserted, thus lifting the bolt pin 15 to the position shown in Fig. 5, so that by a counterclockwise turning movement the plug and ring 7 may be turned back to the original position shown in Fig. 3, the beveled wall of the hole 12 operating as a cam to press back the bolt pin 15 until it may again drop into the cupped recess 11. By this very simple expedient I am enabled to provide as a unitary structure, a lock of the pin cylinder type with a self-contained shut-out means, whereby the operation of the lock by the usual key may be prevented.

I have shown the invention only in its preferred form and it should be understood that I contemplate that a variety of changes may be made without departing from the spirit and scope of the invention, it being my intention to cover broadly the use of a so-called shut-out means associated with a lock of the type described as a unitary part thereof. By this arrangement these locks may be associated with any form of door latch or bolt without the necessity of modifying or changing the latch or bolt construction.

What I claim is:

1. In a lock, a main body portion, a rotatable element carried thereby and having a key passage, means for locking said parts against relative rotation, said means being movable by a key to release said parts, whereby the rotatable element may be turned in said body portion, with rotatable auxiliary locking means operating between said body portion and rotatable element for locking said element against movement by said key, said auxiliary means being operable by a different key, both keys being operable through the same key passage.

2. In a lock, a main body portion, a rotatable element carried thereby, a row of pin tumblers for locking said parts against relative rotation, said tumblers being movable by a key to release said parts whereby said rotatable element may be turned in said body portion, with rotatable auxiliary means for locking said parts against relative movement by said key, said first mentioned locking means and said auxiliary locking means being respectively operated by different keys, and a single key-way in said rotatable element for both keys.

3. In a lock, a main body portion, a rotatable element carried thereby, means for locking said parts against relative rotation, said means being movable by a key to release said parts whereby the rotatable element may be turned, with auxiliary means for locking said parts against operation by said key, said auxiliary means being op-

erable by a different key, the auxiliary locking means comprising a movable bolt pin carried by the main body portion and arranged to project into the rotatable element, with means for holding said bolt pin out of engagement with said rotatable means at certain times.

4. In a lock, a main body portion, a rotatable element carried thereby, means for locking said parts against relative rotation, said means being movable by a key to release said parts whereby the rotatable element may be turned, with auxiliary means for locking said parts against operation by said key, said auxiliary means being operable by a different key, the auxiliary locking means comprising a movable bolt pin carried by the main body portion and arranged to project into the rotatable element, with means for holding said bolt pin out of engagement with said rotatable means at certain times, said last mentioned means comprising a ring mounted to rotate on the rotatable element and arranged between the bolt pin and the rotatable element.

5. In a lock, a main body portion, a rotatable element carried thereby, means for locking said parts against relative rotation, said means being movable by a key to release said parts whereby the rotatable element may be turned, with auxiliary means for locking said parts against operation by said key, said auxiliary means being operable by a different key, the auxiliary locking means comprising a movable bolt pin carried by the main body portion and arranged to project into the rotatable element, with means for holding said bolt pin out of engagement with said rotatable means at certain times, said last mentioned means comprising a ring mounted to rotate on the rotatable element and arranged between the bolt pin and the rotatable element, with means for limiting the rotary movement of the ring.

6. In a lock, a main body portion, a rotatable element carried thereby, means for locking said parts against relative rotation, said means being movable by a key to release said parts whereby the rotatable element may be turned, with auxiliary means for locking said parts against operation by said key, said auxiliary means being operable by a different key, the auxiliary locking means comprising a movable bolt pin carried by the main body portion and arranged to project into the rotatable element, with means for holding said bolt pin out of engagement with said rotatable means at certain times, said last mentioned means comprising a ring mounted to rotate on the rotatable element and arranged between the bolt pin and the rotatable element, with means for limiting the rotary movement of the ring, said ring having a cupped recess

and a perforation adjacent thereto, with means for shifting the bolt pin from one to the other as the ring is turned.

5 7. In a pin cylinder lock, a cylinder, a rotatable key-plug mounted therein, a single row of pin tumblers carried by the said parts and arranged to lock the plug against rotation and arranged to be unlocked by one key, an auxiliary bolt pin carried by said  
10 cylinder in the plane of the row of tumblers and arranged to lock the plug against rotation and arranged to be operated by a different key to release said plug.

15 8. In a pin cylinder lock, a cylinder, a rotatable key-plug mounted therein, pin tumblers carried by the said parts and arranged to lock the plug against rotation and arranged to be unlocked by one key, an auxiliary bolt pin carried by said cylinder and  
20 arranged to lock the plug against rotation at certain times and arranged to be operated by a different key to release said plug at certain times, with a hold-out device between

the plug and the cylinder operated by said different key to control the position of the  
25 bolt pin.

9. In a pin cylinder lock, a cylinder, a rotatable key plug mounted therein, a pin tumbler comprising a locking means arranged to lock the plug against rotation in  
30 the cylinder, an auxiliary locking means arranged to lock the plug against movement in the cylinder, with means for holding said auxiliary locking means at times out of the  
35 locking position.

10. In a pin cylinder lock, a cylinder, a rotatable key plug mounted therein, a pin tumbler comprising a locking means for the plug in the cylinder, an auxiliary locking  
40 means to lock the plug against movement in the cylinder, means for holding said auxiliary locking means out of the locking position, said means being key controlled by a key capable of simultaneously operating thereon and on said pin tumbler.

WILLIAM CONEY.