

G. N. MASON.

LOCK.

APPLICATION FILED JULY 25, 1911.

1,024,733.

Patented Apr. 30, 1912.

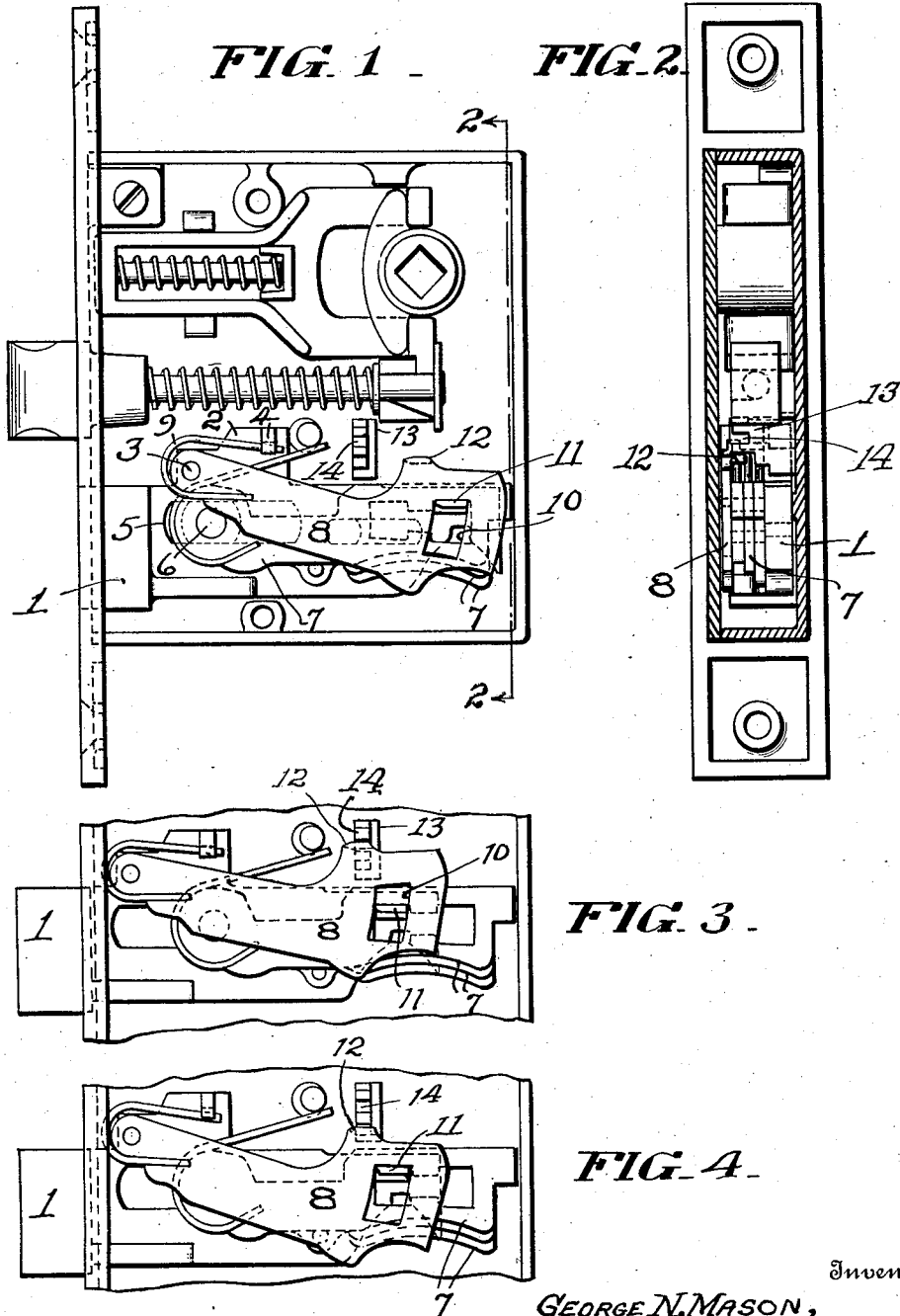


FIG. 3.

FIG. 4.

Inventor

GEORGE N. MASON,

Witnesses

Daniel Webster, Jr.
John Kelly,

By

E. A. [Signature]
Attorney

UNITED STATES PATENT OFFICE.

GEORGE N. MASON, OF READING, PENNSYLVANIA, ASSIGNOR TO READING HARDWARE COMPANY, OF READING, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LOCK.

1,024,733.

Specification of Letters Patent.

Patented Apr. 30, 1912.

Application filed July 25, 1911. Serial No. 640,489.

To all whom it may concern:

Be it known that I, GEORGE N. MASON, citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Locks, of which the following is a specification.

My invention relates to improvements in locks for doors and it is particularly adapted for use in hotels and like places, where a number of keys for the same lock are in the hands of different persons, and the object is to provide a lock which, after being locked by a certain one of the operating keys, can only be unlocked by certain ones of the said keys.

The object is to provide a lock whereby the proprietor of a hotel can guarantee safety to the occupant of the room, for the reason that the usual master key and grand master key, held by the servant and manager respectively, will not unlock the door after it has been locked by the key held by the occupant, but, in which the proprietor, with the great-grand master key, may unlock the door.

A further object is to inform the occupant that his room has been entered by the holder of the said great-grand master key. This latter object is performed by making the lock incapable of being opened even by the key held by the occupant, after it has been opened and locked again by the great-grand master key. In other words, the lock may be operated by the maid's key, by the usual occupant's key, and by a master key usually held by the manager, and for all ordinary purposes these three keys will be, and are used.

When the occupant wants absolute privacy, the usual occupant's key is not used, but the safety key is substituted which operates a supplemental tumbler in the lock which cannot be operated by any of the aforementioned keys. The only key that will operate this tumbler, besides the safety key, is the great-grand master key held by the proprietor or other responsible person. The latter key will operate the lock to open it and again lock it, but in locking it, it will not contact with the supplemental tumbler but will move it along with the locking bolt, and place the parts in a position where they cannot be opened by any of the keys men-

tioned other than the great-grand master key.

The construction involves the usual tumblers, operated by the key bits, with a supplemental tumbler mounted on and carried by the locking bolt, with means for engaging it in two positions while the bolt is in protracted position.

The invention is more fully described in the following specification and clearly illustrated in the accompanying drawing, in which:—

Figure 1 is a front elevation of my lock with the cap-plate removed, showing the locking bolt in retracted position. Fig. 2 is a sectional view therethrough, taken in line 2—2 of Fig. 1. Fig. 3 shows the locking bolt in protracted position with the supplemental tumbler in the position placed by the safety or occupant's key. Fig. 4 shows the same parts, with the supplemental tumbler in the position placed by the great-grand master key.

The numeral 1 designates the locking bolt which is formed with an extension 2 on its upper edge, on which I place a pivot post 3 and a spring stop 4. The bolt is provided with the usual slot 5 in which is located the pivot post 6 for the tumblers 7. Lying on the top of these tumblers, and pivotally secured to the post 3, is a supplemental tumbler 8, provided with a spring 9 seated against the stop 4. This tumbler is provided with a slot 10 which engages the usual tumbler engaging lug 11 on the locking bolt. The supplemental tumbler is also provided with a tongue 12 at its upper edge, and this is adapted to engage the tumbler lock post 13. This post is secured to the lock case and it is formed with a slot in its upper edge, 14, so that the tongue 12 may either engage the post in the slot or beneath it, as the case may be.

In operation, when the bolt is thrown by the ordinary key or by the maid's key, the tumblers are raised and the bolt moves forward as usual, and the supplemental tumbler 8 is raised by the turning of the key, until the tongue 12 passes over and rests on the upper edge of the lock post 13. When the key is turned in the opposite direction, retracting the bolt, the tumbler 8 will move back with it and assume normal position. When however, the safety key is

used to operate the lock, the supplemental tumbler is raised by it only sufficiently to permit the tongue 12 to enter the slot 14 in the post 13, and if either the maid's, the 5 master or the grand master key were inserted in the lock, it could not operate it, for the reason that the tumbler 8 is always engaged by the said keys, and when it is in the lock post, as described, the key 10 could not raise it. The great-grand master key, however, is so constructed that it does not engage the supplemental tumbler 8, but merely the set of tumblers 7, and when inserted and turned, it will raise the tumblers 15 7 and retract the bolt, carrying with it the tumbler 8. Now, however, if the lock is protracted by this great-grand master key, again locking the door, the tumblers 7 being the only ones engaged by the key, will 20 operate, and the tumbler 8 will be carried forward by the bolt, but its tongue 12 will pass beneath the locking post 13, then, even the safety key will not unlock the door, for it will be necessary to use a key that contacts 25 only with the tumblers 7 and the safety key

is made to contact with the tumbler 8 also, and if an attempt were made to open it with the safety key, the tumbler 8 could not be raised for the reason that it is locked beneath the post 13. 30

Having thus fully described my invention what I claim and desire to secure by Letters Patent is:—

In a lock the combination of a casing, a locking bolt, a series of bolt operating keys, 35 a set of tumblers, a supplemental tumbler secured to the locking bolt, a locking post in the casing, adapted to be engaged at two different points by the supplemental tumbler, depending on the key with which the 40 bolt was operated, and adapted, when operated by one certain key of the series to hold it securely against operation by any other of the series than the said key.

In testimony whereof I affix my signature in presence of two witnesses. 45

GEORGE N. MASON.

Witnesses:

ED. A. KELLY,

CLARA E. YOUNG.

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