

(No Model.)

2 Sheets—Sheet 1.

C. W. ANDREWS.
HOTEL DOOR LOCK.

No. 571,210.

Patented Nov. 10, 1896.

Fig. 1

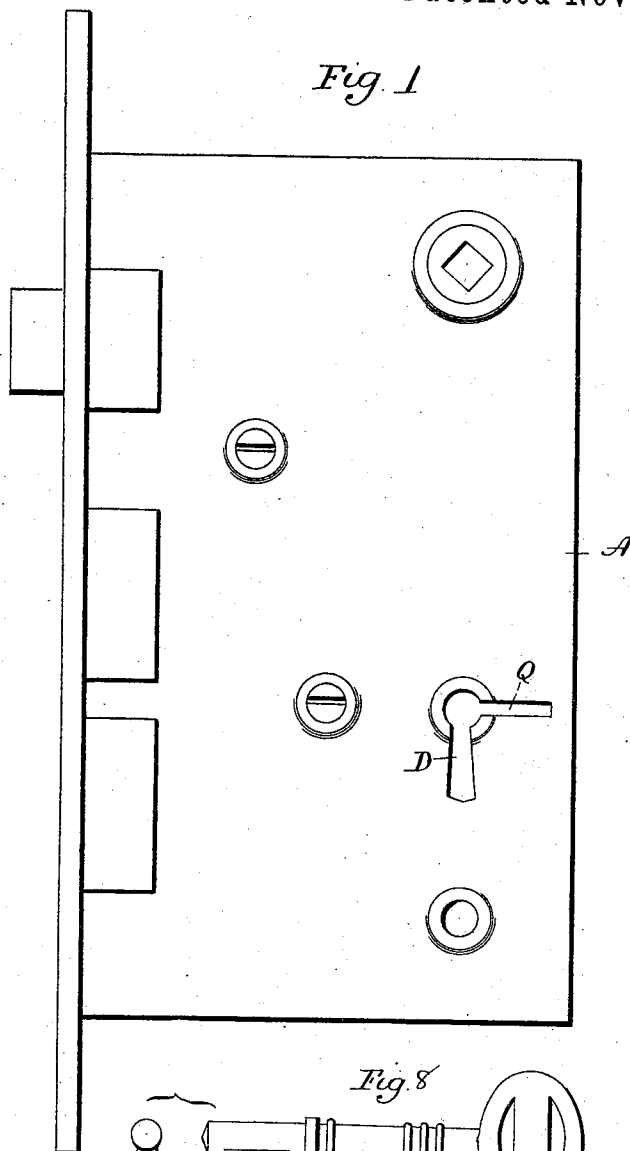


Fig. 8

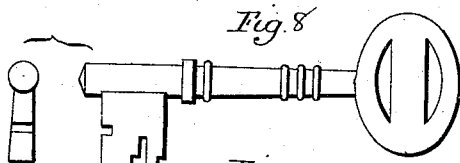


Fig. 7

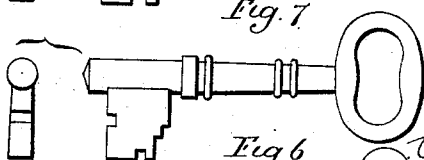
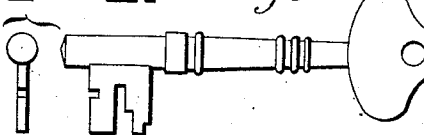


Fig. 6



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J. H. Shumway.
Lillian D. Kellogg.

Charles W. Andrews
Inventor.
By
Earle Raymond

(No Model.)

2 Sheets—Sheet 2.

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Fig 2

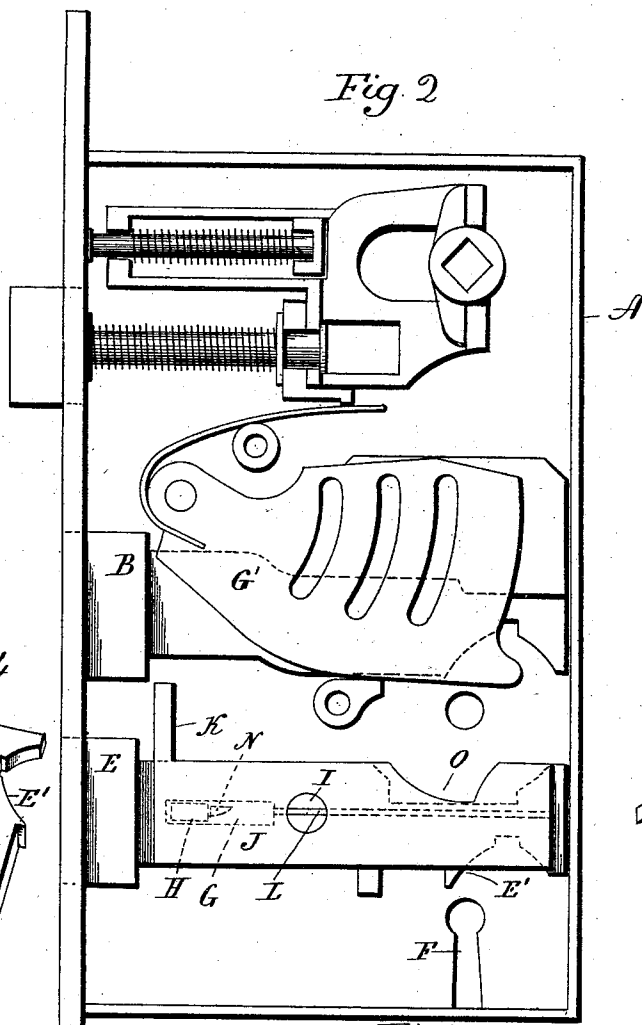


Fig 4

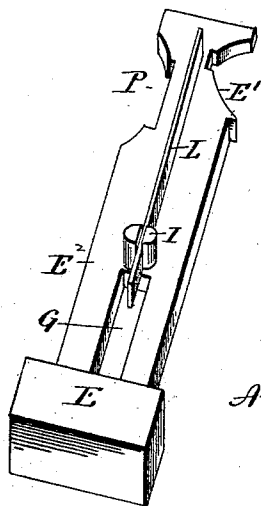


Fig 5

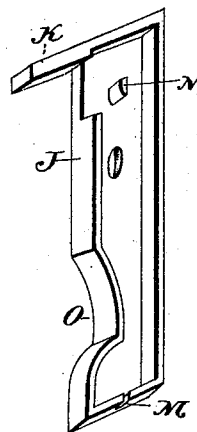
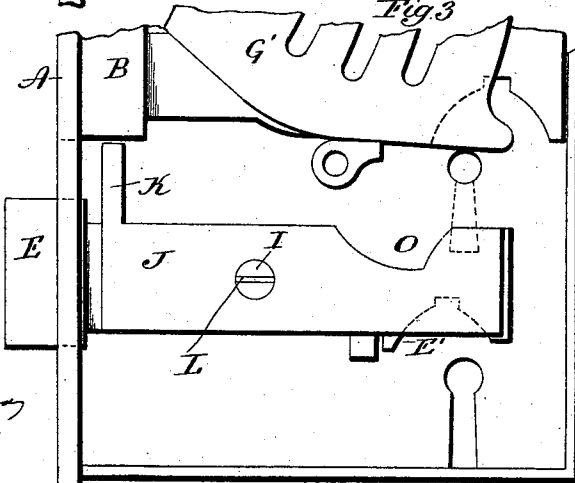


Fig 3



Witness
J. H. Thompson
William D. Kelby

Charles W. Andrews.
By atty. Inventor.
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UNITED STATES PATENT OFFICE.

CHARLES W. ANDREWS, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE
MALLORY & WHEELER COMPANY, OF SAME PLACE.

HOTEL-DOOR LOCK.

SPECIFICATION forming part of Letters Patent No. 571,210, dated November 10, 1896.

Application filed July 2, 1896. Serial No. 597,855. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. ANDREWS, of New Haven, in the county of New Haven and State of Connecticut, have invented a new
5 Improvement in Hotel-Door Locks; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of
10 the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of a hotel-lock embodying my invention; Fig. 2, a side view of
15 the lock with the cap removed, showing both bolts in the retired position; Fig. 3, a lower portion of the lock mechanism, showing the lower or inside bolt thrown outward; Fig. 4, a perspective view of the lower bolt detached;
20 Fig. 5, a perspective view of the locking-lever detached; Fig. 6, the grand master-key; Fig. 7, the pass-key; Fig. 8, the master-key.

This invention relates to an improvement
25 in door-locks, and particularly to that class known as "hotel-locks," that is, locks having two bolts, one of which may be operated from the outside and the other from the inside.

30 In locks of this character it is desirable that some means should be provided to indicate when the door is locked upon the inside. At the same time, in case of accident, it is desirable that an authorized person should be enabled to unlock the door without forcing or
35 deranging the lock.

The object of this invention is to arrange and construct the bolts so that the door may be locked from either side and when locked
40 upon the inside will prevent the insertion of a regular or sub master-key from the outside, and to provide means for the insertion of a grand master-key, whereby the bolts may be thrown from the outside in case of emergency;
45 and the invention consists in the construction, as hereinafter described and particularly recited in the claims.

The case A may be of any preferred construction, arranged with or without knob-
50 latch mechanism, and provided with an outside locking-bolt B, in connection with tum-

blers G', more or less in number and of usual construction, said bolt being adapted to be thrown by a key entering the outside of the case through the key-slot D. Below the bolt
55 B is the inside bolt E, adapted to be thrown from the inside by a key entered through a key-slot F on the inside of the case and engaging with the key-notch E' in the lower edge of the tail E² of the bolt. Extending
60 upward through a slot G in the tail E² is a post H, formed on the inside of the case. Mounted upon a stud I, formed on the face of the tail E² in rear of the slot G, is a lever or tumblers J, formed at its forward end with
65 an upwardly-extending finger K, which, when both bolts are withdrawn, stands slightly in rear of the head of the bolt B, as shown in Fig. 2, but passes beneath the bolt when the inside bolt E is thrown, as shown in Fig. 3.
70 The inner face of the lever is recessed to receive a spring L, one end of which is secured in the stud I and the opposite end in a slot M in the rear end of the lever, which spring tends to normally hold the lever J in line
75 with the tail E² of the inside bolt. Near the forward end of the lever is a stump N, which engages with the rear side of the post H when the bolt is withdrawn and with the opposite side when the bolt is in the thrown position,
80 thus locking the bolt in either position. In the upper edge of the lever is a key-notch O, which coacts with a key-notch P in the upper edge of the tail E² of the bolt. Extending
85 from the same center as the key-slot D is a narrow slot Q, which will only admit a key having a thin bit, as shown in Fig. 6. It will be understood that the bolts are adapted to be thrown by the same regular key and those of a series by the same sub master-key or
90 grand master-key.

The operation of the lock is as follows: The door is locked or unlocked from the outside by the bolt B through a key entering the slot D, and may be locked or unlocked from the
95 inside by a key entering the key-slot F and acting upon the under side of the lever J and tail E², the key first lifting the lever to clear the stump N from the post H and then throwing the bolt, the stump then passing at one
100 side of the post H and returning to a position in front of it, whereby the bolt is held against

retraction. In this position the upper edge of the rear end of the lever stands in the path of the key-slot D, as indicated in Fig. 3, so that it is impossible to insert a regular or sub master-key or any other key through that opening, at once indicating to a person on the outside of the door that the door is locked on the inside. When the door is so locked upon the inside, the finger K of the lever J stands beneath the bolt B, which positively prevents movement of the lever J, and hence avoids the possibility of picking the lock from the outside. In case of accident or emergency when it is desirable to open the door from the outside after it has been locked upon the inside a grand master-key may be inserted through the narrow key-slot Q and turned to first throw the outside bolt, which clears the finger K. The continued movement of the grand master-key will operate upon the lever J, through the notch O, to depress that end of the lever and throw the stump out of engagement with the post H, and then upon the notch P in the bolt to withdraw the bolt. The key is then turned in the opposite direction to withdraw the bolt B, and thus unlock the door. It will be understood that the escutcheon on the outside of the door is provided with two key-slots corresponding to the slots in the case, one being so narrow as to prevent the ordinary regular or the master key from entering. The locks are so arranged that the regular or sub master-key will operate upon the lower sides of both bolts, while the grand master-key not only operates upon the lower sides of both bolts, but also upon the upper side of the inside bolt.

I am aware that hotel-locks having two bolts adapted to be independently operated are old, and therefore do not wish to be understood as claiming, broadly, such as my invention.

I claim—

1. The herein-described lock having two bolts and tumblers therefor, both bolts and their tumblers adapted to be thrown by keys operating upon their lower edges, and the

lower bolt and its tumbler adapted to be withdrawn by a key operating upon its upper edge after the upper bolt has been thrown, substantially as described.

2. The herein-described lock having two bolts and tumblers therefor, the lower or opposite bolt having combined therewith a lever pivotally mounted upon the tail of said bolt, and coöperating to hold the bolt in its locked or unlocked position, and adapted with the bolt to be thrown or withdrawn by a key operating upon its lower edge, and also adapted to be withdrawn by a key operating upon its upper edge after the upper bolt has been thrown, substantially as described.

3. In a two-bolt lock the combination with a lower bolt formed with key-notches in the upper and lower edges of its tail, of a lever pivotally mounted upon the said tail, a spring also mounted on said tail and extending into engagement with the rear edge of said lever, an upwardly-extended finger at the forward edge of said lever, a stump on said lever co-acting with the post in the case for holding the bolt in the locked or unlocked position, said lever formed with an operating-notch in its upper edge and adapted when thrown to close the key-opening in the outside of the case, substantially as described.

4. The herein-described lock having two bolts and tumblers therefor, both adapted to be moved by keys operating upon their lower edges, the lock-case formed with two key-slots extending from the same center, and located between the said bolts, one of said slots narrower than the other, and the lower bolt adapted to be withdrawn by a key entered through the narrow slot and operating upon its upper edge after the upper bolt has been thrown, substantially as described.

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

CHARLES W. ANDREWS.

Witnesses:

FRED. C. EARLE,
LILLIAN D. KELSEY.