

No. 819,120.

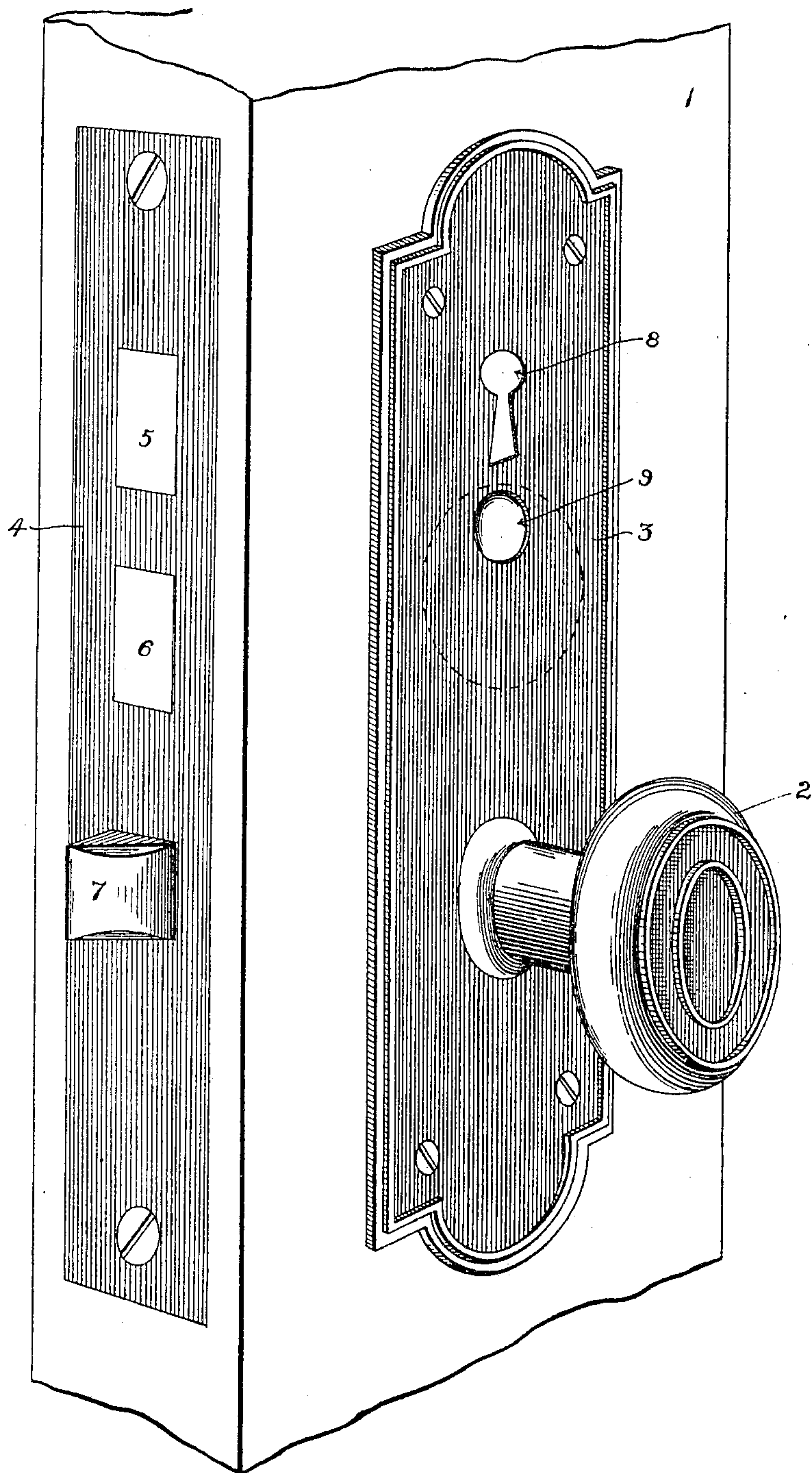
PATENTED MAY 1, 1906.

C. J. CALEY.
LOCK AND LATCH.

APPLICATION FILED MAY 27, 1904.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses
Chas A. Beard
[Signature]

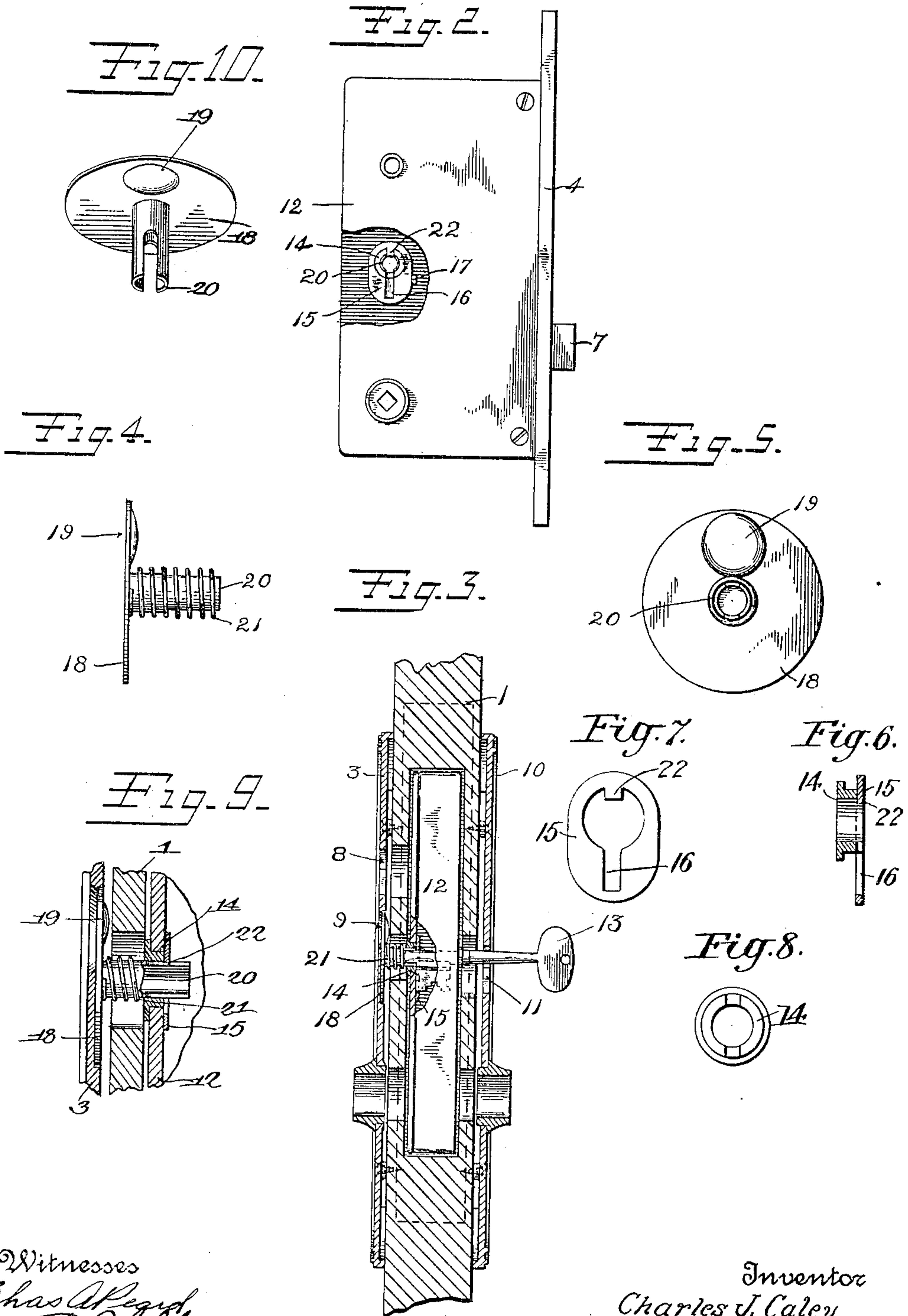
Inventor
Charles J. Caley
By his Attorneys
[Signature]

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2 SHEETS—SHEET 2.



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CHARLES J. CALEY, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO
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LOCK AND LATCH.

No. 819,120.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed May 27, 1904. Serial No. 210,037.

To all whom it may concern:

Be it known that I, CHARLES J. CALEY, a citizen of the United States, residing at New Britain, in the county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Locks and Latches, of which the following is a full, clear, and exact description.

My invention relates to improvements in locks, and particularly those intended for use on hotel-doors.

The object of my invention is to provide a lock which may be operated by means of a key from either side and which will indicate by a visible sign on the outer side of the lock whenever a key is inserted from within and turned.

The invention consists of improvements the principles of which are illustrated in the accompanying two sheets of drawings.

Briefly, the elements comprise a lock with means for operating it from the outside and also from the inside of the door, combined with indicating means operated simultaneously with the operation of the lock from the inside and visible from the outside.

Figure 1 is a perspective view illustrating a fragment of a door with a lock embodying the improvements of my invention installed. Fig. 2 is a side view of a lock-casing embodying the improvements of my invention, part of the case being broken away to show the interior thereof. Fig. 3 is a vertical section of the parts shown in Fig. 1, but showing only a part of the lock-casing and indicating mechanism in section. Fig. 4 is a detail side elevation of the indicating member. Fig. 5 is a rear view of the same. Fig. 6 is a vertical section of the parts for connecting the key and the indicator. Fig. 7 is a front view of one part of this device. Fig. 8 is a front view of the other part. All three of these figures are on substantially the same scale as Figs. 4 and 5. Fig. 9 is a fragmentary sectional view of the indicator, key-socket, and adjacent parts on substantially the same scale as Figs. 4, 5, 6, 7, and 8. Fig. 10 is a perspective view of the indicator and shaft on the same scale.

1 indicates a fragment of the door.
2 is an outside knob.
3 is an escutcheon-plate which is secured

in a suitable manner to the outside of the door.

4 is a face-plate at the edge of the door. 55

5 is a bolt adapted to be operated by a key from the outside of the door.

6 is a bolt adapted to be operated by a key from the inside of the door.

7 is a latch adapted to be operated by either the inside or outside knob. 60

8 indicates the keyhole in the outer escutcheon-plate for the insertion of the key to operate bolt 5.

9 indicates an opening in the escutcheon-plate 3, through which the indicating device may be observed. 65

10 is the inner escutcheon-plate, adapted to be secured in a suitable manner to the inside of a door. 11 is a keyhole in this escutcheon-plate, through which a key may be inserted to operate the bolt 6. 70

12 is a lock-casing containing any suitable mechanism for operating the bolts 5 and 6.

13 indicates a key which is adapted to operate either bolt 5 or 6, depending upon whether it is inserted through the keyhole 8 or the keyhole 11. 75

14 is a collar which is pivotally mounted in the outside of the lock-casing 12. 80

15 is a depending body having a recess or seat 16 for the inner end of the key. The collar 14 and body 15 are rotatable with the key when the same is inserted through the keyhole 11 and engaged in the seat 16. 85

17 is a stop to limit the rotation of the body 15, as shown particularly in Fig. 2.

18 is the indicating member, preferably in the form of a disk. (Shown particularly in Figs. 4 and 5.) 90

19 is an embossed portion to distinguish from the body of the disk.

In the preferred form the indicating member has a tubular part 20, which is surrounded by a spring 21. This spring takes up against the outer side of the collar 14 and holds the dial against the inside of the outer escutcheon-plate. In Fig. 3 part of the ends of the tubular member 20 and the spring 21 are broken away to show the key in position. I have in the form shown provided a recess in the rear of the escutcheon-plate 3, in which this dial 19 may take a bearing. To connect the indicator with the collar 14, I may cause the in- 100

ner end of the tubular member 20 to be split, as shown in the drawings.

22 is a projection from the body 15, which lies in a groove in the collar 14 and extends 5 down between the split ends of the tubular member 20, so as to cause the tubular member and the dial to turn with the body 15 when a key is inserted into the recess 16.

The indicator may be readily applied to 10 the lock-casing after the lock is inserted in the mortise in the door and is held in place by means of the escutcheon-plate 3. The lock may, however, be used without the indicator, if desired.

15 The normal position of the indicator is that shown in Fig. 3. It will be obvious from an inspection of the drawings and the foregoing description that the position of the indicator is not affected by any operation of the bolt 5.

20 When, however, a key is inserted into the lock from the inside of the door and turned a slight distance, the indicator is at once rotated and shows from the outside of the door that a key is in the lock. This visible signal 25 will prevent the servants from trying the knob to see if the door is locked. As a consequence the occupant of the room will not be disturbed.

From an inspection of Fig. 2 it will be ap- 30 parent that when the key is inserted and takes its seat in the recess 16 it can be rotated only through a portion of a revolution, and hence cannot be brought back to a position which will permit its withdrawal when the 35 bolt is locked. The indicator will, moreover, show, when the key is inserted and partially turned, whether the bolt is locked or not.

The advantages of such a construction will 40 be apparent to those who are skilled in this art.

What I claim is—

1. In a lock mechanism, the combination

of a lock-casing, a rotatable member having a limited movement and adapted to be oper- 45 ated by a key and an indicating-dial outside of said casing removably connected to said member for the purpose specified.

2. In a lock mechanism, the combination of a lock-casing, an escutcheon-plate, an indi- 50 cating-dial mounted behind said escutcheon-plate, a tubular member extending from said dial into said casing and a spring for holding said parts in their proper relative positions.

3. In a lock mechanism, the combination 55 of a bolt, means for operating the same from the inside of the lock only, an indicating-dial arranged to be visible from the opposite side of the lock, key-controlled means for operat- 60 ing said indicating-dial and means for preventing the withdrawal of said key until said dial is returned to its normal position.

4. In a lock mechanism, the combination of a casing having a keyhole-opening in one 65 side, a hub rotatably mounted in the other side of the casing, a body carried by said hub inside the casing and having a recess to re- receive a portion of a key, a stop to limit the ro- 70 tation of said body, an indicating-dial, and telescopic means of connection between said dial and said hub.

5. In a lock mechanism, the combination of a casing having a keyhole-opening in one 75 side, a hub rotatably mounted in the other side of the casing, a body carried by said hub inside the casing and having a recess to re- receive a portion of a key, an indicating-dial, and telescopic means of connection between said dial and said hub.

Signed at New Britain, Connecticut, this 80 25th day of May, 1904.

CHAS. J. CALEY.

Witnesses:

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