A. L. ANDRUS & E. E. RAUSE.

INDICATOR LOCK.

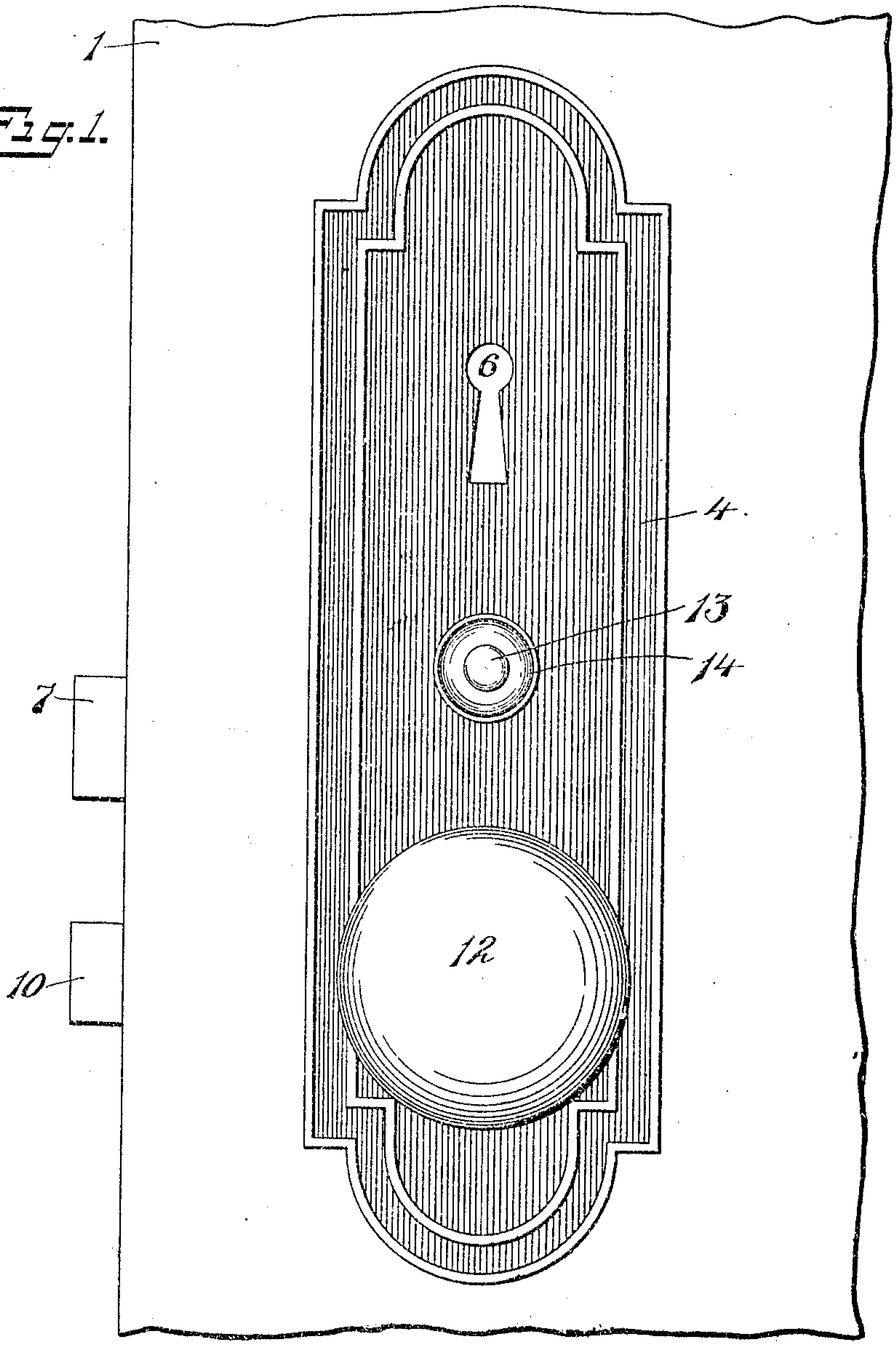
APPLICATION FILED MAY 31, 1906.

913,448.

Patented Feb. 23, 1909.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

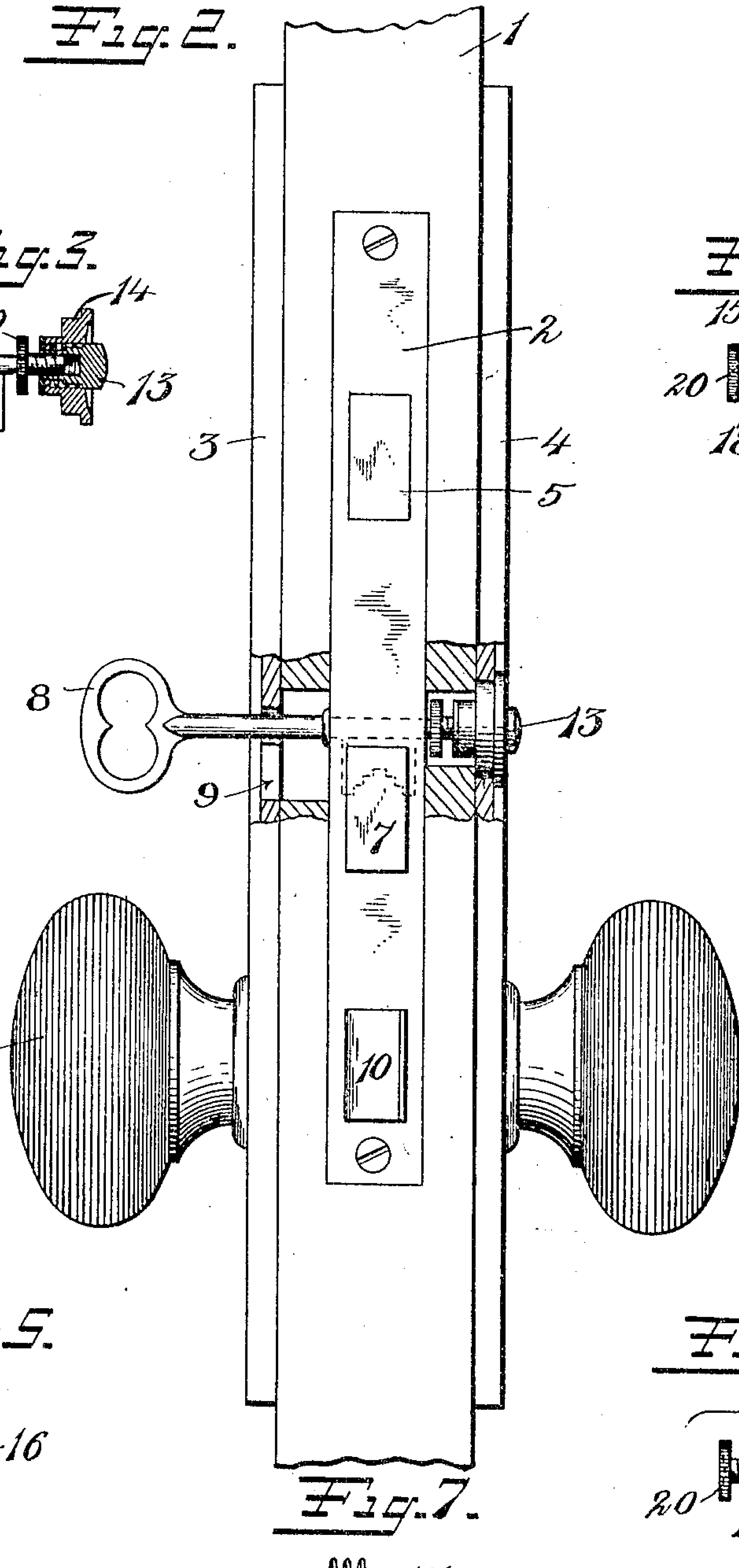


Fig. 3.

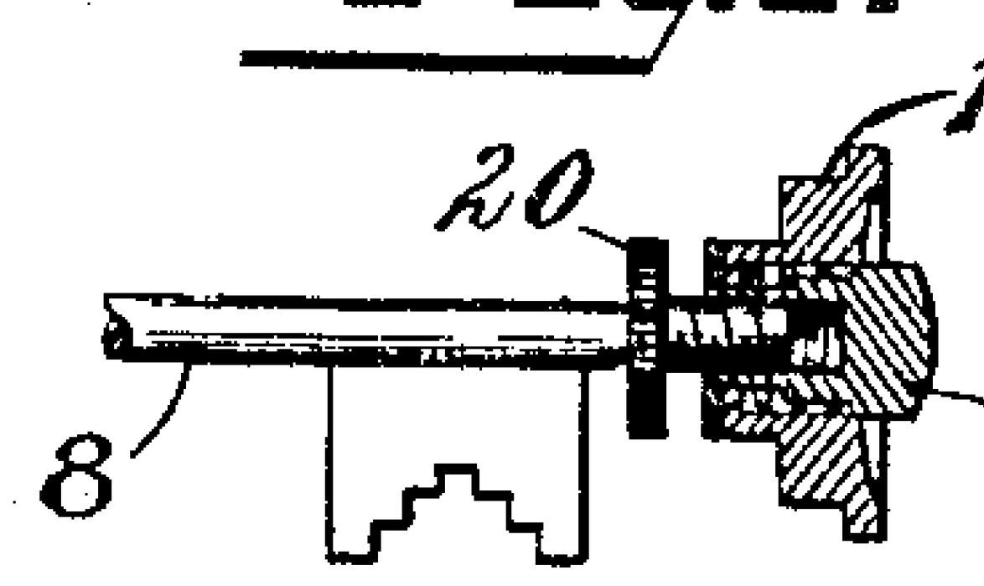


Fig. 4.

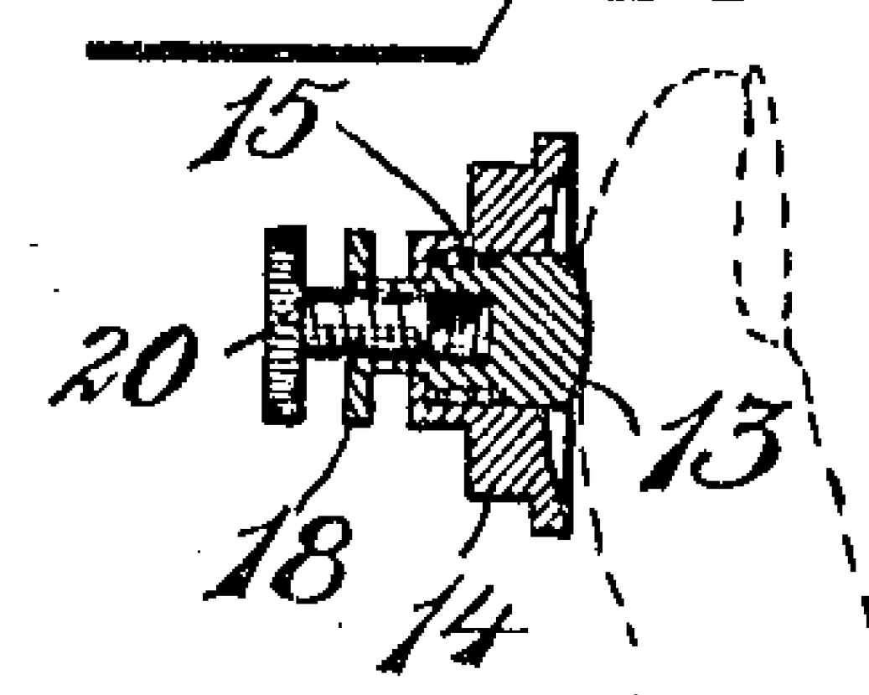


Fig. 5.

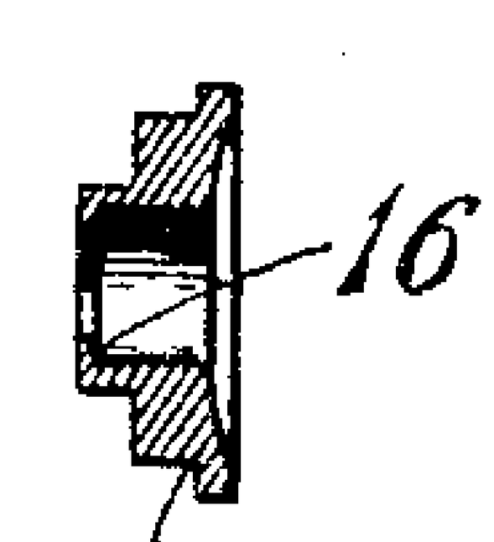


Fig. 6.

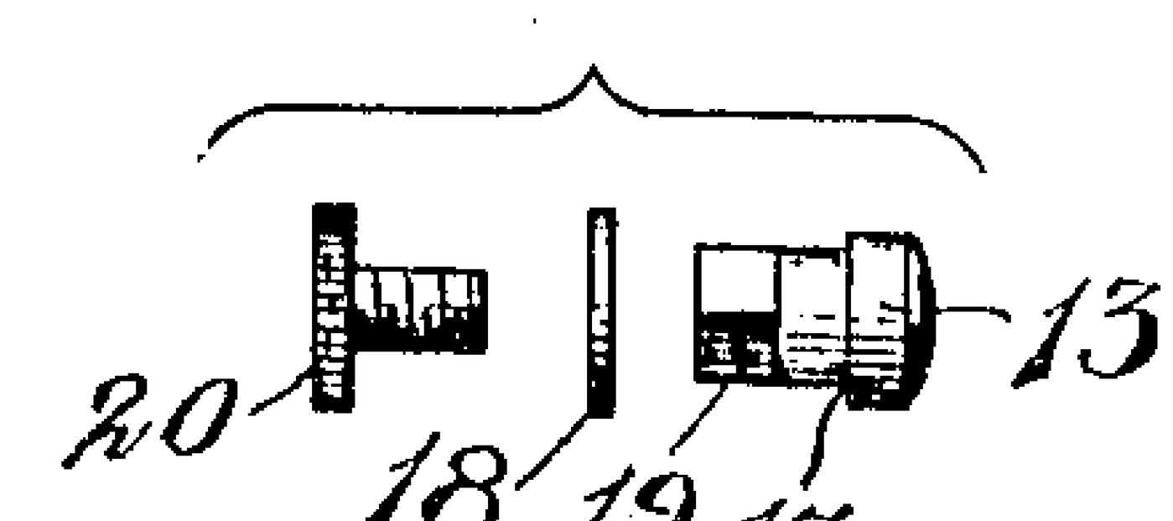
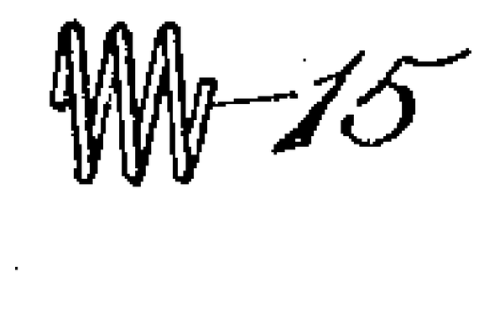


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

ADEN L. ANDRUS AND EDWARD E. RAUSE, OF NEW BRITAIN, CONNECTICUT, ASSIGNORS TO RUSSELL & ERWIN MANUFACTURING COMPANY, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

INDICATOR-LOCK.

No. 913,448. Specification of Letters Patent. Patented Feb. 23, 1909.

Application filed May 31, 1906. Serial No. 319,469.

To all whom it may concern:

Be it known that we, ADEN L. ANDRUS and EDWARD E. RAUSE, citizens of the United States, residing at New Britain, Connecticut, have invented certain new and useful Improvements in Indicator-Locks, of which the following is a full, clear, and exact description.

Our invention relates to improvements in locks, and particularly locks for the doors of hotel rooms.

The object of the invention is to provide a simple mechanism by which a person on the outside may readily determine whether the room is occupied or not.

It is customary when a person enters a hotel room to lock the door from the inside or at least insert the key in the lock at once. Taking advantage of this practice we have provided a simple device by which a person, for instance, a maid, may ascertain if the room is occupied, and, consequently, whether to attempt to open the door or not.

The accompanying two sheets of drawings illustrate the preferred form of our invention.

Figure 1 is an elevation of a fragment of a door having a lock with escutcheon and indicator embodying the improvements of our invention. Fig. 2 is an edge view of the same part being broken away to show the key inserted in the inner key-hole and the indicator co-acting therewith. Fig. 3 is a detail view showing a fragment of a key and the indicator in section. Fig. 4 is a detail sectional view of the indicator in the position it would occupy when pressed in when the key is absent. Fig. 5 is a detail sectional view of the indicator housing or bearing. Fig. 6 shows side elevations of the movable members of the indicator. Fig. 7 shows the spring for the indicator.

1 is a fragment of a door.

2 indicates the face plate of the lock which is of the mortise type.

3 and 4 are the escutcheon plates of suitable design secured to the opposite sides of the door.

5 is a locking bolt adapted to be extended and retracted by any suitable means, for example a key inserted in the key-hole 6 at the outer side of the door. 7 is a second locking bolt adapted to be extended and retracted by a key such as 8 inserted through a key-hole 9 at the inner side of the door. It is intended that both locking bolts shall be operated by the same guest key.

10 is an ordinary spring-pressed latch bolt adapted to be retracted by either of the knobs 11 or 12 as is customary.

Considerable annoyance is often occasioned the occupants of a room by servants trying the door from the exterior. Our invention provides a simple means by which it can be ascertained whether the room is occupied without the necessity of attempting to open the door.

13 is a button or plunger supported in the housing or plunger guide 14 and normally pressed outward by a spring 15 which is located between the abutments or shoulders 16 and 17. The housing is held in the outer escutcheon plate 4 in any suitable manner.

18 is a washer carried by the angular end 19 of the plunger or button for limiting the outward movement thereof.

20 is a screw taking into a tapped hole in the inner end of the plunger or button 13. This screw preferably has a concave head as indicated in dotted lines in Figs. 3 and 6 which serves to center the tip of a key when it is inserted in the lock from the inner side of the door.

Normally, the indicator parts are in the position shown in Figs. 2 and 3. The presence of the key in the position shown in these figures prevents the plunger or button 13 from being operated. A person trying the button from the exterior will know instantly upon applying a slight pressure to the button whether the key is in the lock or not in other words whether the room is occupied. When the key is not in the lock the button may be pushed in as shown in Fig. 4; in other words it is free to move. The screw 20 serves as an adjustable extension to the button so that the same indicator may be adapted to doors of different thicknesses and to escutcheon or side plates of different thicknesses and still co-act properly with a key when inserted in the inner key-hole, 9.

From the foregoing it will be seen that the indicator device is one that is manually set by that act which causes the locking of the door. It is likewise manually read; that is, it is read by the sense of feeling. This is of particular advantage because such doors as it is

desirable to have indicators upon are usually along poorly lighted corridors. As shown, when the plunger or indicator is movable or may be pressed in it would indicate that the room is unoccupied; whereas, when it is locked against movement it would indicate it is occupied.

What I claim is:

1. A construction of the character described comprising the combination of a lock having two locking bolts and separate key-holes on opposite sides out of line with one another for the insertion of keys for the operation of said bolts and a manually operable indicating device located opposite one key-hole for determining the presence or absence of a key in said key-hole.

2. In a lock provided with a key-hole, a locking bolt and a manually operable indicating device having a projecting exposed portion and located opposite the key-hole for determining the presence or absence of a key therein.

3. In a lock mechanism, the combination of a lock casing having a key-hole on one side and a locking bolt adapted to be operated by a key inserted in the key-hole and a movable indicating device having a projecting exposed portion and in line with the key-hole adapted to be engaged by the key inserted therein.

4. In a lock mechanism, the combination of a casing having a key-hole on one side, an escutcheon plate, a laterally projecting and movable indicating device carried by the escutcheon plate and adapted to co-act with the key inserted in the key-hole.

5. In a lock mechanism, the combination of a bolt, means for operating the bolt from the inner side of the lock only and a movable indicating device adapted to protrude from the opposite side for manual engagement.

6. In a construction of the character described, the combination of a lock having two bolts, two side plates each having a key-hole for the insertion of keys for the operation of said bolts and an indicating device protruding from one of said side plates and adapted to co-act with a key inserted in one of said key-holes.

7. In a lock, a bolt adapted to be operated by a key, an indicating device adapted for manual engagement and an adjustable extension carried by said indicating device for the purpose specified.

8. As an article of manufacture, an indicating device for a key-operable-lock comprising a housing, a spring-pressed plunger carried thereby and an adjustable extension member movable with said plunger and having a key-seat.

9. In an indicator for locks, the combination with a lock and an escutcheon plate, of a spring pressed plunger carried by the escutcheon plate in the plane of the key hole in the lock, and adapted to coact with a key inserted in said key hole.

10. In an indicator for locks, the combination with a lock and an escutcheon plate, of a housing secured to the escutcheon plate in the plane of the key hole in the lock, and a plunger mounted in said housing and adapted to coact with a key by the insertion of said key in said key hole.

11. In a lock mechanism, the combination of a bolt, means for operating the bolt from the inner side of the lock, and a movable indicating device separate from said bolt-operating means, adapted to protrude from the opposite side for manual engagement.

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Witnesses:
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