C. L. BATES.

DOOR LOCK.

No. 169,401. Patented Nov. 2, 1875.

fig. 1.

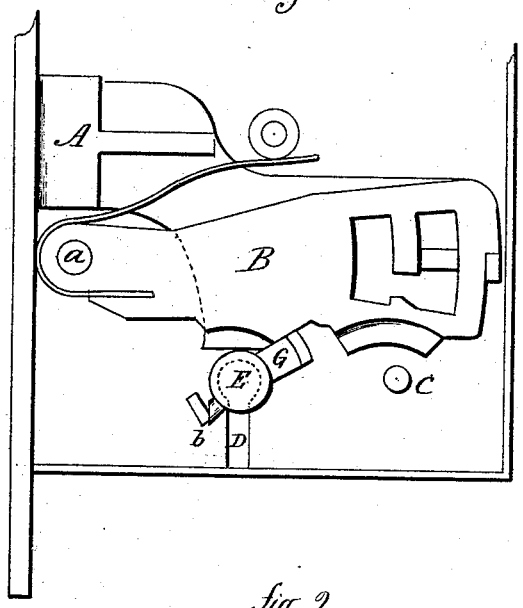


fig. 2.

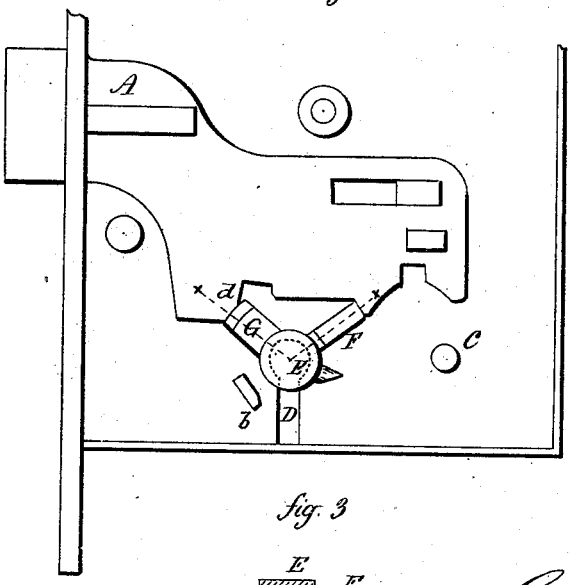
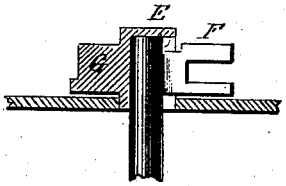


fig. 3



Witnesses.
A. Shumway.
Clara Broughton.

Chas. L. Bates.
Inventor.
By Atty.
John E. Earle

UNITED STATES PATENT OFFICE.

CHARLES L. BATES, OF BRIDGEFIELD TOWNSHIP, BERGEN COUNTY, N. J., ASSIGNOR TO THOMAS KENNEDY, OF BRANFORD, CONN.

IMPROVEMENT IN DOOR-LOCKS.

Specification forming part of Letters Patent No. **169,401**, dated November 2, 1875; application filed September 9, 1875.

To all whom it may concern:

Be it known that I, CHARLES L. BATES, of Bridgefield township, in the county of Bergen and State of New Jersey, have invented a new Improvement in 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 the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, the lock portion of the latch with the covering-plate removed; Fig. 2, the same with the tumblers removed and the bolt thrown; Fig. 3, section of Fig. 2 on line *x x*.

This invention relates to an improvement in locks for doors; the object being to prevent the bolt from being thrown from the outside when the door is locked from the inside, designed with special reference for use in hotels.

A is the lock-bolt; B, the tumblers, pivoted in the case, as at *a*, in substantially the usual manner; C, the stem, upon which the key from the outside is set to turn the bolt; or it may be a common key-hole and key. At one side, and, preferably, toward the face, a second key-hole, D, is formed, opening only to one side—that is, the inner side. In this key-hole a socket, E, is set, which receives the spindle of the key, and so as to allow the bit F to pass within the case. On this socket is a projection, G, corresponding to the bit of a key.

When the key is inserted through the key-hole D this socket is in the position denoted in Fig. 1, resting against a stop, *b*. While the socket stands in this position the key from the outside may be inserted, and the bolt thrown in either direction, in the usual manner; and this may be done even while the inside key is in the lock, but not turned so as to throw the bolt.

To lock the bolt from the inside, the key is turned, as denoted in Fig. 2, and with it the socket turns the arm G, throwing the bolt in the manner as does the bit of a key; and when the bolt is thrown this projection G is stopped against the shoulder *d* on the bolt, as seen in Fig. 3, the bit F of the key holding it in that position. While the bolt is thus locked the key may be inserted from the outside; but it cannot in any manner affect the bolt.

The projection G should be constructed to raise the tumblers in like manner as does the key; but, as far as the security is concerned, the tumblers may be dispensed with, as the socket securely holds the bolt, and independent of the tumblers.

A pipe-key is employed, because it is desirable that the outside key-hole should not go through the lock; yet that key-hole may go through, so that the key may be inserted upon both sides.

I claim—

The combination, in a door-lock, of the following elements: the case, constructed with a key-hole on each side, in substantially the same horizontal line, but in different axial planes; a cam, G, the axis of which is the axis of one of the key-holes, and constructed for the insertion of the key, so that the bit of the key will enter at an angle to the said cam; a bolt, constructed to be thrown by the key in one key-hole, and by the cam through the other, and with a shoulder, against which the cam bears when the bolt is thrown, the key retaining it in that position, substantially as set forth.

CHARLES L. BATES.

Witnesses:

WILLIAM L. BLEECKER,

WILLIAM H. TRACY.