

No. 861,986.

PATENTED JULY 30, 1907.

N. B. HURD.
LOCK.

APPLICATION FILED OCT. 30, 1906.

Fig. 1.

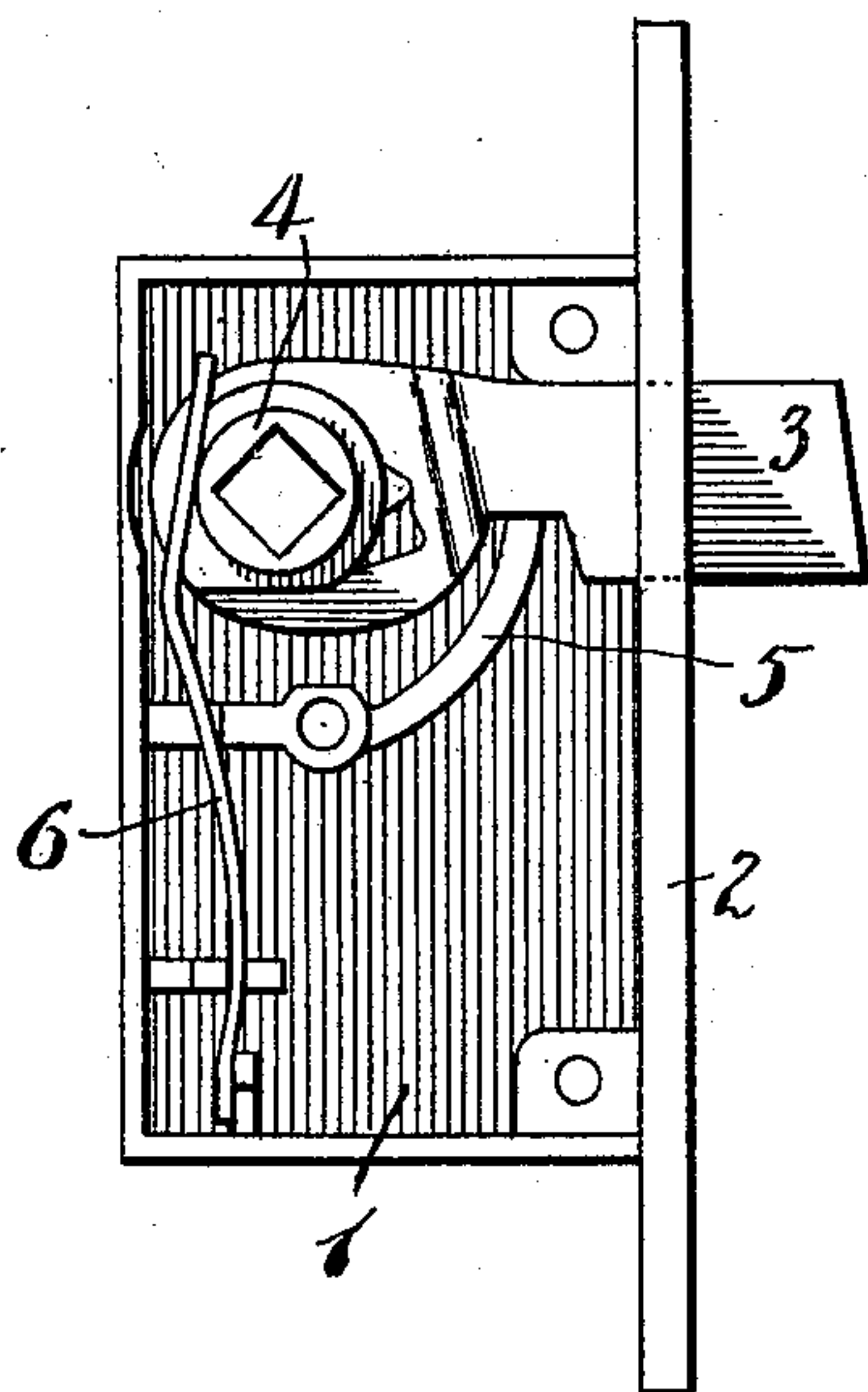


Fig. 2.

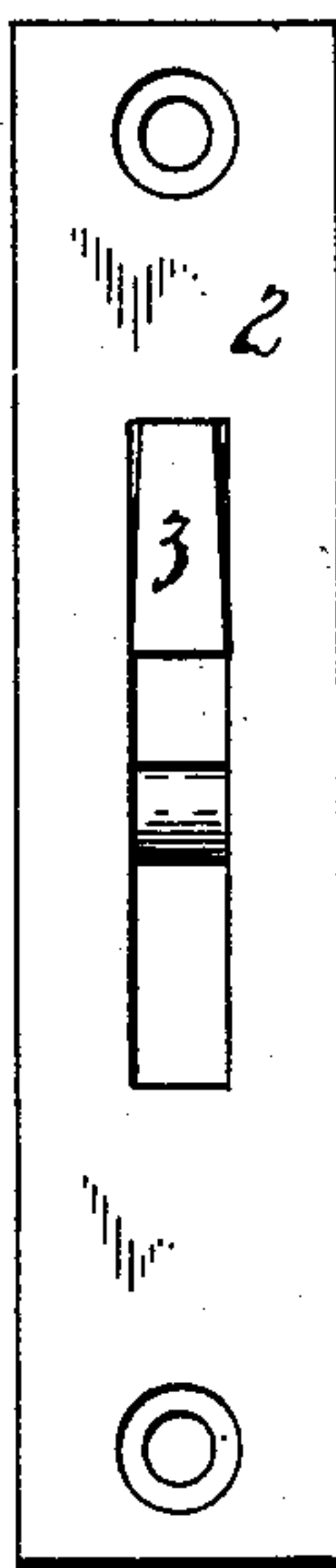


Fig. 4.

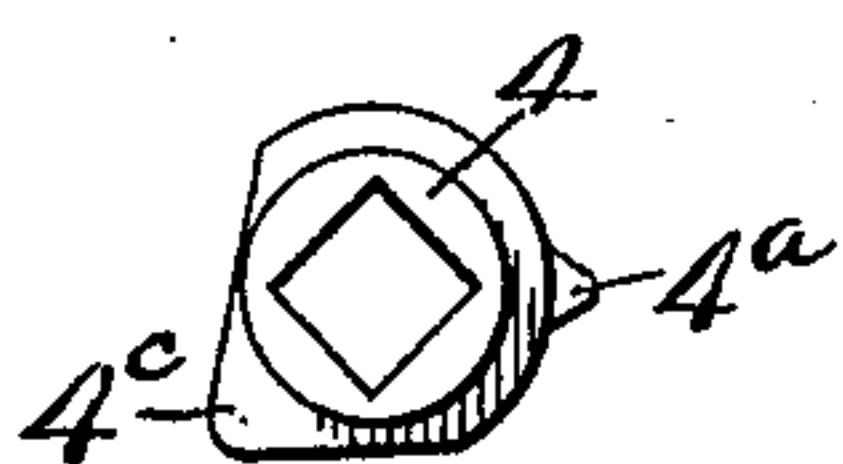


Fig. 3.

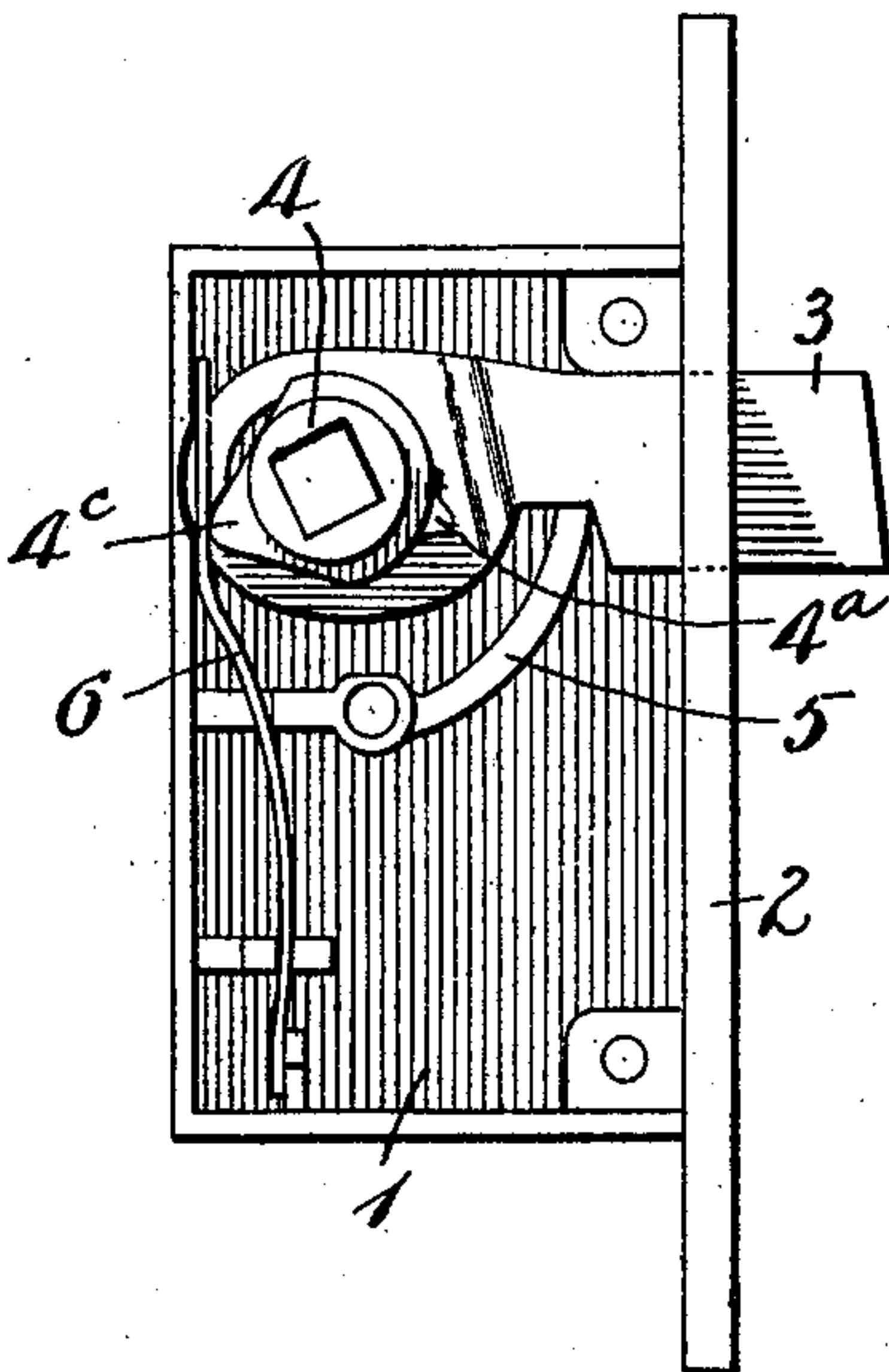


Fig. 5.

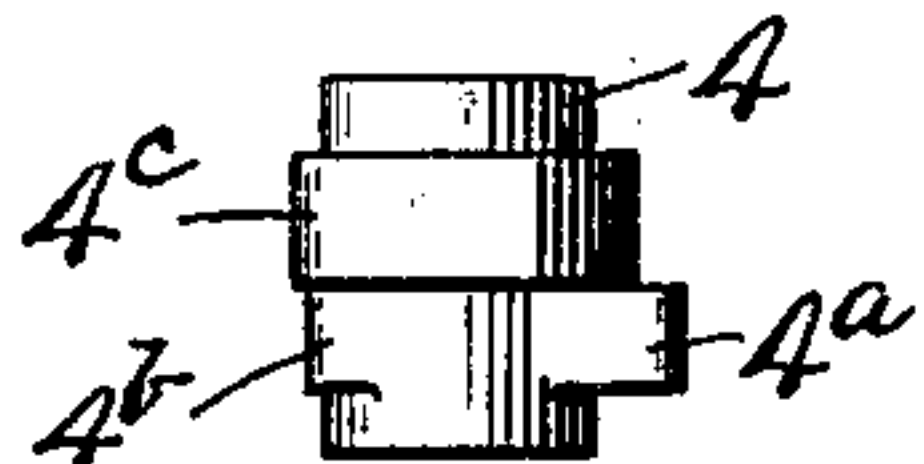


Fig. 6.

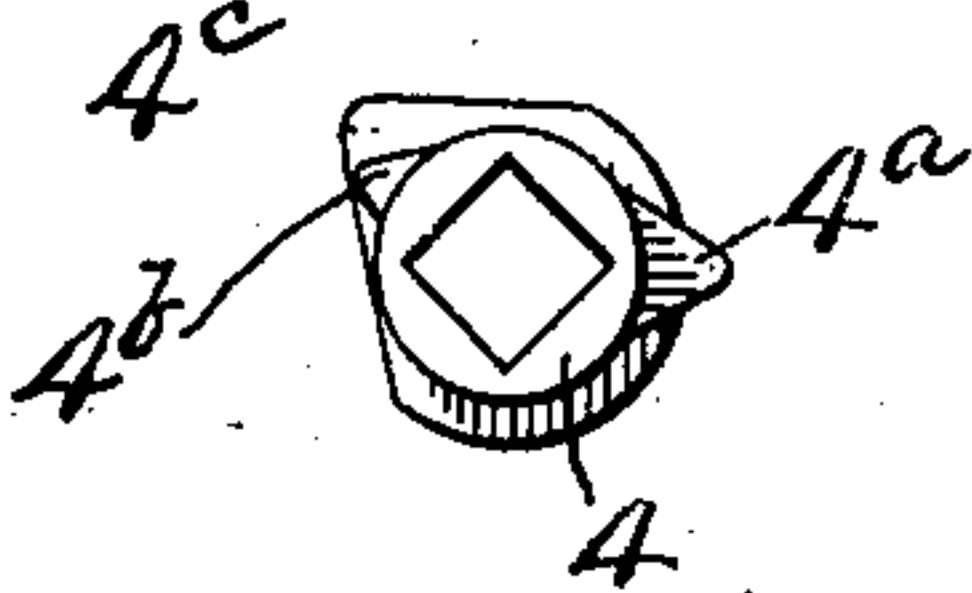
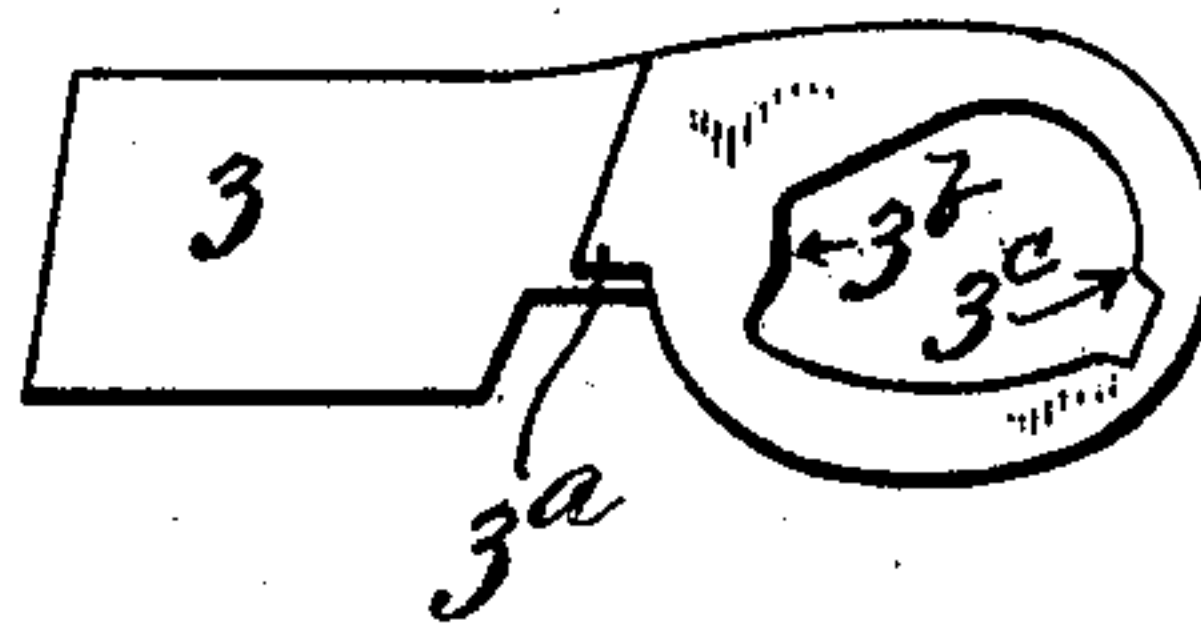


Fig. 7.



Witnesses
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LOCK.

No. 861,986.

Specification of Letters Patent.

Patented July 30, 1907.

Application filed October 30, 1906. Serial No. 341,249.

To all whom it may concern:

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

My invention relates to improvements in locks, and has particular reference to that type of locking devices termed "turn buckles".

10 The object of the invention is to provide a simple and effective means for locking the bolt against external operation by means of a knife or other thin instrument inserted through the space at the edge of the door or cover to which the lock is applied.

15 In the drawings Figure 1 is a side elevation of the lock with the cover plate removed. Fig. 2 is a front elevation. Fig. 3 is a view similar to Fig. 1, the parts being shown in a different position. Figs. 4, 5 and 6 are different views of the actuating cam or hub. Fig. 20 7 is an elevation of the bolt, detached.

1 is the lock case, of any suitable form.

2 is the front plate having an elongated slot through which the bolt may be projected.

25 3 is the bolt itself. 4 is the roll-back hub or cam therefor.

5 is a bolt stop on the inner wall of the case, the same being struck on an arc concentric with the axis of rotation of the hub 4.

30 6 is a spring arranged to normally bear against certain parts of the hub.

The bolt 3 has a swinging movement and finds its support on the hub 4. As will be observed in Fig. 1, the bolt 3 stands in a slightly advanced position relatively to its position shown in Fig. 3.

35 3^a is a locking shoulder on the bolt (see Fig. 7), which locking shoulder, when the bolt is in the position indicated in Fig. 1, stands over the end of the stop 5, and consequently when in said position the said bolt cannot be moved by any pressure applied at its outer end.

40 4^a and 4^b are two cams on the hub. At the forward side of the hub opening in the bolt 3 there is a cam shoulder 3^b. At the lower side of this cam shoulder (as shown in Fig. 7) there is a depression or recession of the wall which forms a relatively deep pocket as compared with the recession on the other side of the should-

der 3^b. In Fig. 1 the cam 4^a will be seen to stand above the shoulder 3^b, and in this position the bolt 3 will be projected forward so that the shoulder 3^a engages with the stop 5. When, however, the hub is turned clockwise and into the position shown in Fig. 3, the said cam 4^a will rest in the deeper depression at the lower side of the shoulder 3^b, the cam 4^b pressing back the bolt 3 by engaging against the shoulder 3^c (Fig. 7). This pressing back of the bolt of course occurs just as the cam 4^a clears the shoulder 3^b. Continued rotation in a clockwise direction of the hub 4 will then swing the bolt 3 from the position indicated in Fig. 3 to a position in which the end of the bolt will be housed within the casing 1. 4^c is another cam on the hub 4, against which the spring 6 presses. The action of this spring on the cam 4^c is to frictionally hold the hub 4 in the locking or unlocking position. The usual spindle (not shown), or other equivalent device, may be provided to operate the hub 4.

It will be observed that it is by the compound action of the bolt that it is moved into position and locked or unlocked and moved out of position. The means for accomplishing this compound movement for the purpose described is effective, simple and durable, and affords positive action.

What I claim is:

1. In a locking device, a bolt, means for imparting to said bolt a compound movement comprising a rotatable hub member carrying said bolt and operative connections between said rotatable hub and said bolt whereby the rotation of said hub will first swing said bolt from the retracted to the projected position and finally move said bolt radially outwardly into the locked position.

2. In a locking device, an oscillating bolt, a hub support and actuator therefor, a stop, and operative connections between said bolt and said hub to move said bolt radially outwardly when projected into operative relation with the stop whereby said bolt is locked.

3. In a lock, a hub, a bolt supported at one end thereof, said bolt being free to swing with the rotation of said hub, a stationary stop, a cam for imparting a radial movement to said bolt when in its locking position to engage said bolt with said stop, and a second cam to retract said bolt from engagement with said stop by imparting a reverse movement to said hub.

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Witnesses:

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