

G. N. MASON.

LOCK.

APPLICATION FILED MAY 27, 1910.

970,252.

Patented Sept. 13, 1910.

FIG. 1.

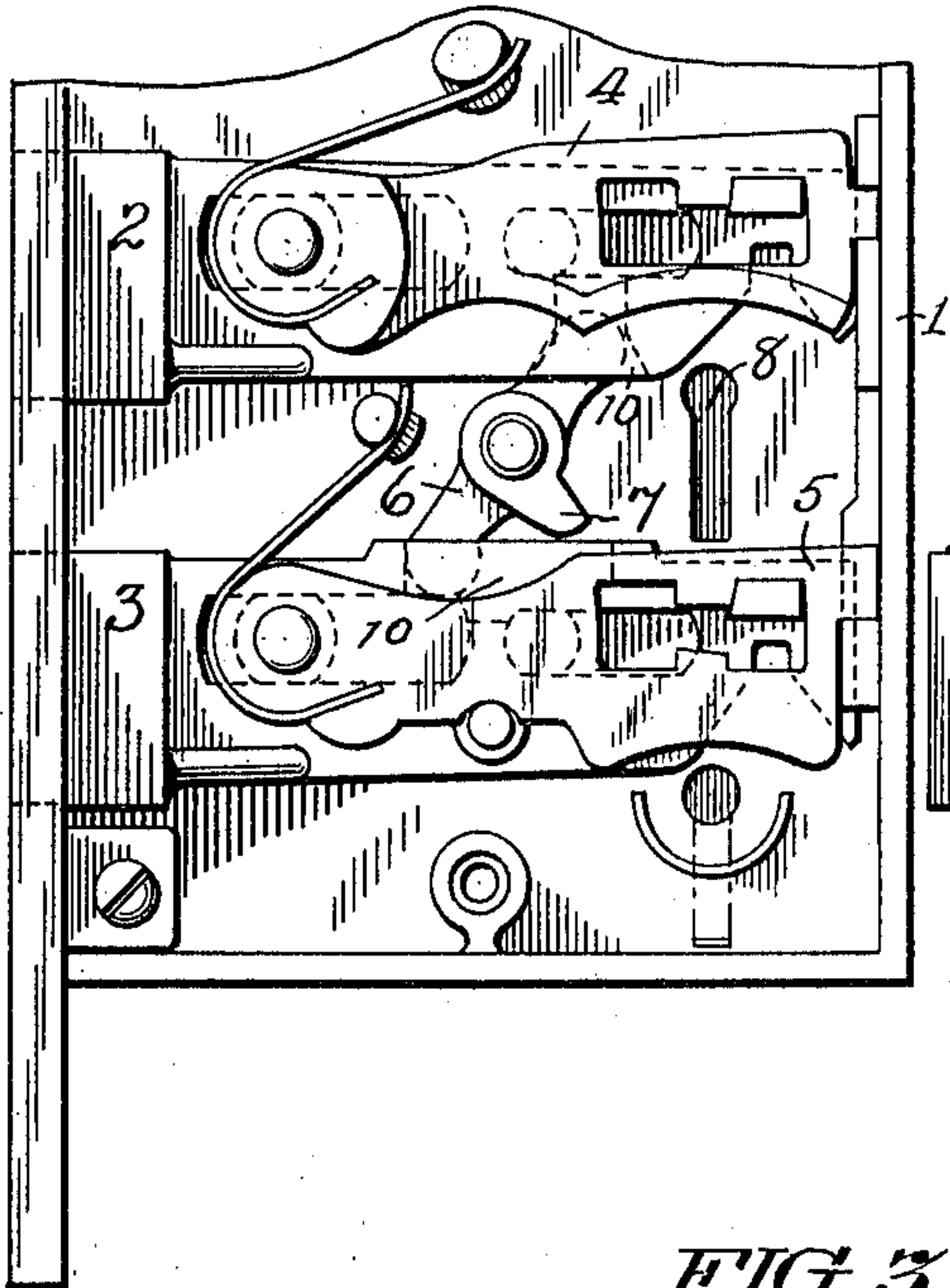


FIG. 2.

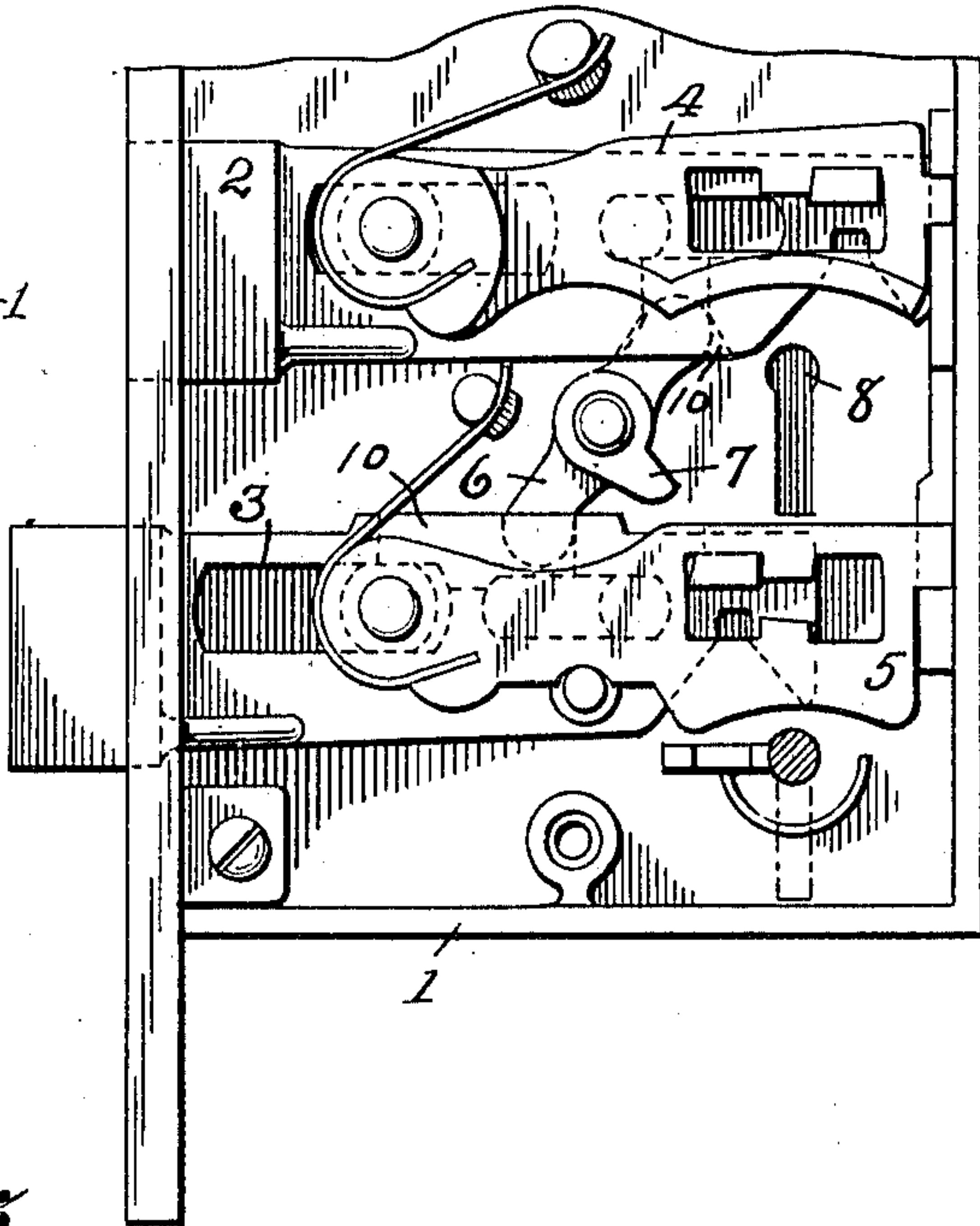
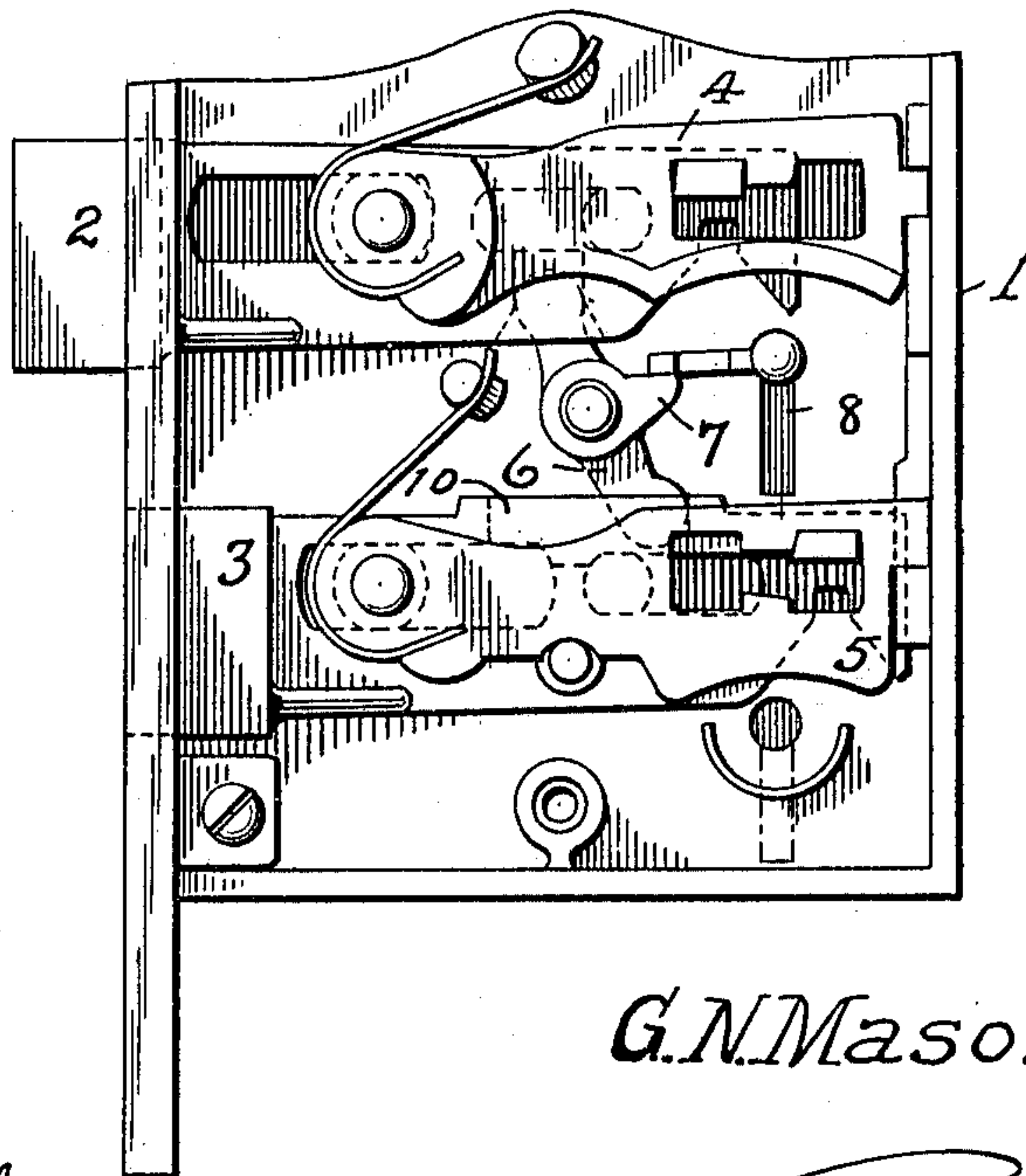


FIG. 3.



G. N. Mason,

Inventor

Witnesses

J. N. Kelly,
E. F. Miller.

By

E. A. Kelly.

Attorney

UNITED STATES PATENT OFFICE.

GEORGE N. MASON, OF READING, PENNSYLVANIA, ASSIGNOR TO READING HARDWARE COMPANY, OF READING, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LOCK.

970,252.

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To all whom it may concern:

Be it known that I, GEORGE N. MASON, citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Locks, of which the following is a specification.

This invention relates to improvements in locks of the class in which a number of keys for the same lock are in the hands of different persons and in which the locking bolts are to be operated from both sides of the door. Locks of this class are so made that the bolts may be operated from the outside after they have been locked from the inside, but under certain conditions only; and in which the locks may be operated from the inside even when locked from the outside. In all locks of this class, a means has been provided for withdrawing one bolt while the other bolt is being protracted. Means have also been provided to stop the movement of the key, so that it could not be withdrawn, without retracting the bolt. In the present instance I have provided a device, in the form of a yoke piece in which both functions are provided for in the same device.

The invention consists of a yoke adapted to operate both bolts and provided with an integral checking dog or stop adapted to engage the key bit, so that the turning of the key will operate the bolts in opposite directions as before, and the stop will always engage the key bit when it is intended that it should so engage it.

In the accompanying drawing, I have shown a portion of a two bolt lock, with my invention in position thereon.

Figure 1 shows the lock with both bolts retracted; Fig. 2 shows the outside bolt protracted and Fig. 3 shows the inside bolt protracted.

The numeral 1 designates the lock casing; 2 the inside locking bolt; 3 the outside locking bolt and 4 and 5 designate tumblers for the respective bolts. All of these parts are of the ordinary construction.

The numeral 6 designates my improved yoke. This device is pivoted to the inside of

the casing, at a point approximately at its center and its upper end engages one of the locking bolts while the lower end engages the other, operating in pockets 10 formed in the bolts. This yoke piece is formed with an integral projection 7 formed at one side and about the center, and it is adapted to lie in the path of the bit of the key when inserted in the key opening 8 of the casing.

With the lock as shown in Fig. 1, when the bolt 2 is protracted, the parts assume the position shown in Fig. 3. The key cannot be removed without retracting the bolt 2, because it contacts with the stop 7 on the yoke.

With the lock as shown in Fig. 1 and the key inserted in the outside, the bolt 3 would be protracted, as shown in Fig. 2; to unlock the door from the inside, with the bolts in this position, the key would protract the bolt 2, and this would retract the bolt 3, leaving them as shown in Fig. 3, with the key bit in contact with the stop 7. The continued movement of the key is arrested by the stop 7 and to withdraw the key, it must be reversed, which will retract the bolt 2.

When the door has been locked, say from the inside, it will be necessary to unlock it before the key can be removed from the lock. This is because the key bit is arrested in its movement by the stop 7. This stopping of the key movement is done to prevent the removal of the key with the door locked, thus insuring against misplacing of the key by an occupant of a room whose door has been locked.

The construction is extremely simple but it is positively unfailing in its action.

What I claim is:—

1. In a lock the combination with a casing of a plurality of locking bolts, tumblers adapted to engage said bolts, and a yoke 6 pivotally secured to the casing and in movable engagement with said locking bolts, said yoke having an integral stop in the form of a projection 7 adapted to lie in the path of the key bit when the lock is operated from one side.

2. In a door lock, the combination with a

5 casing of an inside locking bolt; an outside locking bolt; tumblers adapted to engage said bolts; and a bolt operating yoke 6, pivotally secured to the casing and in engagement with both locking bolts, said yoke having an integral stop 7 at one side, adapted to lie in the path of the key bit whenever the inside locking bolt is protracted.

In testimony whereof I affix my signature, in presence of two witnesses.

GEORGE N. MASON.

Witnesses:

ED. A. KELLY,
J. O'R. KELLY.