

(No Model.)

M. EASTON.
COIN OPERATED LOCK.

No. 376,182.

Patented Jan. 10, 1888.

Fig. 1.

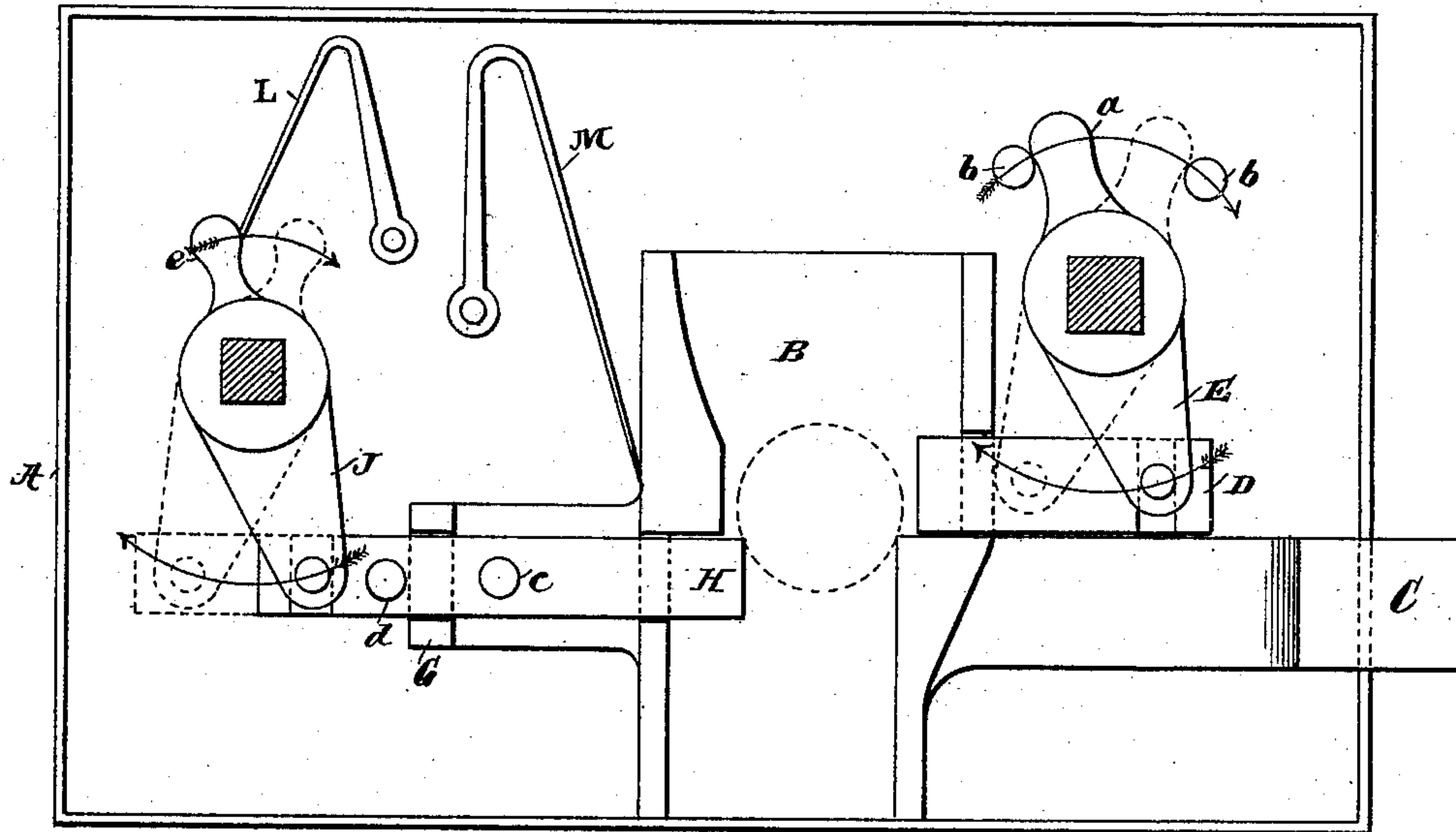
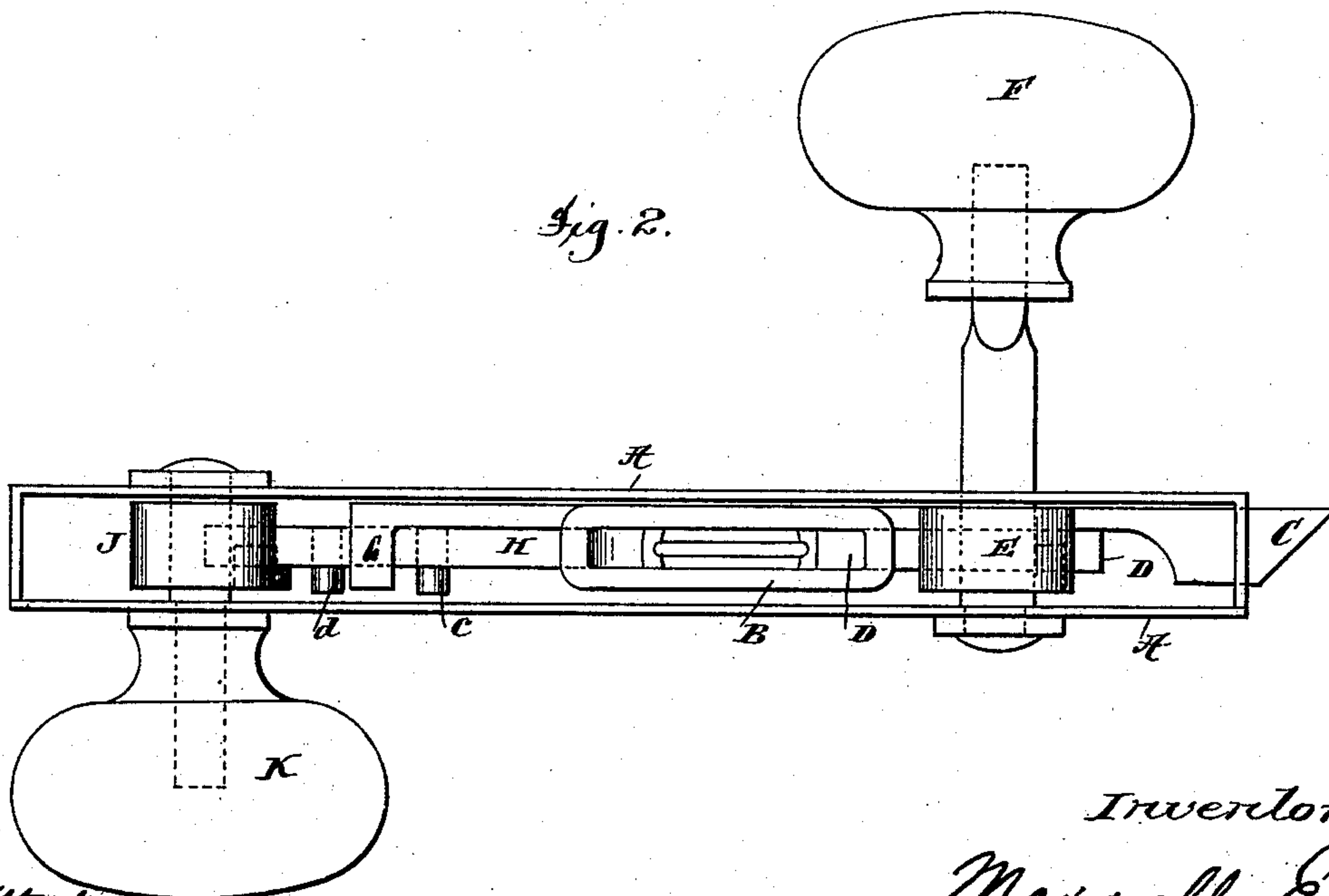


Fig. 2.



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UNITED STATES PATENT OFFICE

MAXWELL EASTON, OF LONDON, ENGLAND, ASSIGNOR TO PERCIVAL
EVERITT, OF SAME PLACE.

COIN-OPERATED LOCK.

SPECIFICATION forming part of Letters Patent No. 376,182, dated January 10, 1888.

Application filed July 23, 1887. Serial No. 245,050. (No model.)

To all whom it may concern:

Be it known that I, MAXWELL EASTON, a subject of the Queen of Great Britain, and a resident of London, England, have invented certain new and useful Improvements in Door-Locks, of which the following is a full, clear, and exact description.

My invention relates to locks, and particularly to such as are intended for application to the doors of closets, rooms, and the like, and its object is to devise a lock which is rendered operative through the instrumentality of a suitable coin or token and without the employment of the usual key.

The invention is hereinafter described, and its features of novelty are pointed out in the claims at the end of this specification.

In the accompanying drawings, which form a part of this specification, and in which like features are indicated by like letters in both views, Figure 1 represents a sectional elevation of a lock embodying my invention, and Fig. 2 is a top plan view of the same.

Referring to the drawings, the letter A indicates the lock-case of suitable metal, and which is intended to be secured to a door in the usual manner. Within the case A is arranged so as to slide therein a receptacle, B, open at top and bottom and adapted to receive a coin or token which may be inserted through the open top of case A, or through a slit in the latter, and which will be suitably guided to insure its entering said receptacle. The receptacle B will be contracted about midway of its length, so as to furnish, in connection with a bolt presently mentioned, a support for the coin or token. Formed, by preference, integral with the coin-receptacle B is the lock-bolt C, of the usual shape at its outer end, which, when the parts of the lock are in their normal positions, protrudes sufficiently through the case A to provide secure fastening means.

The letter D indicates a bolt pivoted at one end to the actuating-crank E of the handle F, and whose opposite end is free to slide in and out of the coin-receptacle B, as shown. The travel or limit of movement of the bolt D is regulated by the co-operation of the free end a of the crank E with the stops b b, fixed to the case A.

At the back of the coin-receptacle B there is provided a guide, G, preferably integral with said receptacle, and through which passes the supplemental bolt H, the inner end of which when in its normal position extends into the receptacle B just beyond the inner wall of said receptacle, as shown clearly in Fig. 1. By this means the inserted coin or token is prevented from falling through receptacle B, so long as the supplemental bolt H is not positively operated by its handle.

The supplemental bolt H is pivoted at its outer end to the crank J of the handle K, and by this means it may be operated. The throw or limit of movement of supplemental bolt H in and out of the receptacle B is governed by the stops c d, which co-operate with the guide G in a manner obvious from an inspection of the drawings. The free end e of the crank J is in contact with a spring, L, suitably secured in the case A, which normally holds said free end in the position shown in full lines, Fig. 1, thereby bringing the stop d against the guide G and securing the supplemental bolt H in a position to support the inserted coin, as explained. The spring M, likewise secured in case A, holds the coin-receptacle, with its attached bolt C, in normal position within the case, so that the movement of these parts and that of the supplemental bolt H is against the power exerted by the two springs mentioned, which, as will be readily observed, hold the bolts normally projected.

The operation of the invention in the embodiment illustrated and above described is as follows: The lock is placed so that the handle F projects from the side of the door on the outside of the room or inclosure to be secured. Before the insertion of a suitable coin or token within the slit communicating with the coin-receptacle B, if the handle F be turned it will simply push the bolt D within the coin-receptacle, and the lock-bolt C will not be affected. This is obvious; but when the proper coin is inserted within receptacle B (the size of the slit will prevent the introduction of too large a coin, and one smaller than the size required will simply pass through receptacle B into the cash-box, which, of course, will be attached in some suitable manner to the door for the pur-

pose of receiving the coins as they are dropped from the coin-receptacle) and lodges therein, as explained, the manipulation of the handle F in the manner explained in the direction of the arrow, passing through *b b*, will throw the bolt D against the coin and press the latter against the wall of the coin-receptacle, and by continuing the movement of the handle F the interposed abutment furnished by the coin will cause the coin-receptacle and its attached lock-bolt C to move back against the resistance of the springs M L, at the same time causing the supplemental bolt H to move back also. By this means the door is unlocked. In closing the door the lock acts not unlike an ordinary dead-latch; but so long as the coin remains within the receptacle the door may be opened by any one from the outside. When the lock is applied to a water-closet door, which is one of the principal uses for which it is designed, the person leaving the closet, by turning the handle K, which is on the inside of the closet, in the direction indicated by the arrow passing through *e*, will draw back the supplemental bolt H, and thus permit the coin to drop into the cash-box arranged for its reception. Immediately the handle K is released the spring L will return the supplemental bolt H to its normal position.

To enable the occupant of the room or closet to pass out, the handle K is turned in the direction above explained until the stop *c* abuts against the guide G, when, by turning farther in the same direction, the coin-receptacle and its attached bolt C are drawn back, thus unlocking the door.

When my invention is used in connection with water-closet inclosures, the doors of said inclosures will be appropriately marked, in order that any one desiring to make use of the closet may be advised that the insertion of the requisite coin is necessary to effect admittance to the closet. Of course I do not confine the use of my invention to any particular purpose, as it may be applied advantageously to a variety of uses.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a lock, the combination, with a lock-bolt, a coin-receptacle, a supplemental bolt, as H, co-operating with the coin-receptacle to support the coin, and a third bolt connected to an operating-handle and co-operating with the coin-receptacle, whereby the lock-bolt may be withdrawn upon the insertion of the requisite coin or token within the coin-receptacle, substantially as set forth.

2. In a lock, the combination, with a lock-bolt, of a coin-receptacle connected to the lock-bolt and arranged to slide therewith, a supplemental bolt, as H, co-operating with the coin-receptacle to support the coin, and a third bolt connected to an operating-handle, substantially as set forth.

3. The coin-receptacle and the lock-bolt, in combination with a supplemental coin-supporting bolt, bolt D and its operating-crank, and stops secured to the lock-case for regulating the movement of the crank of bolt D, substantially as set forth.

4. The coin-receptacle and the lock-bolt, in combination with a supplemental bolt, as H, co-operating with the coin-receptacle to support the coin, and an operating crank and handle connected to said supplemental bolt, whereby the coin may be discharged from the coin-receptacle or the lock-bolt withdrawn for exit from the closet or the like, substantially as set forth.

5. The combination, with the coin-receptacle provided with the guide G, of the supplemental bolt having stops *c d* and an operating crank and handle, substantially as set forth.

6. In combination, the lock-bolt, coin-receptacle, supplemental bolt, bolt D, operating handles of supplemental bolt and bolt D, and springs L M, substantially as set forth.

In testimony that I claim the foregoing I have signed my name in the presence of two witnesses.

MAXWELL EASTON.

Witnesses:

EUGENE H. LEWIS,
J. E. M. BOWEN.