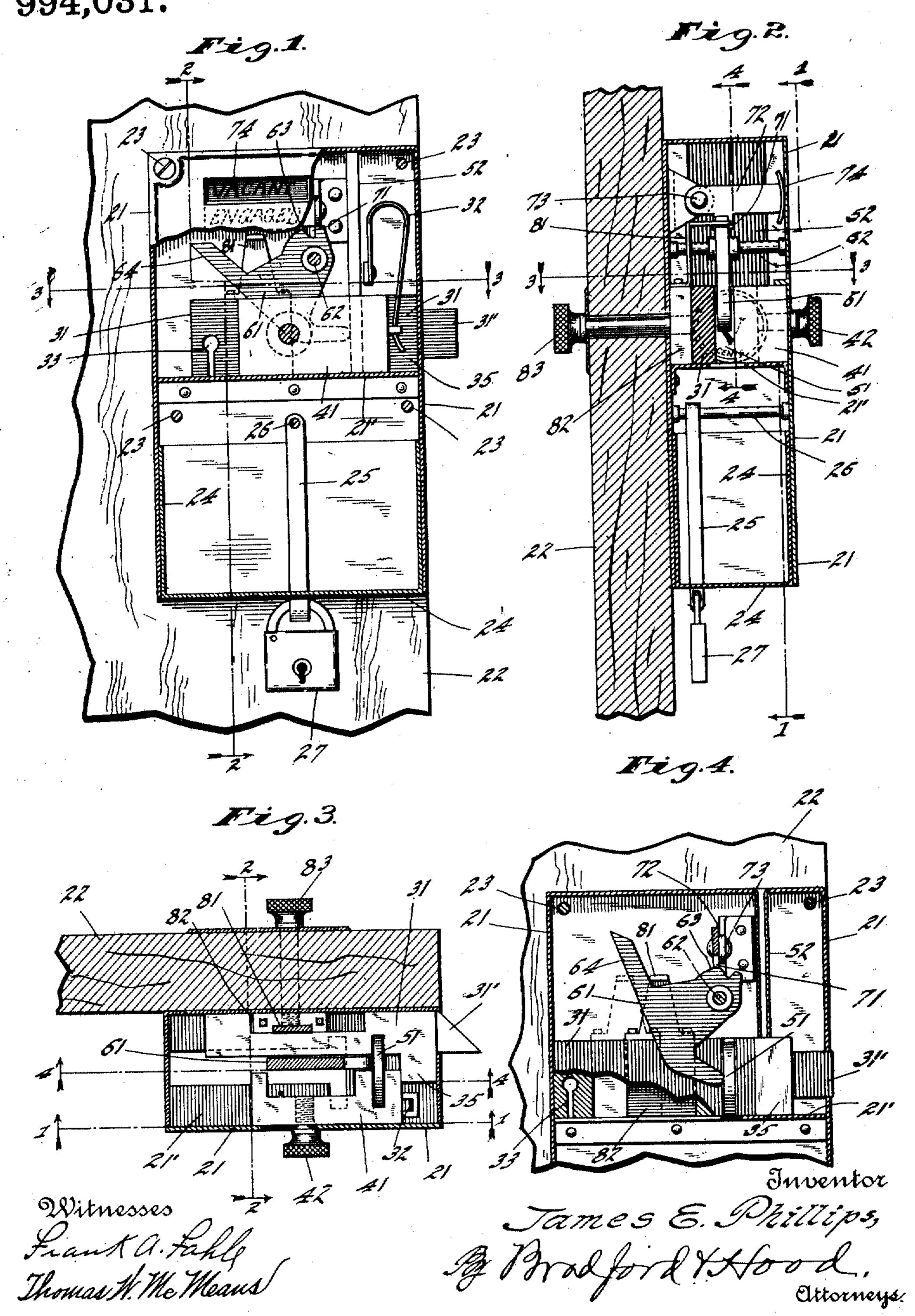
J. E. PHILLIPS. COIN CONTROLLED LOCK.

APPLICATION FILED JAN. 31, 1910. Patented May 30, 1911. 994,031.



## UNITED STATES PATENT OFFICE.

JAMES E. PHILLIPS, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF TO GEORGE H. PHILLIPS, OF INDIANAPOLIS, INDIANA.

## COIN-CONTROLLED LOCK.

994,031.

Specification of Letters Patent.

Patented May 30, 1911.

Application filed January 31, 1910. Serial No. 541,002.

To all whom it may concern:

Be it known that I, James E. Phillips, a citizen of the United States, residing at Indianapolis, in the county of Marion and 5 State of Indiana, have invented a certain new and useful Coin-Controlled Lock, of which the following is a specification.

The object of my present invention is to provide a coin controlled lock suitable for 10 use in places where it is desired to have the public admitted upon payment of a small fee, such as toilet rooms and the like.

It consists in a mechanism by means of which a coin of the prescribed size is used 15 in gaining admission, and in the manipulation of which a signal is given showing whether the room controlled by the lock is occupied or vacant.

A lock embodying my said invention will 20 be first fully described, and the novel features thereof then pointed out in the claims.

Referring to the accompanying drawings, which are made a part hereof, and on which | similar reference characters indicate similar | 25 parts, Figure 1 is a front elevation of a lock of the character in question shown as attached to a fragment of a door and with the front side of the casing broken away to show the mechanism, the view being in the direc-30 tion indicated by the arrows from the broken lines 1 1 in Figs. 2 and 3; Fig. 2 a vertical sectional view of the same as seen when looking in the direction indicated by the arrows from the dotted lines 2 2 in Figs. 1 35 and 3; Fig. 3 a horizontal sectional view as seen when looking downwardly from the broken lines 3 3 in Figs. 1 and 2, and Fig. 4 a view showing several of the same parts shown in Fig. 1, but in the operated posi-40 tion, the view being taken from the point indicated by the broken line 4 4 in Figs. 2 and 3.

In use the casing 21 of my improved lock | is shown as secured to the door 22 as by suitable screws or bolts 23. The lower part | The coin 51 as it moves backward during 100 of this casing extends down and receives a coin container 24. Said coin container is shown as inserted from the bottom, and as retained in place by a locking bar 25 carried <sup>50</sup> from a rod 26 and secured against displacement by a padlock 27.

The main latch bolt 31 of the lock has a projecting point 31' which is adapted to engage with a strike on the adjacent door jamb (not shown). It is normally held for-

ward into engagement with such strike by a spring as 32, which however permits it to yield either when the part 31' comes in contact with the strike, or when the bolt 31 is operated by one of the handles, or by a key. 60 Provision is made to operate this bolt by an ordinary key, which may be inserted in a keyhole 33 at any time, so that a janitor or other authorized person may unlock the door without using a coin.

Directly in front of and parallel with the main lock bolt 31 is a sliding member 41 having a knob 42 which projects through the front side of lock casing 21, and by which it may be moved back and forth. The forward 70 end of bar 41 passes behind shoulder 35 on lock bolt 31, so that the lock bolt is always moved forward into locking position when the member 41 is in its forward position. The spring 32 is shown as engaging with 75 member 41, and thus arrange to keep the parts 31 and 41 forward together.

When the lock is in its idle or at rest position there are registered notches in their adjacent faces. When a coin 51 is inserted 80 through coin chute 52 it will descend into said registering notches, and, while in this position, will prevent either one of these parts from moving independently of the other. When it reaches the position in the 85 notches the coin will rest on the horizontal partition 21' of the lock case, and there remain until the lock is opened. When the person desiring to unlock the door has thus inserted a coin, he next pushes back the lock 90 bolt, by means of knob 42 and the intermediate parts, and opens the door. At the point to which the coin is carried by the movement in question there is an opening through partition 21' sufficiently large to 95 permit the coin to fall through into coin receptacle 24, and this happens as the person who has unlocked the door passes through and closes it.

the unlocking operation also strikes a point on a cam plate 61 (which is pivoted at 62) and said cam plate is swung from the position indicated in Fig. 1 to the position indicated in Fig. 4. During this movement the 105 cam point 63 comes in contact with projecting point 71 on arm 72 (pivoted at 73) which carries the arc-shaped inscription plate 74, thus moving said inscription plate from one position to the other so that the 110

inscription "Vacant" or the like will disappear, and the inscription "Engaged" or "Occupied" or the like will be displayed. At the same time another projection 64 on 5 cam plate 61 will swing up alongside a Zshaped arm 81 carried by a slide 82 to which is attached a knob 83 extending through to the inside of the door. The slide 82 is positioned within a recess in lock bolt 31, and 10 is thus capable of being operated by knob 83 to withdraw the lock bolt from engagement with the strike on the door jamb. This the occupant does when ready to depart, and in doing this the cam plate 61 15 is moved from the position shown in Fig. 4 back to the position shown in Fig. 1, thus restoring the inscription plate to its former position.

Having thus fully described my said in-20 vention, what I claim as new, and desire to

secure by Letters Patent, is—

1. The combination, in a coin controlled lock, of a casing, a lock bolt movably mounted therein, a slide positioned on the 25 outside of the said lock bolt having a knob extending to the outside, said lock bolt and said slide being provided with registering notches, a coin chute positioned above the said lock bolt and slide and registering with 30 said notches when the parts are in at-rest position, a support for the coin below the lock bolt and slide which supports the coin while the lock is being unlocked and having an opening through which the coin will 35 drop when the unlocking operation is completed, and a spring which normally holds the lock bolt and the slide forward.

2. The combination, in a coin controlled lock, of a casing, a lock bolt movably mount-40 ed therein, a slide positioned on the outside of the said lock bolt having a knob extending to the outside, said lock bolt and said slide being provided with registering notches, a coin chute positioned above the 45 said lock bolt and slide and registering with said notches when the parts are in at-rest position, a support for the coin below the lock bolt and slide which supports the coin while the lock is being unlocked and having an 50 opening through which the coin will drop when the unlocking operation is completed, a spring which normally holds the lock bolt and the slide forward, an inscription plate within the lock casing, and a cam plate also 55 within the lock casing adjacent thereto and having one arm extending into the path of the coin and provided with a cam projection for operating the inscription plate.

3. The combination, in a coin controlled 60 lock, of a casing, a lock bolt movably mounted therein, a slide positioned on the outside of the said lock bolt having a knob extending to the outside, said lock bolt and said slide being provided with registering 65 notches, a coin chute positioned above the

said lock bolt and slide and registering with said notches when the parts are in at-rest position, a support for the coin below the lock bolt and slide which supports the coin while the lock is being unlocked and having 70 an opening through which the coin will drop when the unlocking operation is completed, a spring which normally holds the lock bolt and the slide forward, an inscription plate within the lock casing, a cam 75 plate also within the lock casing adjacent thereto and having one arm extending into the path of the coin and provided with a cam projection for operating the inscription plate and a second slide provided with 80 a knob for operating the lock from the inside.

4. The combination, in a coin controlled lock, of a casing, a lock bolt movably mounted therein, a slide positioned on the outside 85 of the said lock bolt having a knob extending to the outside, said lock bolt and said slide being provided with registering notches, a coin chute positioned above the said lock bolt and slide and registering with 90 said notches when the parts are in at-rest position, a support for the coin below the lock bolt and slide which supports the coin while the lock is being unlocked and having an opening through which the coin will drop 95 when the unlocking operation is completed, a spring which normally holds the lock bolt and the slide forward, an inscription plate within the lock casing, a cam plate also within the lock casing adjacent thereto and 100 having one arm extending into the path of the coin and provided with a cam projection for operating the inscription plate, and a second slide provided with a knob for operating the lock from the inside and having 105 an arm which extends into the path of an arm on said cam plate whereby the said cam plate is operated to permit the inscription plate to be restored to normal position.

5. The combination, in a coin-controlled 110 lock, of a lock case, a lock bolt, means for operating the same from the outside through the insertion of a coin, means for operating the same from the inside consisting of a slide and a knob on said slide, and an inscription 115 plate adjacent thereto, a movable cam plate, a connection between the cam plate and inscription plate, and an arm on said last named slide extended into coöperative engagement with said cam plate for operating 120 the same.

6. The combination, in a coin controlled lock, of the lock case, the lock bolt, means for operating the same from the outside when a coin is inserted therein, an inscrip- 125 tion plate, and a movable cam plate, a connection between said cam plate and said inscription plate to alternately shift the same to either of its positions and controlled by the coin.

130

7. The combination, in a coin controlled lock, of the lock case, the lock bolt, means for operating the same from the outside when a coin is inserted therein, an inscription plate, a movable cam plate, a coin-controlled connection between said cam plate and inscription plate, and means for operating the lock bolt from the outside embodying a slide and an arm on said slide which extends into operative engagement with said cam plate and operates to restore the cam

plate and inscription plate to position ready to receive another coin.

In witness whereof, I have hereunto set my hand and seal at Indianapolis, Indiana, 15 this twenty-seventh day of January, A. D. one thousand nine hundred and ten.

JAMES E. PHILLIPS. [L. s.]

Witnesses:

THOMAS W. McMeans, Katherine C. Fletcher.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."