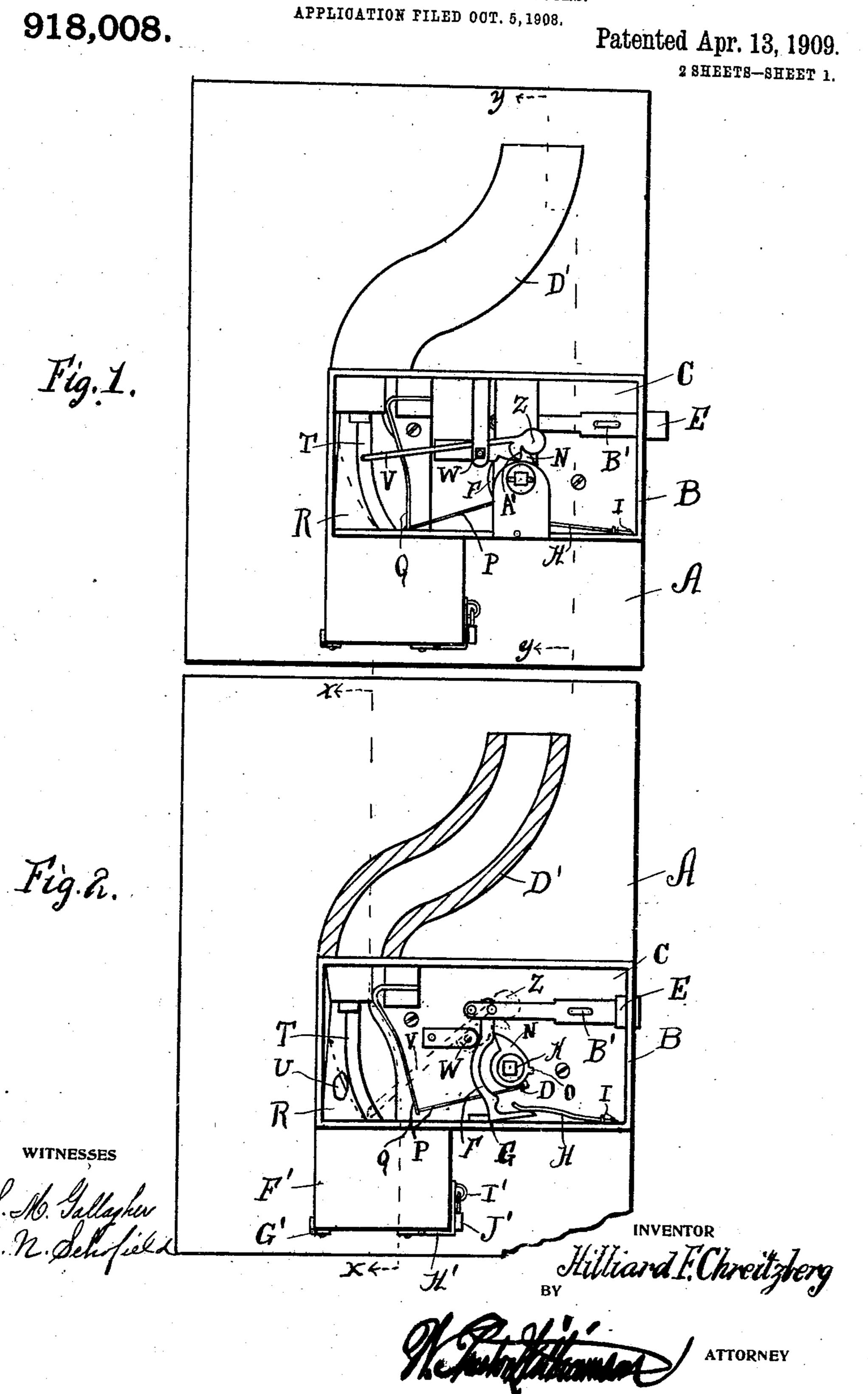
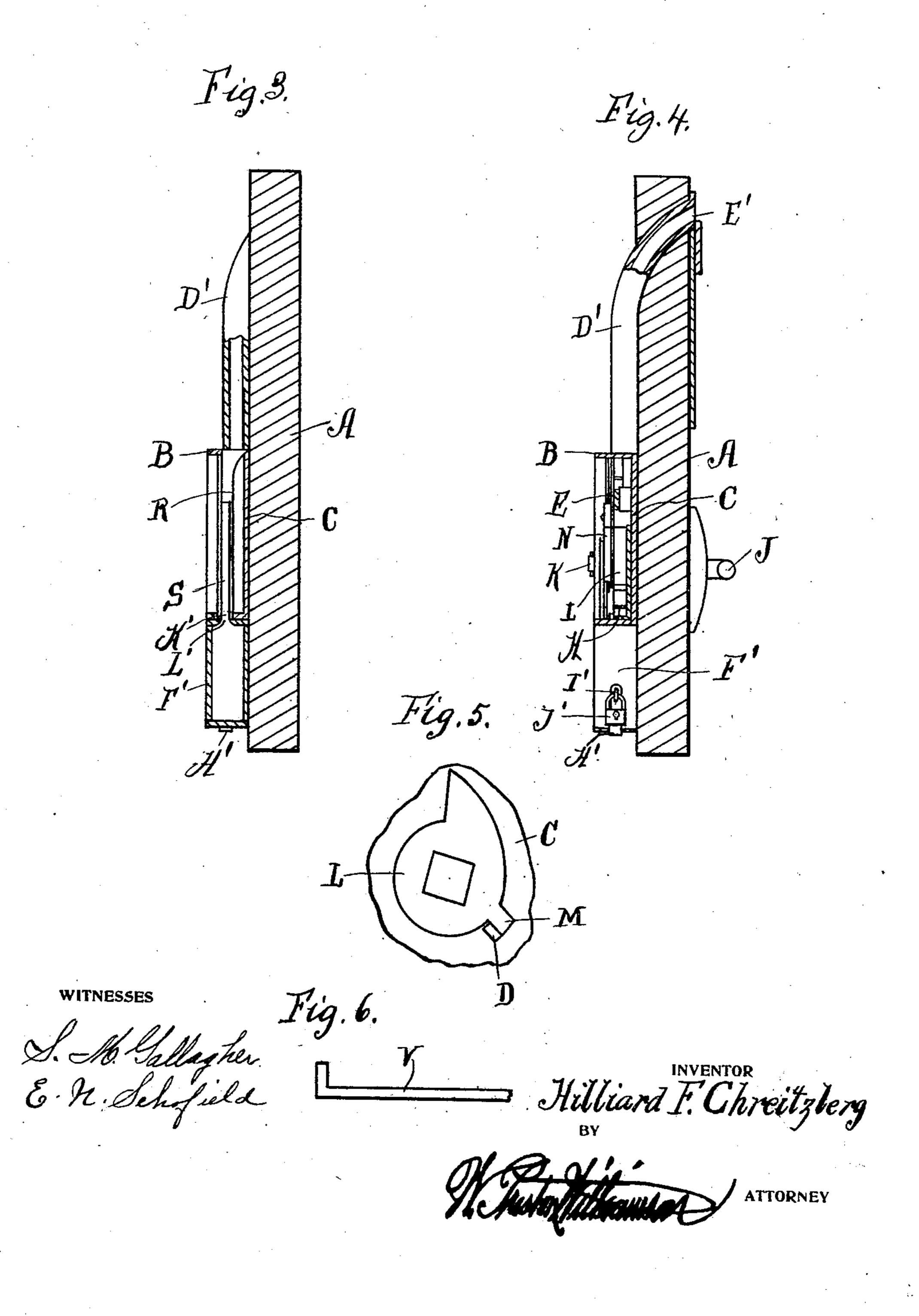
H. F. CHREITZBERG.
COIN CONTROLLED LOCK FOR DOORS.



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918,008.

Patented Apr. 13, 1909.
2 SHEETS-SHEET 2.



UNITED STATES PATENT OFFICE.

HILLIARD F. CHREITZBERG, OF MONROE, NORTH CAROLINA.

COIN-CONTROLLED LOCK FOR DOORS.

No. 918,008.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed October 5, 1908. Serial No. 456,114.

To all whom it may concern:

Berg, a citizen of the United States, residing at Monroe, county of Union, and State of North Carolina, have invented a certain new and useful Improvement in Coin-Controlled Locks for Doors, of which the following is a specification.

My invention relates to a new and useful improvement in coin controlled locks for doors, and has for its object to provide an exceedingly simple and effective device of this character whereby the lock may be thrown back allowing the door to be opened when a coin has been placed in the slot in the door.

My invention is especially adapted for use in public toilets or hotels and like places.

Another object of my invention is to provide a coin controlled lock which may be easily and readily placed upon a door in such a way that it may not be opened from the outside without the use of a coin, but which may be opened from the inside so that a person may leave the room.

With these ends in view, this invention consists in the details of construction and combination or elements hereinafter set forth and then specifically designated by the

claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a view in elevation of the lock the coin chute and holder placed upon the door, the face plate of the lock being removed.

Fig. 2, a similar view showing the coin chute in section and the controlling lever in dotted lines. Fig. 3, a section at the line X—X of Fig. 2 looking in the direction of the arrow.

Fig. 4, a section at the line Y—Y of Fig. 1 looking in the direction of the arrow, Fig. 5, an enlarged view of a portion of the back plate of the lock showing the lug for limiting the movement of the lever or knob of the door. Fig. 6, a plan view of one end of the coin controlled lever.

In carrying out my invention as here embodied, A represents a door to which is fastened the lock B which is composed of the casing Chaving the lug D formed therewith.

E represents the bolt which is movably | 55 secured to the upper end of the L-shape |

lever F, said L-shape lever being pivoted to the lower portion of the casing at G. Resting on the upper face of the short end of said L-shape lever is one end of the flat spring H the opposite end of which is secured to the 60 casing at I, said spring constantly bearing downward on the short portion of the L-shape lever so that the bolt E, would at all times be forced outward.

J is the bolt operating lever which is commonly known as a knob its inner end being square as indicated by K. On this square portion is secured the cam L which engages with the L-shape lever so that when the bolt operating lever is turned said cam will press 70 against the L-shape lever gradually moving it to one side which will draw the bolt E inward. On this cam is formed a projection M which engages with the lug D when the bolt E is out thus preventing the bolt operating lever J from being turned in but one direction.

N represents a similar cam which is also placed on the square portion K of the bolt operating lever and this has a lug O formed 80 therewith to which one end of the connecting rod or chain P is secured, the opposite end being fastened to the spring Q for a purpose to be hereinafter described.

R denotes the coin channel which is placed 85 in the lock casing and the forward side of this is open as indicated by S, and in this channel is formed a curved slot T. Inside of the coin channel is placed a guide U which is adapted to force the coin dropped into the channel 90 toward the open side thereof. The spring Q rests over the open side S of the coin channel and its upper end is secured to the lug in proximity to the top of the channel, the connecting rod P being secured to its lower end 95 as herein described.

V represents the coin controlled lever pivoted to the casing at W one end of this lever extends into the coin channel through the slot T, the opposite end having the weight Z 100 formed with or secured thereto which is so arranged as to produce a catch A' which engages with the cam N when there is no coin in the channel.

B' indicates a T-shape pin secured to the 105 bolt E and extending through a suitable slot formed in the cover or back of the lock so that said bolt may be thrown back or inward when a person desires to leave the room.

D' is a coin chute the lower end of which 110

enters the coin channel, the upper end of this chute leads from the slot E' so that a coin dropped therein will pass into the coin chan-

nel R in the rear of the lock.

5 F' represents a coin box the bottom of which is secured thereto by the hinge G', and said bottom is locked by a suitable strap H' secured thereto and passing over the staple I' to which is fastened the padlock J'. In the bottom of the lock casing is formed a slot K' which engages with a similar slot I' formed in the top of the coin box so that the coin at the proper time may drop from the lock into the coin box.

It is to be understood that the coin slot E' is to be of such size as to allow but one certain coin to pass into the coin chute, say for in-

stance, a cent.

In practice the coin is placed in the coin 20 slot E' where it passes into the coin chute D' downward through said coin chute into the coin channel R inside of the lock casing, the coin will then come in contact with the coin operating lever V, and said coin being of 25 greater weight than the weight of the opposite end of the coin operating lever will bear the end of said lever which extends into the coin channel downward, raising the weight Z and the catch A' upward at which time the catch being disengaged from the cam N the bolt operating lever J can be turned in one direction which will turn the cams L and N, the cam L pressing against the L-shape lever F will cause the bolt E to be thrown back or 35 inward disengaging it from the catch on the door jamb at the same time. The spring Q will be drawn away from the coin channel R through the medium of the lug on the cam N and the connecting rod P which will allow the 40 coin to pass out of the coin channel R into the coin box F' when the bolt operating lever is let go of, the spring H bearing on the short end of the L-shape lever F will press said short end down causing the bolt E to move 45 outward, and when it is moved outward to its full extent and catch on the coin operated lever V will be brought into engagement with the cam N because of the weight Z at which time the door cannot be opened until 50 another coin has been dropped into the chute.

A person on the inside desiring to leave the room may push the T-pin B' backward disengaging the bolt from the catch on the door jamb which allows the door to be opened.

Of course I do not wish to be limited to the exact details of construction here shown as the cams M and N if found desirable may be made as one.

Having thus fully described my invention,

60 what I claim as new and useful, is—

1. In a coin controlled lock for doors, a lock casing having a lug formed therewith, a bolt movably secured in said lock casing, a virtually L-shape lever pivoted to said bolt and 65 to the lower portion of the casing, a flat spring

one end of which is secured to the casing, the opposite end resting upon the short portion of the L-shape lever constantly pressing it in a downward direction, a bolt operating lever, cams having lugs formed therewith secured 70 to the inner end of the bolt operating lever, one of said cams adapted to engage with the L-shape lever, the lug thereon adapted to engage with the lug formed with the casing thus preventing the bolt operating lever from 75 being operated except in one direction, and means for preventing said bolt operating lever from being turned until a coin has been dropped into the lock, as and for the purpose set forth.

2. In a coin controlled lock for doors, a lock casing having a lug formed therewith, a bolt movably secured in said lock casing, a virtually L-shape lever pivoted to said bolt and to the lower portion of the casing, a flat 85 spring one end of which is secured to the casing, the opposite end resting upon the short portion of the L-shape lever constantly pressing it in a downward direction, a bolt operating lever, cams having lugs formed therewith 90 secured to the inner end of the bolt operating lever, one of said cams adapted to engage with the L-shape lever, the lug thereon adapted to engage with the lug formed with the casing thus preventing the bolt operating 95 lever from being operated except in one direction, a coin channel situated in the rear portion of the lock casing having a slot formed therein and one side open, means for guiding a coin into said coin channel, a coin 100 operated lever one end of which is adapted to enter the coin channel through the slot therein, a weight so formed as to produce a catch formed with or secured to the opposite end of the coin operated lever, said catch 105 adapted to engage with one of the cams, and means for operating said oin operated lever, as specified.

3. In a coin controlled lock for doors, a lock casing having a lug formed therewith, a 110 bolt movably secured in said lock casing, a virtually L-shape lever pivoted to said bolt and to the lower portion of the casing, a flat spring one end of which is secured to the casing, the opposite end resting upon the 115 short portion of the L-shape lever constantly pressing it in a downward direction, a bolt operating lever, cams having lugs formed therewith secured to the inner end of the bolt operating lever, one of said cams adapted to 120 engage with the L-shape lever, the lug thereon adapted to engage with the lug formed with the casing thus preventing the bolt operating lever from being operated except in one direction, a coin channel situated in the rear 125 portion of the lock casing having a slot formed therein and one side open, means for guiding a coin into said coin channel, a coin operated lever one end of which is adapted to enter the coin channel through the slot 130

therein, a weight so formed as to produce a catch formed with or secured to the opposite end of the coin operated lever, said catch adapted to engage with one of the cams, a 5 spring, the upper end of which is secured to the casing in proximity to the coin channel so that said spring covers the open side thereof, and means for drawing said spring away from the open side of the coin channel,

10 as and for the purpose set forth.

4. In a coin controlled lock for doors, a lock casing having a lug formed therewith, a bolt movably secured in said lock casing, a virtually L-shape lever pivoted to said bolt 15 and to the lower portion of the casing, a flat spring one end of which is secured to the casing, the opposite end resting upon the short portion of the L-shape lever constantly pressing it in a downward direction, a bolt operat-20 ing lever, cams having lugs formed therewith secured to the inner end of the bolt operating lever, one of said cams adapted to engage with the L-shape lever, the lug thereon adapted to engage with the lug formed with 25 the casing thus preventing the bolt operating lever from being operated except in one direction, a coin channel situated in the rear portion of the lock casing having a slot formed therein and one side open, means for 30 guiding a coin into said coin channel, a coin operated lever one end of which is adapted to enter the coin channel through the slot therein, a weight so formed as to produce a catch formed with or secured to the opposite 35 end of the coin operated lever, said catch adapted to engage with one of the cams, a spring, the upper end of which is secured to the casing in proximity to the coin channel so that said spring covers the open side 40 thereof, and a connecting rod one end of which is secured to the lug on one of the cams, the opposite end to the lower end of the spring so that when the cam is moved through the medium of the bolt operating 45 lever said spring will be drawn away from the coin channel allowing the coin to pass out, as described.

5. In a coin controlled lock for doors, a lock casing having a lug formed therewith, a 50 bolt movably secured in said lock casing, a virtually L-shape lever pivoted to said bolt and to the lower portion of the casing, a flat spring one end of which is secured to the casing, the opposite end resting upon the short ! 55 portion of the L-shape lever constantly pressing it in a downward direction, abolt operating lever, cams having lugs formed therewith secured to the inner end of the bolt operating lever, one of said cams adapt-60 ed to engage with the L-shape lever, the lug thereon adapted to engage with the lug formed with the casing thus preventing the bolt operating lever from being operated except in one direction, a coin channel situated 65 in the rear portion of the lock casing having |

a slot formed therein and one side open, means for guiding a coin into said coin channel, a coin operated lever one end of which is adapted to enter the coin channel through the slot therein, a weight so formed as to 70 produce a catch formed with or secured to the opposite end of the coin operated lever, said catch adapted to engage with one of the cams, a spring, the upper end of which is secured to the casing in proximity to the coin 75 channel so that said spring covers the open side thereof, a connecting rod one end of which is secured to the lug on one of the cams, the opposite end to the lower end of the spring so that when the cam is moved so through the medium of the bolt operating lever said spring will be drawn away from the coin channel allowing the coin to pass out, and a T-shape pin secured to the bolt extending out through the cover of the lock for 85 drawing the bolt back when a person desires to leave the room.

6. In combination with a door having a slot formed therein of a lock casing having a lug formed therewith, a bolt movably se- 90 cured in said lock casing, a virtually L-shape lever pivoted to said bolt and to the lower portion of the casing, a flat spring one end of which is secured to the casing, the opposite end resting upon the short portion of the 95 L-shape lever constantly pressing it in a downward direction, a bolt operating lever, cams having lugs formed therewith secured to the inner end of the bolt operating lever, one of said cams adapted to engage with the 100 L-shape lever, the lug thereon adapted to engage with the lug formed with the casing thus preventing the bolt operating lever from being operated except in one direction, a coin channel situated in the rear portion of 105 the lock casing having a slot formed therein and one side open, means for guiding a coin into said coin channel, a coin operated lever one end of which is adapted to enter the coin channel through the slot therein, a weight 110 so formed as to produce a catch formed with or secured to the opposite end of the coin operated lever, said catch adapted to engage with one of the cams, a spring, the upper end of which is secured to the casing in proximity 115 to the coin channel so that said spring covers the open side thereof, a connecting rod one end of which is secured to the lug on one of the cams, the opposite end to the lower end of the spring so that when the cam is moved 120 through the medium of the bolt operating lever said spring will be drawn away from the coin channel allowing the coin to pass out, a T-shape pin secured to the bolt extending out through the cover of the lock for 125 drawing the bolt back when a person desires to leave the room, a coin chute one end of which is in proximity to the slot in the door, the opposite end resting above the coin channel in the lock, and a coin box placed 130

beneath the lock casing into which the coin enters when the spring is drawn away from the open side of the coin channel.

7. In combination with a door having a 5 slot formed therein of a lock casing having a lug formed therein, a bolt movably secured in said lock casing, a virtually L-shape lever pivoted to said bolt and to the lower portion of the casing, a flat spring one end of which is 10 secured to the casing, the opposite end resting upon the short portion of the L-shape lever constantly pressing it in a downward direction, a bolt operating lever, cams having lugs formed therewith secured to the inner 15 end of the bolt operating lever, one of said cams adapted to engage with the L-shape lever, the lug thereon adapted to engage with the lug formed with the casing thus preventing the bolt operating lever from being oper-20 ated except in one direction, a coin channel situated in the rear portion of the lock casing having a slot formed therein and one side open, means for guiding a coin into said coin channel, a coin operated lever one end of 25 which is adapted to enter the coin channel through the slot therein, a weight so formed as to produce a catch formed with or secured to the opposite end of the coin operated lever, said catch adapted to engage with one of the

cams, a spring, the upper end of which is se- 30 cured to the casing in proximity to the coin channel so that said spring covers the open side thereof, a connecting rod one end of which is secured to the lug on one of the cams, the opposite end to the lower end of the 35 spring so that when the cam is moved through the medium of the bolt operating lever said spring will be drawn away from the coin channel allowing the coin to pass out, a T-shape pin secured to the bolt ex- 40 tending out through the cover of the lock for drawing the bolt back when a person desires to leave the room, a coin chute one end of which is in proximity to the slot in the door, the opposite end resting above the coin 45 channel in the lock, a coin box placed beneath the lock casing into which the coin enters when the spring is drawn away from the open side of the coin channel, and means for locking said coin box, as shown and de- 50 scribed.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

HILLIARD F. CHREITZBERG.

Witnesses:

J. F. EVERETT, H. D. STEWART.