No. 663,488. Patented Dec. 11, 1900.

T. R. CHERRY.

COIN CONTROLLED LOCK.

(Application filed Feb. 21, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

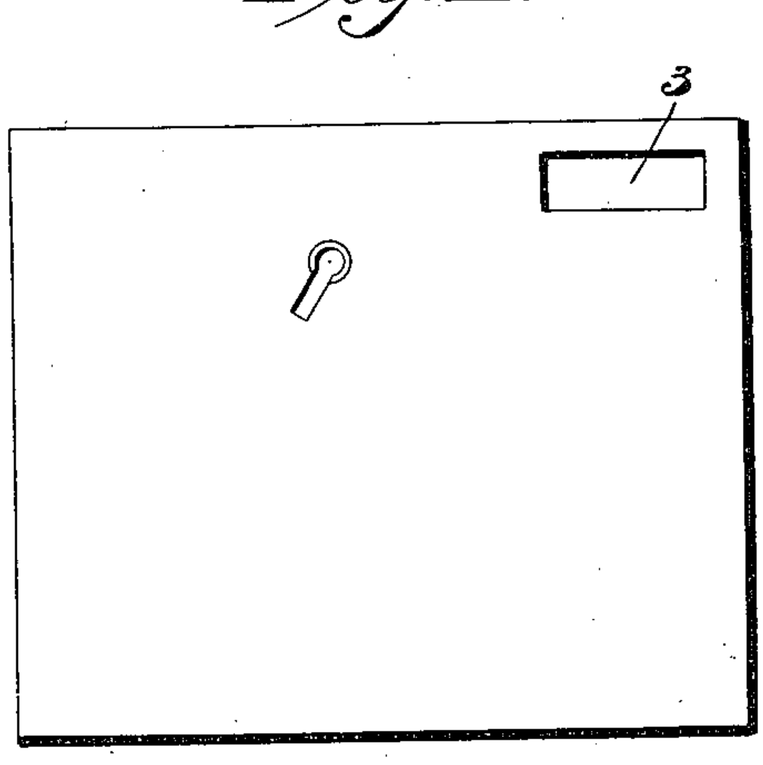


Fig. 2.

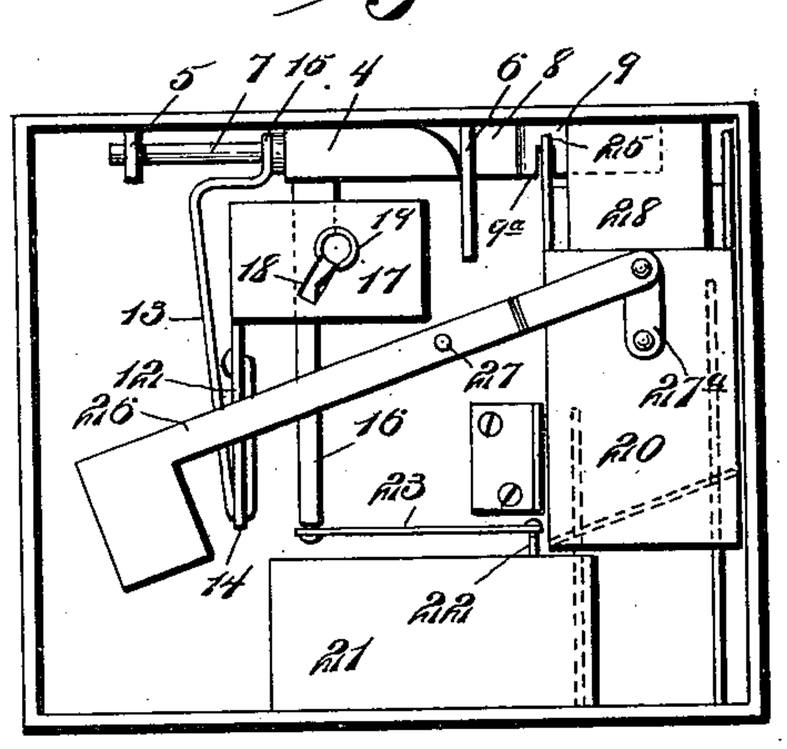


Fig. 3.

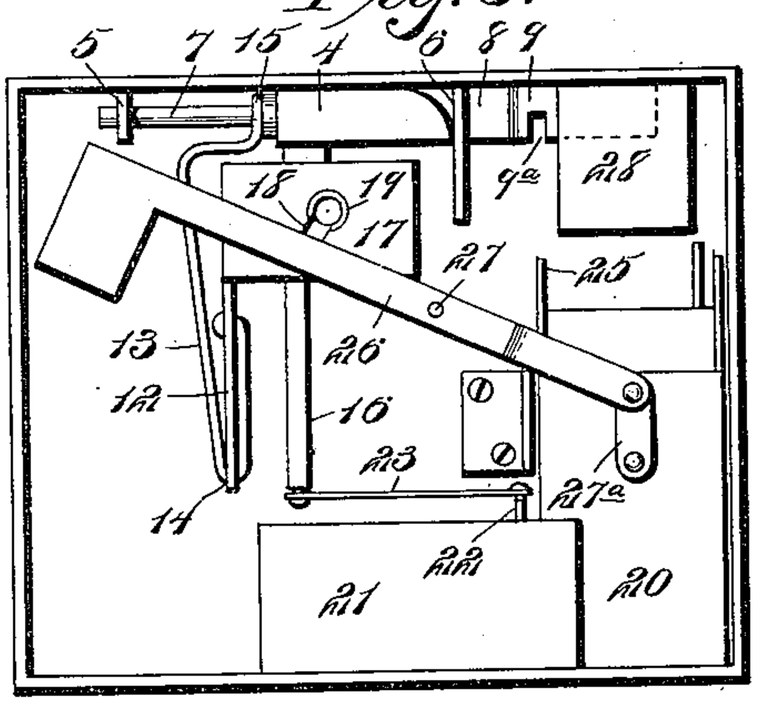


Fig. 4.

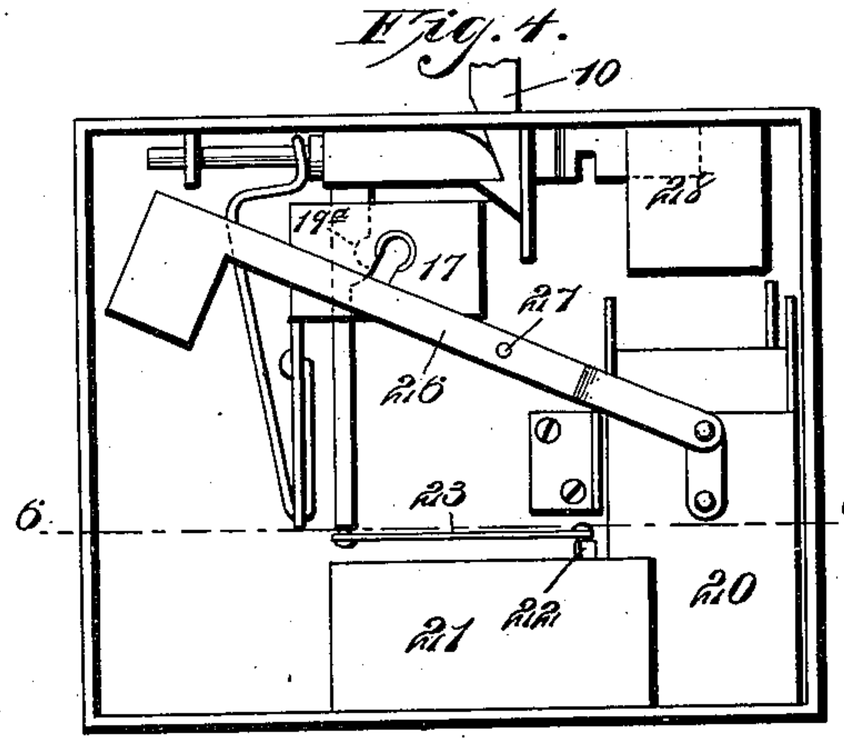


Fig. 5.

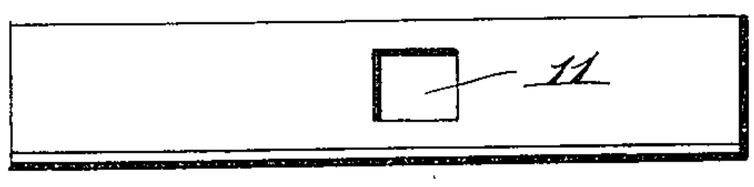
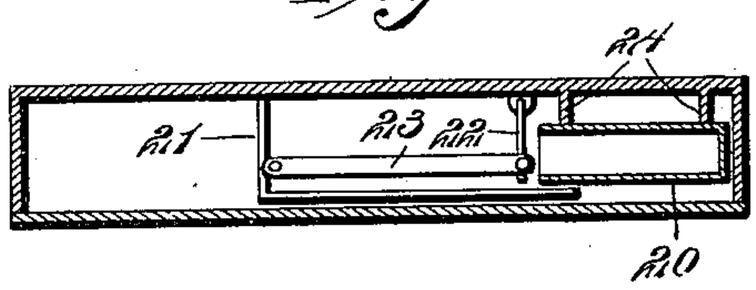


Fig. 6.



WITNESSES

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(No Model.) 2 Sheets—Sheet 2.

Fig. 7.

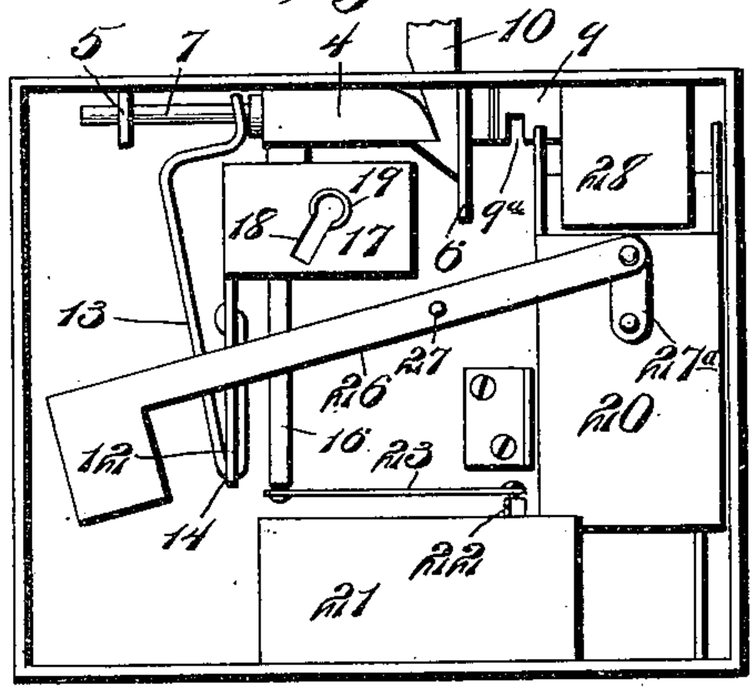


Fig. 8.

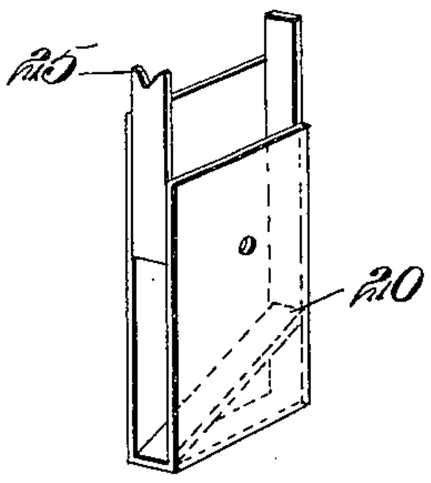
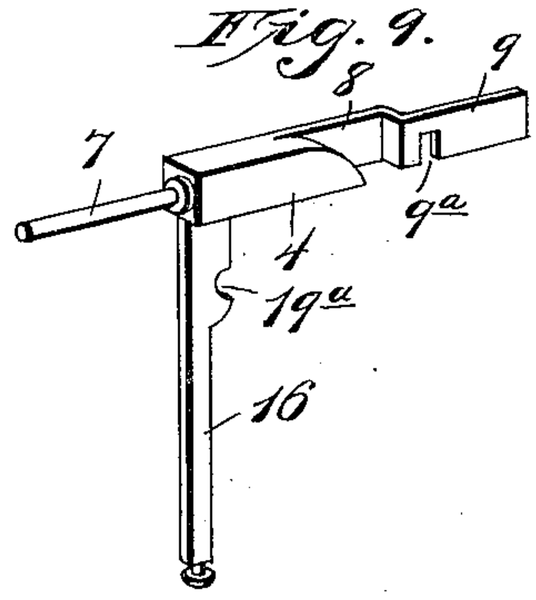


Fig. 9.



WITNESSES

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UNITED STATES PATENT OFFICE.

THERON R. CHERRY, OF BALTIMORE, MARYLAND, ASSIGNOR TO MARY A. CHERRY, OF SAME PLACE.

COIN-CONTROLLED LOCK.

SPECIFICATION forming part of Letters Patent No. 663,488, dated December 11, 1900.

Application filed February 21, 1900. Serial No. 6,089. (No model.)

To all whom it may concern:

Be it known that I, THERON R. CHERRY, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented new and useful Improvements in Locks, of which the following is a specification.

This invention relates to coin-actuated locks; and the object thereof is to provide a lock which can only be operated by the insertion of a coin of predetermined denomination.

With this object in view my invention consists in the peculiar construction and arrangement of parts, as will be fully described hereinafter, and recited in the claims.

In the drawings, Figure 1 is an elevation of the lock. Figs. 2, 3, 4, and 7 are elevations of the lock mechanism, showing the parts in different positions. Fig. 5 is a top plan view of the lock-case, showing the opening for the insertion of the strike. Fig. 6 is a sectional view taken on the line 6 6 of Fig. 4. Fig. 8 is a detail perspective view of the coin-pan, and Fig. 9 is a similar view of the slidable engaging bolt.

In carrying out my invention I provide a hollow lock-case of well-known construction, the face-plate of which is slotted at 3 to provide for the insertion of coin, as will be explained presently.

The sliding bolt (designated by the reference-numeral 4) is slidably secured within and along the upper wall of the case by suitable guides 5 and 6—that is to say, the reduced portion 7 of the bolt 4 slides in the guide 5, while the flat blade 8 on the anterior end of the bolt slides in a slot of the guide 6, and beyond the guide said blade is bent up and then forwardly, forming a raised extension 9, in which is a slot 9^a for the reception of a projecting lug on the coin-pan, whereby the said bolt is locked against movement, as will be apparent hereinafter.

The guide 6 performs a double function. Besides coöperating with the blade to retain the bolt in its desired position it also serves to guide the lock-strike 10 into engagement with the engaging end of the bolt 4 and which is designed to enter the opening 11 provided for that purpose.

12 designates a transverse rib rigidly secured within the lock and to which a spring 13 is secured on one side and which after passing around the end thereof in the eye 14 branches off at a tangent and finally terminates in an eye 15, sleeved upon the reduced portion of the bolt to normally retain it in a position to be engaged by the coin-pan and also lock the key to the case.

In order to effectually retain the key in the case and prevent its removal by unauthorized persons, I provide a lever 16, which is rigidly secured to the bolt 4 and depends therefrom. Above this lever is a bridge-plate 17, having a key-slot 18, at one end of which is a sleeve 19 to guide the shank of the key into the slot and the blade of the key into engagement with the lever 16. A semicircular offset 19^a being provided in one side of the lever 16, the shank of the key will be engaged thereby under normal conditions and the key-blade will be caused to slide under said lever, so that it cannot be withdrawn except by releasing the coin-pan. This coin-pan consists of an approximately rectangular member 20, open at the top and slotted at one side, while the bottom is on an angle or incline to guide the coin from the pan into the discharge-receptacle 21, open at its bottom and normally closed at the side adjacent to the slot in the coin-pan by a hinged door 22, which can be opened through the medium of a link or bar 23, connected to the door and the free end of the lever 16. The coin pan or member is slidably secured upon ways or guides 24 and carries at its upper and open end a lug 25, which is designed to enter the slot 9^a in the blade 8 to normally hold the mechanism heretofore described in a locked position.

In order to retain the lug in proper engagement with the slot, I arrange a bifurcated and weighted lever 26 within the casing and pivot the same to a stub 27. The bifurcated ends of the lever are connected to either side of the coin-pan by link connections at 27^a, so that said pan will be free to slide upon its guides when forced down by a coin of proper size and weight.

It being assumed that all the parts are properly arranged, suppose it is desired to operate the lock. The operator inserts a coin into the slot 3, which will be shunted into the coin-pan by the deflecting-plate 28. This will cause the pan to overcome the weighted end of the lever, the pan will be carried down to

a position opposite the discharge-receptacle, and the lug will be withdrawn from the slot in the extended blade of the bolt 4. The lock-strike can then be inserted in the opening 11 and engaged by the bolt, which will slide a sufficient distance to allow the withdrawal of the key. It is of course understood that the key is normally held locked to the lock-case and the mechanism therein. The slight movement of the bolt 4 will be sufficient to open the hinged door in the side of the discharge-receptacle and the coin will roll into the same and drop out at the bottom into a receptacle provided for its reception, but which does not form part of my invention. As soon as the coin is released from the pan said pan will immediately ascend again; but the slot 9^a will be out of alinement with the lug or projection, owing to the width of the engaging lock-strike, and said slot cannot again be engaged until the key is inserted and the bolt forced back to release the strike. The act of withdrawing the strike will cause the spring to shoot the bolt 4 forwardly and the slot 9^a will be engaged by the lug on the coin-pan as soon as it alines therewith. This will cause the key to again be locked by the lever 16 and it can only be withdrawn and the strike inserted by the insertion of another coin.

I have not described this device as applicable to any particular door or device, because I reserve the right to utilize it for any purpose to which it may be put, and I hold that slight changes and alterations might be made without departing from the spirit or affecting the scope of my invention.

I claim—

1. In a coin-controlled lock, the combination with a case of a spring-pressed sliding bolt, having a slotted extension on one end thereof, a pivoted lever weighted at one end, a coin-pan at the other end of said lever and carrying a lug for engagement with the slot, whereby the bolt is held against sliding only upon inserting a coin in the pan.

2. In a lock, a sliding bolt normally held against movement, a pivoted lever weighted on one end and carrying means at its other end to engage the bolt, said means comprising a rectangular coin-pan provided with a slot in the side and adapted to be thrown out of engagement with the bolt by the weight of a coin, so that said bolt may slide.

3. In a lock, a spring-pressed sliding bolt, a slotted extension thereon, a pivoted lever, a slotted and rectangular coin-pan normally engaging said slotted extension to retain the bolt against sliding, and means for sliding the bolt when a coin is inserted in the pan.

4. In a lock, a bolt normally held against engaging its strike, a key secured in said lock when the bolt is in its normal position, a lever depending from the bolt and having a bridge-plate to engage the key, and coin-controlled means for releasing the lever and key.

5. In a lock, a slidable bolt normally held in a locked position, and against movement, a key in said lock to be withdrawn only when the bolt slides, a keeper adapted to enter the lock-case only upon the insertion of a coin, and coin-controlled means for releasing the key.

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

THERON R. CHERRY.

Witnesses:

HENRY S. BREWINGTON,

ROBERT C. RHODES.