

1,373,863.

Fig. 3.

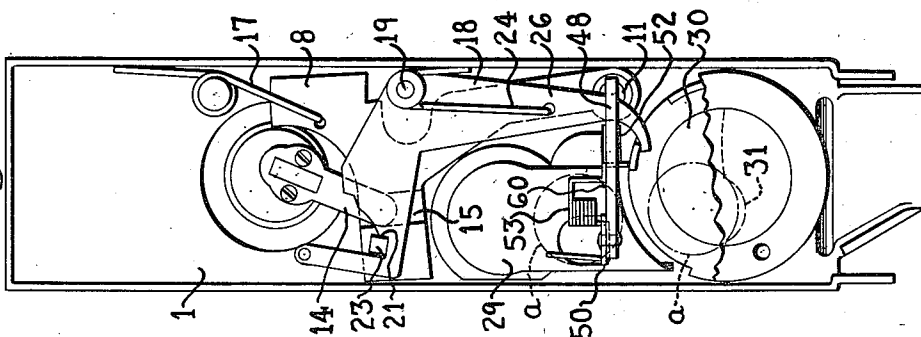


Fig. 2.

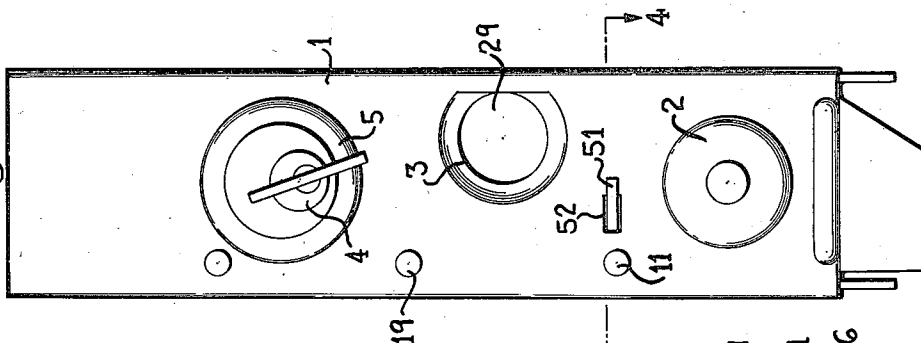


Fig. 1.

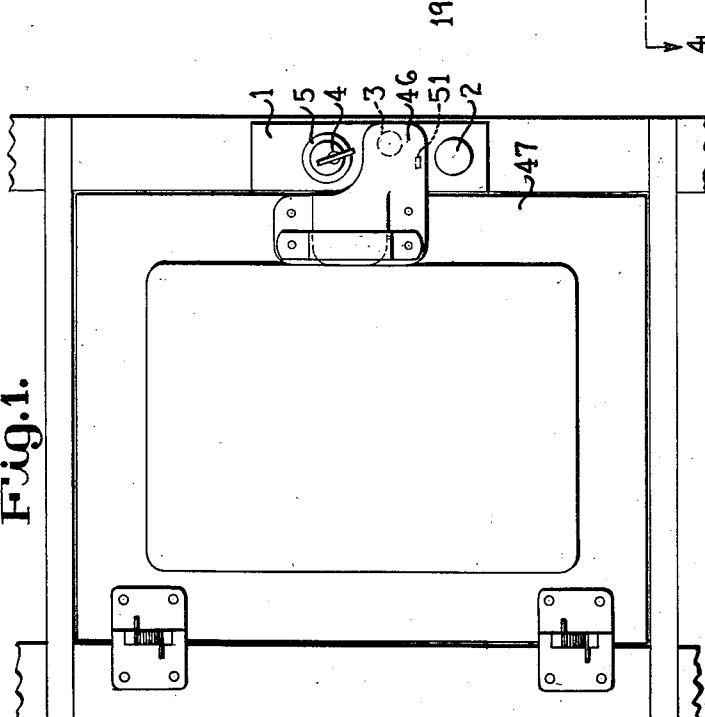


Fig. 5.

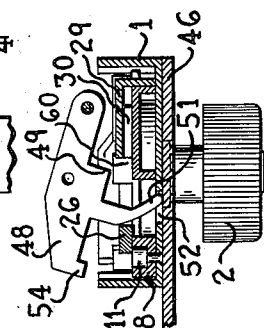
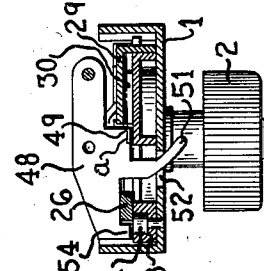


Fig. 4.



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UNITED STATES PATENT OFFICE.

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COIN-CONTROLLED LOCKER-LOCK.

1,373,863.

Specification of Letters Patent.

Patented Apr. 5, 1921.

Application filed July 17, 1920. Serial No. 397,119.

To all whom it may concern:

Be it known that I, RALEIGH B. BUZZAIRD, a citizen of the United States, and resident of Washington, in the District of Columbia, have invented a new and useful Coin-Controlled Locker-Lock, of which the following is a specification.

This invention is an improvement in coin-locking means for parcel-checking lockers. The doors of such lockers are locked by the users through the deposit of a coin, which also enables the owner of the checked property to remove the key from the lock, to constitute his check. By use of the key he can unlock the locker again and take out his belongings, the key then being locked in the lock against theft or loss.

An object of the invention is to avoid patrons losing their money by dropping coins in the locks of lockers which are in use, and also to prevent fraudulent operation of the lock by a wire or the like, so as to lock the locker without payment of a coin. To this end means are provided whereby closing of the door closes the coin entrance of the lock, this being most simply and advantageously accomplished by placing a projecting lip on the door in position to cover the coin-entrance, so as to prevent introduction either of a coin or a tool as long as the door is closed.

A further object is to avoid possibility of the user losing his coin and his service by operating the lock after deposit of the coin but before closing the door. For this purpose an arrester has been devised, which coöperates with the coin-drop, chute or passage, of the lock, to sustain the coin before reaching the instrumentality which acts upon it or through it to cause projection of the bolt, this arrester being displaced by the closing of the door, and preferably by the action of the same lip which blanks the coin-entrance. Thus, the user places his property in the open locker, drops a coin in the lock, and thereafter closes the door, whereupon, and not until then, the lock is rendered operative. The closing of the door also closes the coin-entrance, so that the coin must be introduced first; and as there is a natural tendency for the user to attempt to operate the lock as soon as he has given up his coin, the result would in many instances be a loss if it were not for the

present provision which makes it impossible for him to operate the lock until the door is shut.

In the accompanying drawings forming a part hereof:

Figure 1 is a front elevation of a locker and lock, showing how the door-lip closes the coin-entrance and represses the coin-arrester;

Fig. 2 is a front elevation of the lock on a larger scale;

Fig. 3 is a rear elevation of the lock in the unlocked condition, with the cover of the coin-disk casing partly broken away, indicating two positions of the coin, arrested in the coin-drop above the coin-disk, and seated in the pocket of the disk, respectively;

Fig. 4 is a horizontal section on the line 4-4 of Fig. 2, showing the coin-arrester in normal position and indicating a coin caught thereon; and

Fig. 5 is a similar section, showing the condition with the coin-arrester displaced by the door-lip.

The general lock construction in which the present invention is shown embodied is the invention of another, and is illustrative of the combination, the invention being applicable, however, to other forms and types of coin-controlled locker locks.

The front plate or escutcheon 1 has a knob 2, a coin-entrance 3 and the key-slot end of a key-cylinder 4 on its outer side. This key-cylinder and its cylinder-casing 5 constitute a well-known form of lock unit, containing tumbler arrangements whereby the key can be removed in the locking condition only, and is locked in the lock by the tumblers when the lock is open. These matters being familiar require no illustration.

A swinging bolt 8 is pivoted at 11, and is projected by a spring 17. The bit 14 of the key-cylinder coöperates with a recess or socket 15 in the rear portion of the bolt. A bell-crank detent is pivoted at 19 and its rearwardly extending arm is formed with a primary holding shoulder 21, which coöperates with a projection 23 on the bolt to hold the latter in its fully retracted condition, the detent having a spring 24 whereby it engages automatically.

The contact extremity of the downwardly extending arm 26 of the detent is arranged to be encountered by a coin *a* carried by a

rotary coin-disk 30 having an eccentric coin-pocket 31. The disk is connected to the knob 2 on the outside, and receives the coin from a coin-drop 29 on the inside leading from the coin-entrance 3.

When the detent is displaced through the deposit of a coin and the turning of the knob, the bolt is freed to move to its locking or projected position. The key-cylinder being connected with the bolt is also moved to the position in which the key can be removed by the user, to constitute his check. When he wishes to regain his property he inserts the key and turns it in the unlocking direction, thereby retracting the bolt, which is caught and held by the detent, the key being thereby locked in the cylinder until the next checking operation.

Coming now to the more particular novelty of the present invention, a lip 46 will be observed, which is fixed to the free edge of the door 47, of such proportions and arrangement as to cover completely and closely the coin-entrance 3 in the front plate 1 of the lock, and overlap adjoining portions of the plate. With this lip in closed position, it is impossible to introduce a coin or any other object into the coin passage and thence into the interior of the lock. Thus an inattentive person cannot lose a coin in the lock of a locker which is in use; nor can the service of the locker be obtained without cost by placing articles in it, closing the door and then displacing the detent 18 by a wire inserted through the coin-drop.

Further safeguard is afforded by a movable coin-arrester 48 having a portion 49, which blocks the coin-drop or path sufficiently to sustain a coin above the coin-mechanism,—in this instance above the disk 30. Such coin-arrester may have numerous forms and arrangements. In the particular construction illustrated it is a transverse arm in the interior of the lock, pivoted at one end to a lug 50, bent out of the wall of the coin-drop and having a finger 51 projecting outward through an opening 52 in the plate 1, in position to be struck and repressed by the lip 46 on the door. Other specific forms of operating connection may be employed where- by the door lip acts through an opening in

the lock to displace the auxiliary part. The coin-contacting portion 49 of the arrester may be a corner or jog on the arm 48, as shown, which normally stands in a notch 60 in the inner side portion of the lower end of the coin-drop.

The member 48 is urged to and normally held in coin-arresting position by a spring 53. Closing of the door, therefore, not only blanks the outer coin-entrance but also clears the interior coin-passage above the coin-mechanism, so that the coin may then reach the latter, enabling the lock to be actuated.

The same member 48 is illustrated as having another portion 54 which engages with the detent to hold the same against premature operation; this, however, forms part of the subject-matter of a separate application.

What I claim as new is:

1. The combination of a coin-controlled lock, a coin-entrance thereto, a relatively movable door subject to said lock, and a lip on the door for closing said coin-entrance.

2. The combination of a coin-controlled lock comprising a spring-shot bolt, key-operated means controlling the unlocking of the bolt, a detent for holding the bolt in unlocked position, and knob-operated coin means for releasing the detent, a coin-entrance and passage, and a relatively movable door subject to said lock bolt and having a lip for closing said coin-entrance.

3. The combination of a coin-controlled lock having a bolt, coin means controlling the locking of the bolt, and key-operated means controlling the unlocking of the bolt, a coin-drop, a relatively movable door subject to said lock bolt having a lip for closing the entrance to the coin-drop, and a movable coin-arrester in the drop arranged to be displaced by said lip.

4. The combination of a coin-controlled lock having a bolt, coin means controlling the locking of the bolt, and key-operated means controlling the unlocking of the bolt, a coin-drop, a movable coin-stop in the drop, a door movable relatively to the lock and subject thereto, and means whereby closing of the door displaces said coin-arrester.

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