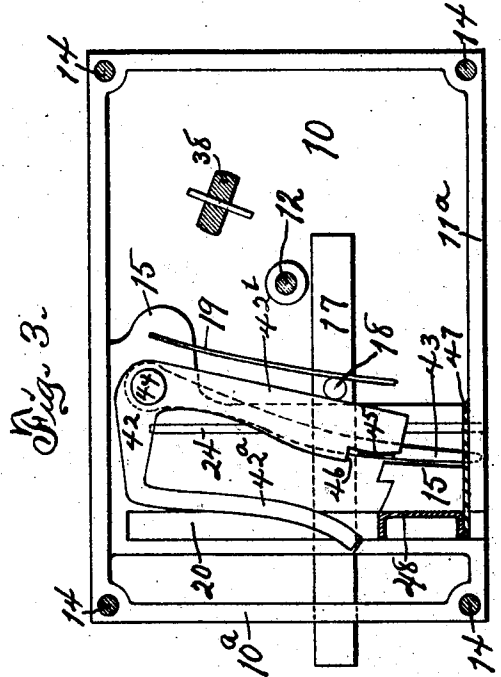
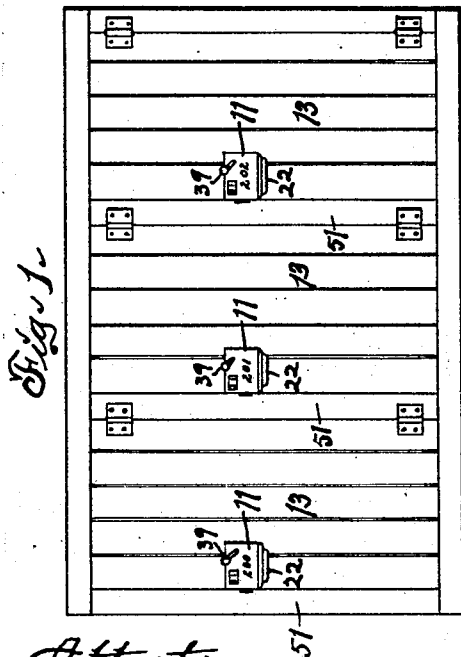
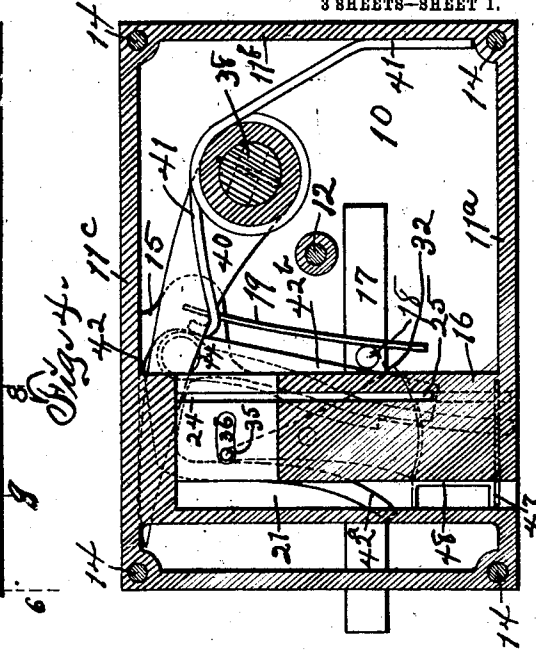
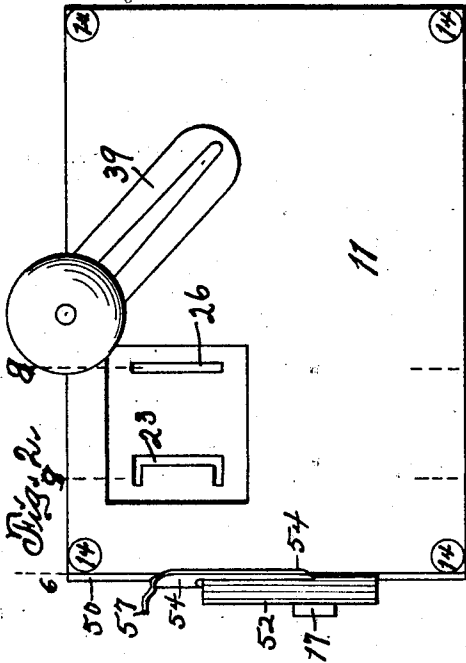


A. W. RIGGS.
CHECK CONTROLLED MANUALLY OPERATED LOCK.
APPLICATION FILED NOV. 24, 1909.

954,700.

Patented Apr. 12, 1910.

3 SHEETS—SHEET 1.



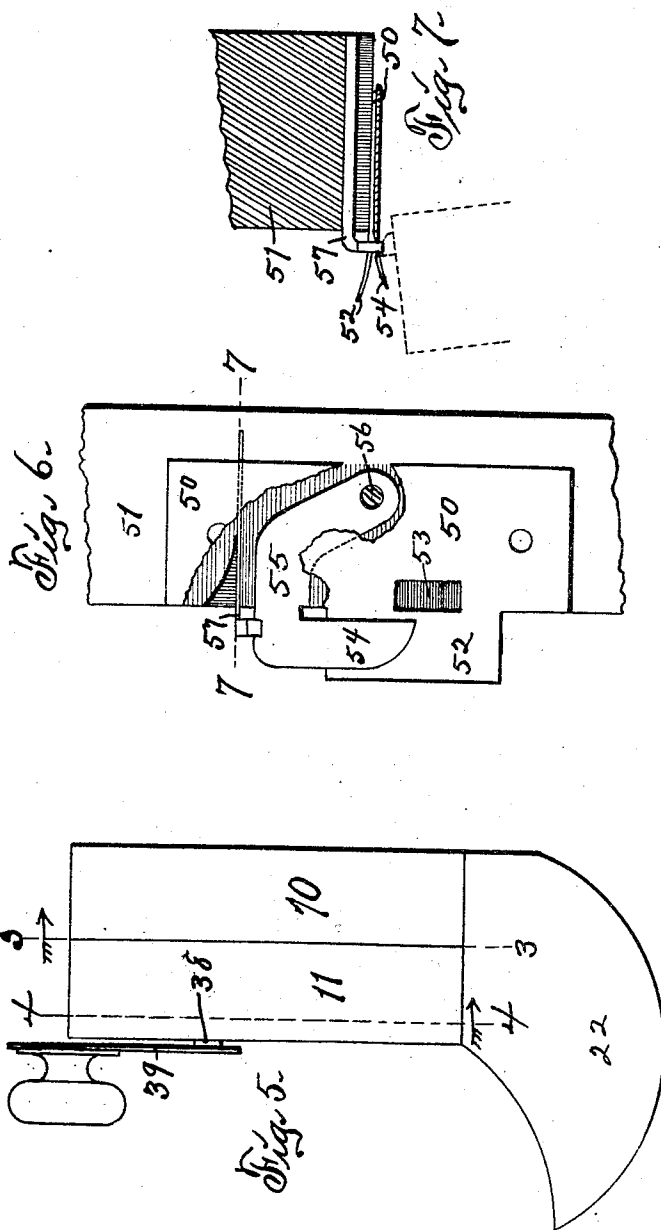
Attest:
E. W. Miller
H. W. Winters

Inventor:
Albert W. Riggs.
By Thomas G. Arwig & Co.
Attys

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3 SHEETS—SHEET 2.



Attest:
Erle W. Miller
N. W. Winter

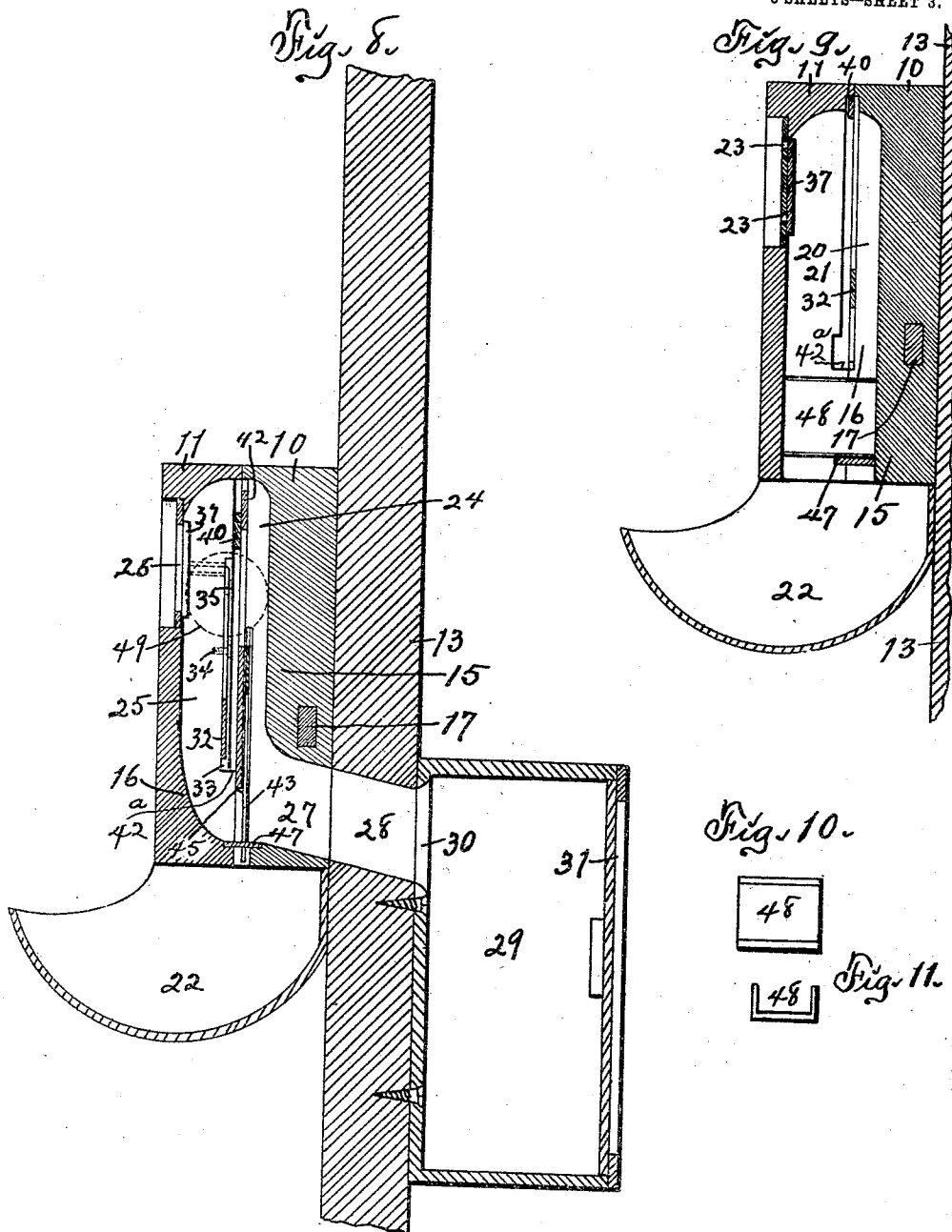
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3 SHEETS—SHEET 3.



Attest:
E. W. Miller
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Albert W. Riggs.
By Thomas J. Craig Co.
Atty

UNITED STATES PATENT OFFICE.

ALBERT W. RIGGS, OF ATLANTIC, IOWA, ASSIGNOR TO HIMSELF AND JACOB O. FUDGE,
OF ATLANTIC, IOWA.

CHECK-CONTROLLED MANUALLY-OPERATED LOCK.

954,700.

Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed November 24, 1909. Serial No. 530,034.

To all whom it may concern:

Be it known that I, ALBERT W. RIGGS, a citizen of the United States, residing at Atlantic, in the county of Cass and State of Iowa, have invented a new and useful Check-Controlled Manually-Operated Lock, of which the following is a specification.

The object of this invention is to provide an improved construction for and means of operating a lock.

A further object of this invention is to provide a construction whereby a key-holding lock may be manually operated through the interposition of a check to release said lock and also to release the key, which key may be employed alternately with the check to release the lock.

A further object of this invention is to provide means whereby a key-holding lock may be manually operated through an interposed check to release the lock, to open a key-hole to release said key, to open a key-hole for the operative insertion of said key, and to close a check-slot.

A further object of this invention is to provide means whereby a key-holding lock may be manually operated through an interposed check to release the lock, to open a key-hole to release said key, to open a key-hole for the operative insertion of said key, to close a check-slot, and to provide a double-action escutcheon adapted to act on a bolt of said lock to release said check.

My invention consists in the construction, arrangement and combination of elements hereinafter set forth, pointed out in my claims and illustrated by the accompanying drawing, in which—

Figure 1 is a front elevation illustrating a plurality of doors, such as are employed for lockers or cabinets, to each of which doors one of my improved locks is applied. Fig. 2 is a front view, enlarged in respect of Fig. 1, showing my improved lock and escutcheon detached from the door. Fig. 3 is a longitudinal section of the lock on the indicated line 3—3 of Fig. 5. Fig. 4 is a longitudinal section of the lock on the indicated line 4—4 of Fig. 5. Fig. 5 is an end elevation of the lock. Fig. 6 is a vertical section on the indicated line 6—6 of Fig. 2. Fig. 7 is a section on line 7—7 of the device shown in Fig. 6. Fig. 8 is a vertical section on the indicated line 8—8 of Fig. 2. Fig.

9 is a vertical section on the indicated line 9—9 of Fig. 2. Figs. 10 and 11 are face and end views respectively of a key employed at times with the lock.

This invention relates to a coin-controlled manually-operated lock especially intended for use in lockers or cabinets of hotels, clubs, depots, bathhouses, gymnasiums and the like where it is desired to deposit packages, luggage, baggage, wearing apparel and appurtenances and to pay for the privilege of depositing the same and without employing or requiring the services of an attendant either in making the deposit or in reclaiming the article or articles deposited.

The lock casing or housing is preferably formed in two parts of metal by molding and the two general parts thereof are designated in the drawing by the numerals 10, 11. The two parts 10, 11 of the lock may be connected by a screw 12 located centrally thereof and the parts may be mounted on a door 13 by screws or bolts 14 seated in or extending through corner portions of the casing. The parts 10, 11 are formed with integral blocks 15, 16 opposite each other, when the parts are connected, and extending from top to bottom of the parts. A latch bolt 17 is mounted in a horizontal slide seat in the part 10 of the casing, said slide seat being formed in and below the center of the block 15 and extending through the adjacent end wall 10^a of the casing. A stud 18 is formed on and extends horizontally from and at right angles to the latch bolt 17 on the opposite side of the block 15 from the end wall 10^a. A leaf spring 19 is fixed at one end in a notch in the upper end portion of the block 15 and extends downward across and at the rear of the stud 18. It is the function of the leaf spring 19 to press the latch bolt outwardly through its slide seat and in so doing to move the stud 18 toward the block 15. The block 15 is formed with a vertical groove 20 in its inner face and the depth of said groove approximates to one-third of the depth of said block, and a vertical groove 21 is formed in the block 16 directly opposite and communicating with the groove 20. The lower end portion of the groove 21 opens through the bottom wall 11^a of the casing member 11 and communicates with a cup 22 suspended from and beneath said member and opening to the outer face

of the door 13. A key-hole 23, preferably angular in elevation, and corresponding in shape with the cross-section of a channel bar, is formed in the face plate of the casing member 11 and communicates with the upper portion of the grooves 20 and 21. A vertical groove 24 is formed in the block 15 parallel with and at the rear of the groove 20 and the lower end portion or bottom of said groove 24 is inclined rearwardly. A vertical groove 25 is formed in the block 16 parallel with and at the rear of the groove 21 and is opposite to and communicates with the groove 24 when the parts of the casing or housing are connected. An ingress check-slot 26 is formed in the face plate of the casing member 11 at and communicating with the upper end portions of the grooves 24, 25 and an egress check-slot 27 is formed in the face plate of the casing member 10 at and communicating with the lower end portions of said grooves. Thus a check introduced through the slot 26 enters the grooves 24, 25, moves by gravity along said grooves and is discharged, subject to certain restrictions hereinafter set forth, through the egress slot 27 to the rear of the lock. A hole 28 is formed in the door 13 in communication with the egress check-slot 27 and a receptacle 29 is mounted on the inner face of said door and is provided with a hole 30 communicating with said hole 28. The receptacle 29 preferably partakes of the characteristics of a cash box having a locked door 31 and is adapted to receive checks or coins from the lock and retain them until removed by the proper custodian of the locker to which said lock and receptacle are applied. For convenience I prefer to construct the housing, the blocks therein, the grooves 24, 25 in the blocks and the ingress and egress slots 26, 27 of a size and shape to accommodate and utilize a check or coin of the denomination corresponding with the fee charged for the use of the locker to which the lock is applied, and in the United States and under ordinary conditions such coin would be a five cent "nickel" or a silver dime. A tumbler 32 is mounted in a recess 33 formed in the inner face of the block 16. The tumbler 32 preferably is generally triangular in shape with its lower corners rounded and is pivoted adjacent its upper end on a pin 34 seated in the block 16. The rounded lower corners of the tumbler 32 normally extend across both of the grooves 20, 24 and prevent movement of the key through the grooves 20, 21 and of the check through the grooves 24, 25. A neck 35 is formed on and extends upward from the upper end of the tumbler 32 and is turned outwardly through a curved slot 36 in the block 15 and pivotally engages the central portion of a shutter 37. The shutter 37 is mounted vertically in a slide seat between the upper end portion of the

block 15 and the inner face of the face plate of the housing member 11 and is adapted to be operated by the tumbler in such manner as to simultaneously open the key-hole 23 and close the ingress check-slot 26, or simultaneously close the key-hole and open the check-slot, or conjunctively close the key-hole and check-slot. Under my construction it is impossible to so place the shutter that the key-hole and ingress check-slot are both open at the same time for the passage of a key and check into the lock.

A spindle 38 is mounted for rotary oscillation in the housing member 11 at the rear of the block 15 and extends within the housing member 10. Means are provided for moving the spindle 38 in one direction manually and for such purpose in this instance I show a hand-crank 39 on the outer face of the housing member 11. An arm 40 is mounted within the casing and is detachably connected at one end to the spindle 38. A torsional spring 41 is mounted on the spindle 38 between the arm 40 and face plate of the member 11. One end of the spring 41 normally engages the rear wall 11^b of the housing member 11 and the other end portion of said spring hooks over the lower margin of the arm 40 in front of the spindle 38. The arm 40 extends across the inner face of the block 15 and said block is cut away over the recess 33 and on either side of the grooves in said block to permit vertical movement of said arm thereon. The arm 40 also is free to pass over the tumbler 32 and pin 34 and cuts the key and check passages formed by the grooves 20, 21 and 24, 25 respectively. Downward movement of the arm 40 is limited and determined by a shoulder, and upward movement of said arm is limited and determined by the upper wall 11^c of the housing member 11. It is the function of the arm 40, when moved in one direction, by manipulation of the crank 39 and spindle 38, to move a key or a check downward in the key and check passages formed by the grooves above mentioned and in such movement to cause the key or check to move the tumbler 32 laterally and operate the shutter 37. The key and check also have other functions to perform as hereinafter described. It is the function of the spring 41 to return the arm 40, spindle 38 and crank 39 to their initial positions when manual force is removed from said crank. The inner face of the block 16 is cut away over the grooves 21 and 25 therein and a fork 42 is pivoted at its closed end on the upper end portion of said block and is free to move laterally through the space formed by such cutting away. One arm 42^a of the fork normally extends obliquely across the passage formed by the grooves 20, 21 and the other arm 42^b of said fork normally extends obliquely

across the passage formed by the grooves 24, 25. The arm 42^b of the fork normally is engaged by the stud 18 on the latch bolt 17 and is held by such engagement, and
 5 by the leaf spring 19, in its normal position. Thus the latch bolt, stud and leaf spring have the further function of holding the fork 42 in such position that its arms normally obliquely cross the key and
 10 check passages in the housing. The block 16 is further cut away beneath the fork 42 and a trigger 43 is placed in the seat thus formed and is pivoted at its upper end on the same pin, 44, that is employed
 15 to support the fork 42. The trigger 43 is formed with a lip 45 extending inward through a notch 46 in one side of the lower end portion of the arm 42^b and said lip is curved slightly from end to end. The trigger 43 also obliquely crosses the passage
 20 formed by the grooves 24, 25 and the lower end of said trigger extends through a longitudinal slot in a shutter 47. The shutter 47 is loosely mounted in a horizontal slide seat formed in the lower ends of the blocks 15, 16 and said shutter normally extends
 25 across and closes the lower end of the key-passage formed by the grooves 20, 21. The shutter 47 normally is held in such position as to close the lower end of the key-passage
 30 by the trigger 43 which is held in turn by the fork arm 42^b engaging the lip 45; said fork being held as above described by the stud 18, bolt 17 and leaf spring 19. A key 48, preferably made of sheet metal and bracket-shaped in cross-section, is employed. This key may be of any desired size or relative width or width of flanges, or may be variously notched in its flanges to differentiate one key from another and the key-hole
 40 23 of the lock would correspond in elevation with the cross-section of the key while the key-passage through the lock would be shaped to correspond with the contour of the key in plan. In this instance I have shown the key 48 bracket-shaped in cross-section, of a length and width to be received in and extend across the key-passage in the housing members and of smooth rectangular
 45 contour in plan.

The operation of the lock as thus far described is as follows: The latch bolt 17 normally extends outside the housing member 10 and is beveled on the rear face of its
 55 projecting end portion. There is no connection between the spindle 38 and latch bolt 17 that will permit any operation of the spindle to move said latch bolt. A key 48 is contained in the key-passage (Figs. 3 and 4) and rests on the shutter 47. The key-hole 23 is closed by the shutter 37 and the ingress check-slot 26 is open. The door 13 is in closed position and is held by the latch bolt 17 as hereinafter described. A
 60 check 49 of the required size as above suggested, is inserted through the ingress slot 26 into the check-passage formed by the grooves 24, 25 and falls into contact with one rounded corner of the tumbler 32. The crank 39 is manually moved and in turn moves the spindle 38 and arm 40 against the
 70 resilience of the spring 41. Such movement carries the arm 40 through and longitudinally of the check-passage and said arm engages the check in said passage and forces it beyond, by or past the adjacent rounded corner of the tumbler 32. Such movement of the check oscillates the tumbler 32 in one direction and causes the neck 35 thereof to move the shutter 37 into a position to close
 75 the ingress check-slot 26. The same movement of the check causes said check to engage the inner margin of the arm 42^b of the fork 42 and move said arm rearward. Such rearward movement of the arm 42^b carries
 80 the stem 18 and latch bolt 17 rearward against the resilience of the spring 19. In such movement the check 49 is carried into the notch 46 of the arm 42^b and into contact with the lip 45 of the trigger 43. By
 85 the same movement the check 49 is caused to move the trigger 43 rearward conjunctively with and to the same extent as the arm 42^b of the fork. Such rearward movement of the trigger 43 is sufficient to move
 90 the shutter 35 entirely away from and open the lower end of the key-passage formed by the grooves 20, 21, and permit the key 48 to drop out of said passage into the cup 22. The key can then be removed manually from
 95 the cup 22 and should be retained by the depositor of the check. The key 48 is preferably marked with a numeral, index or symbol corresponding with a symbol, index or numeral on the outer face of the lock casing
 100 so that the user may have an invariable guide to the locker in which his deposit is made. This done, the door 13 may be opened and a deposit be made in the locker at the rear thereof; but it will be observed that the check is still retained in the check-passage because of the spring-created pressure of the lip 45 thereon. It is desirable, therefore, to provide further means of automatic operation whereby the check is deposited in the container or cash box 29 and whereby the latch bolt 17 may be sprung into locking position. Such means are provided as follows: An escutcheon 50 of common form is provided and is adapted to be
 105 mounted on a door jamb 51. The escutcheon 50 is formed with a strike 52 and a bolt-hole or socket 53. The strike 52 has the usual function of depressing the spring-actuated latch bolt 17 and the hole 53 has the usual function of receiving the outer end of the latch bolt and holding it against unauthorized removal. A counter escutcheon 54 is provided and is formed with an arm 55 extending partially across the upper portion
 110 115 120 125 130

of the escutcheon 50 in a recess in the jamb 51 and pivoted at its rear end on a pin 56. A spring 57 is mounted in a groove in the jamb 51 and is formed with a hook on its outer end engaging over the arm 55 and tending to depress the counter escutcheon relative to the strike 52. The outer end portion of the groove in which the spring 57 is mounted is wider than the inner end portion thereof, thus permitting vertical movement of the outer end portion of said spring. The counter escutcheon 54 is inclined inwardly or curved divergent from the curvature of the strike 52 and overlies the inner face of said strike normally. The lower margin of the counter escutcheon 54 is curved.

Now, having in mind the construction of the escutcheon and counter escutcheon and their relations to each other, it is seen that when the door is opened the latch bolt 17 will move across and impinge against the inclined face of the counter escutcheon 54 in the direction of the arrow in Fig. 6 and in so doing said bolt will be depressed or move inward a farther distance corresponding to the operative thickness of the counter escutcheon. Such farther movement of the latch bolt 17 further compresses the leaf spring 19 and relieves the pressure of said spring, the stud 18 and the fork arm 42^b from the lip 45 of the trigger 43 and by this means releases the check 49 from the lip 45 and trigger and permits said check to move by gravity through the lower portion of the check-passages and through the egress check-slot 27, the hole 28, and the hole 30 into the receptacle, safe or cash box 29. Upon the complete opening of the door, and consequent discharge of the check 49, the leaf spring 49 acts to move the stud 18 and latch bolt 17 into outermost positions. The same movement replaces the fork 42, trigger 43 and shutter 47 in their initial positions. The next step in the operation is to close the door and permit it to lock automatically in a common manner by engagement of the latch bolt 17 in the bolt-hole 53 of the escutcheon. This step, obviously, is taken only after the desired article or articles are deposited in the locker closable by the door 13. Thereafter the door 13 can be opened only by removal of the lock or by operation of the lock with the proper key (or by a master key or duplicate). Eliminating the contingency of opening the door by removing the lock or through the use of a master key or duplicate, the door will remain closed until the possessor of the key received from such lock, *i. e.*, the patron who has deposited the check as the price of the use of the locker, returns with the key received from the lock and opens it to regain possession of his deposit. Such operation is as follows: The key is inserted in the hole 23 and falls

by gravity upon the arm 42^a of the fork 42 and also falls upon a rounded corner portion of the tumbler 32. The crank 39 is then manually operated to move the arm 40 identical with the first operation thereof and in such movement the arm engages the key 48 and forces it past, by and beyond the tumbler 32 and arm 42^a. In such movement the key moves the tumbler 32 in such manner that said tumbler, acting through the neck 35, moves the shutter 37 so as to open the ingress check-slot 26 and close the key-hole 23. In and by virtue of the same movement the key 48 rocks or oscillates the fork 42 in one direction so that the arm 42^a of said fork moves the stem 18 and latch bolt 17 rearward against the resilience of the spring 19. It will be observed that in this movement of the fork 42 the trigger 43 and shutter 47 are not disturbed. Thereupon the door may be opened because of the withdrawal of the latch bolt 17 from the hole 53 in the escutcheon and the key 48 falls from the fork 42 upon the shutter 35 and is retained in the lock casing until another operation of the lock by and through the medium of a check 49 as above described. It should be observed that whenever the door is moved into closed position the projecting end portion of the latch bolt 17 engages the rounded lower margin of and raises the counter escutcheon.

Although one patron of the locker may remove his deposit and depart without closing the door and consequently without placing the lock in operative position to retain such door, yet a subsequent patron cannot utilize the locker with safety and protection without first locking the door. He may lock the door without using a check and consequently without possessing himself of the key wherewith to unlock the door, but in such event his deposit is retained and protected save and except the condition thereof be discovered and an unwarranted opening of the lock be made by another person using a proper check, and effectually separated from him until he possesses himself of the lock-held key by insertion of the proper check in the lock and subsequent manual actuation of the spindle.

I claim as my invention—

1. A check-controlled manually-operated lock formed with a check passage and ingress and egress slots at the ends of said passage and also formed with a key passage and an ingress key-hole at one end of said key passage, a shutter mounted for oscillation within the lock between said passages and adapted to close the ingress slot and key hole at times, and means for moving said shutter relative to said slot and key-hole.

2. A check-controlled manually-operated lock formed with a check passage and in-

gress and egress slots at the ends of said passage and also formed with a key passage and an ingress key-hole at one end of said key passage, a shutter mounted for oscillation within the lock between said passages and adapted to close the ingress slot and key-hole at times, and a tumbler mounted for oscillation within the lock and adapted to extend across either of said passages, said tumbler pivotally connected to said shutter.

3. A check-controlled manually-operated lock formed with a check passage and ingress and egress slots at the ends of said passage and also formed with a key passage and an ingress key-hole at one end of said key passage, a shutter mounted for oscillation within the lock between said passages and adapted to close the ingress slot and key-hole at times, and a tumbler mounted for oscillation within the lock and adapted to extend across either of said passages, said tumbler pivotally connected to said shutter, said tumbler adapted to be moved in one direction by a check traveling through one of said passages and adapted to be moved in the opposite direction by a key traveling through the remaining passage.

4. A check-controlled manually-operated lock formed with a check passage and ingress and egress slots at the ends of said passage and also formed with a key passage and an ingress key-hole at one end of said key passage, a shutter mounted for oscillation within the lock between said passages and adapted to close the ingress slot and key-hole at times, means for moving said shutter relative to said key-hole and slot, a latch bolt mounted for reciprocation across said passages and spring-held in one direction, an operating member mounted for oscillation in said lock and engaging said latch bolt, said oscillating member extending obliquely across said passages and adapted to be moved in one direction, and move the latch bolt, by a key traveling in one passage or by a check traveling in the remaining passage.

5. A check-controlled manually-operated lock formed with a check passage and ingress and egress slots at the ends of said passage and also formed with a key passage and an ingress key-hole at one end of said key passage, a shutter mounted for oscillation within the lock between said passages and adapted to close the ingress slot and key-hole at times, means for moving said shutter relative to said key-hole and slot, a latch bolt mounted for reciprocation across said passages and spring-held in one direction, an operating member mounted for oscillation in said lock and engaging said latch bolt, said oscillating member extending obliquely across said passages and adapted to be moved in one direction, and move the latch bolt, by a key traveling in one passage or by a check traveling

in the remaining passage, a shutter normally extending across the key passage, and a trigger pivoted within the lock and engaging said shutter, said trigger also extending across the check passage and adapted to be moved in one direction by a check traveling through said passage.

6. A check-controlled manually-operated lock formed with a check passage and ingress and egress slots at the ends of said passage and also formed with a key passage and an ingress key-hole at one end of said key passage, a shutter mounted for oscillation within the lock between said passages and adapted to close the ingress slot and key-hole at times, a tumbler mounted for oscillation within the lock and adapted to extend across either of said passages, said tumbler adapted to be moved in one direction by a check traveling through one of said passages and adapted to be moved in the opposite direction by a key traveling through the remaining passage, a shutter normally extending across the key passage, and a trigger pivoted within the lock and engaging said shutter, said trigger also extending across the check passage and adapted to be moved in one direction by a check traveling through said passage.

7. A check-controlled manually-operated lock formed with a check passage and ingress and egress slots at the ends of said passage and also formed with a key passage and an ingress key-hole at one end of said passage, a shutter mounted for oscillation within the lock between said passages and adapted to close the ingress slot and key-hole at times, means for moving said shutter relative to said key-hole and slot, a latch bolt mounted for reciprocation across said passages and spring-held in one direction, an operating member mounted for oscillation in said lock and engaging said latch bolt, said oscillating member extending obliquely across said passages and adapted to be moved in one direction, and move said latch bolt, by a key traveling in one passage or by a check traveling in the remaining passage, a shutter normally extending across the key passage, a trigger pivoted within the lock and engaging said shutter, said trigger also extending across the check passage and adapted to be moved in one direction by a check traveling through said passage, a spindle mounted for oscillation in the lock and spring-held in one direction, means adapted for manual actuation to oscillate said spindle against said spring, and an arm on said spindle extending across said passages and adapted for travel through an arc and adapted to move a key or a check along its respective passage.

8. A check-controlled manually-operated lock formed with a check passage and ingress and egress slots at the ends of said

passage and also formed with a key passage and an ingress key-hole at one end of said key passage, a shutter mounted for oscillation within the lock between said passages and adapted to close the ingress slot and key-hole at times, a tumbler mounted for oscillation within the lock and adapted to extend across either of said passages, said tumbler adapted to be moved in one direction by a check traveling through one of said passages and adapted to be moved in the opposite direction by a key traveling through the remaining passage, a shutter normally extending across the key passage, a trigger pivoted within the lock and engaging said shutter, said trigger also extending across the check passage and adapted to be moved in one direction by a check traveling through said passage, a spindle mounted for oscillation in the lock and spring-held in one direction, means adapted for manual actuation to oscillate said spindle against said spring, and an arm on said spindle extending across said passages and adapted to travel through an arc and adapted to move a key or a check along its respective passage.

9. In a check-controlled manually-operated lock, a latch bolt spring-held in one direction and adapted to be manually operated in the opposite direction by an interposed key and also adapted to be operated against the spring by an interposed check, such manual operation being for less than the range of movement of the bolt, an escutcheon adapted to be engaged by said latch bolt, and a counter escutcheon overlying the first escutcheon and adapted to engage and complete the range of movement of said bolt.

10. In a check-controlled manually-operated lock formed with a key passage, a check passage and means of ingress and egress relative to said passages, a shutter movable across the means of ingress to said passages, a tumbler within the lock engaging said shutter and extending across said passages, a latch bolt mounted for reciprocation in said lock and spring-held outwardly, a shutter extending across the means of egress from the key passage, an operating member mounted for oscillation within the lock and extending obliquely across said passages, a trigger mounted for oscillation within the lock and engaging the latter shutter, means of engagement between the operating member and the latch bolt, and oscillating devices adapted to move a key along the key passage and also adapted to move a check along the check passage, said key adapted to move the operating member and latch bolt against its spring, said check adapted to move the operating member, latch bolt and trigger against said spring, and an escutcheon adapted to be engaged by said latch bolt.

11. In a check-controlled manually-operated lock formed with a key passage, a check passage and means of ingress and egress relative to said passages, a shutter movable across the means of ingress to said passages, a tumbler within the lock engaging said shutter and extending across said passages, a latch bolt mounted for reciprocation in said lock and spring-held outwardly, a shutter extending across the means of egress from the key passage, an operating member mounted for oscillation within the lock and extending obliquely across said passages, a trigger mounted for oscillation within the lock and engaging the latter shutter, means of engagement between the operating member and the latch bolt, and oscillating devices adapted to move a key along the key passage and also adapted to move a check along the check passage, said key adapted to move the operating member and latch bolt against its spring, said check adapted to move the operating member, latch bolt and trigger against said spring, such movements of the latch bolt being for less than the range thereof, an escutcheon adapted to be engaged by said latch bolt, and a counter escutcheon pivoted relative to and overlying the first escutcheon and adapted to engage and complete the range of movement of said latch bolt at times.

12. In a check-controlled manually-operated lock formed with a key passage, a check passage and independent means of ingress and egress relative to said passages, a shutter movable across the means of ingress to said passages, a tumbler within the lock engaging said shutter and extending across said passages, a latch bolt mounted for reciprocation in said lock and spring-held outwardly, a shutter extending across the means of egress from the key passage, an operating member mounted for oscillation within said lock and extending obliquely across said passages, a trigger mounted for oscillation within the lock and engaging the latter shutter, means of engagement between the operating member and the latch bolt, and oscillating devices adapted to move a key along the key passage and also adapted to move a check along the check passage, said key adapted to move the operating member and latch bolt against its spring, said check adapted to move the operating member, latch bolt and trigger against said spring, and an escutcheon adapted to be engaged by said latch bolt.

13. In a check-controlled manually-operated lock formed with a key passage, a check passage and independent means of ingress and egress relative to said passages, a shutter movable across the means of ingress to said passages, a tumbler within the lock engaging said shutter and extending across said passages, a latch bolt mounted for reciprocation in said lock and spring-held outwardly, a shutter extending across the means of egress from the key passage, an operating member mounted for oscillation within said lock and extending obliquely across said passages, a trigger mounted for oscillation within the lock and engaging the latter shutter, means of engagement between the operating member and the latch bolt, and oscillating devices adapted to move a key along the key passage and also adapted to move a check along the check passage, said key adapted to move the operating member and latch bolt against its spring, said check adapted to move the operating member, latch bolt and trigger against said spring, and an escutcheon adapted to be engaged by said latch bolt.

cation in said lock and spring-held outwardly, a shutter extending across the means of egress from the key passage, an operating member mounted for oscillation within said lock and extending obliquely across said passages, a trigger mounted for oscillation within the lock and engaging the latter shutter, means of engagement between the operating member and trigger, whereby said trigger is moved in one direction only by the operating member, means of engagement between the operating member and the latch bolt, and oscillating devices adapted to move a key along the key passage and also adapted to move a check along the check passage, said key adapted to move the operating member and latch bolt against its spring, said check adapted to move the operating member, latch bolt and trigger against said spring, and an escutcheon adapted to be engaged by said latch bolt.

14. In a coin-controlled manually-operated lock formed with independent key and check passages, a receptacle communicating with the egress means of the check passage, a cup communicating with the egress means of the key passage, a latch bolt, an operating member communicating therewith and extending across said passages, and manually-operated oscillating devices adapted to move a check and a key within said passages and in contact with said operating member.

15. In a check-controlled manually-operated lock having a slot adapted to admit a check, a plate adapted to close said slot, means for moving said plate, a spring-actuated bolt, and means for operating said bolt.

16. In a check-controlled manually-operated lock having a slot adapted to admit a check and a downward passage from said slot, a slidable plate for closing said slot, a pivoted gravitating tumbler engaging said plate, a sliding bolt spring-held in one direction, and a check-engaged operating mem-

ber acting on said sliding bolt in opposition to the spring thereof.

17. In a check-controlled manually-operated lock having a slot to admit a check, a downward passage from said slot, a slidable plate adapted to close said slot at times, a pivoted tumbler engaging said plate, a keyhole, a downward passage from said keyhole, a pivoted arm adapted to move a key or check along one or the other of said passages, a latch bolt spring-held in one direction, and a pivoted operating member adapted for check or key actuation and acting on said latch bolt in opposition to its spring.

18. A check-controlled manually-operated lock, comprising a latch bolt spring-held in one direction, a wholly inclosed operating member adapted to act on said latch bolt in opposition to its spring, said lock formed with independent paths for a key and a check respectively, said operating member crossing said paths, and manually-operated devices adapted to move said key and check through their respective paths and into engagement with said operating member.

19. In a check-controlled manually-operated lock, a latch bolt spring-held in one direction, means for holding a key within said lock temporarily, means for inserting a check to said lock independent of the key, manually-operated devices acting on said check to move said latch bolt against its spring, means for releasing said key from the lock, means for holding said check temporarily within the lock, means for releasing said check from the lock, and means for introducing said key to the lock.

Signed at Des Moines, Iowa, this second day of November, 1909.

ALBERT W. RIGGS.

Witnesses:

S. C. SWEET,
EARL M. SINCLAIR.