Jan. 5, 1926. 1,568,770

F. J. ROWSE

COIN CONTROL SERVICE APPARATUS

Filed June 15, 1923 3 Sheets-Sheet 1

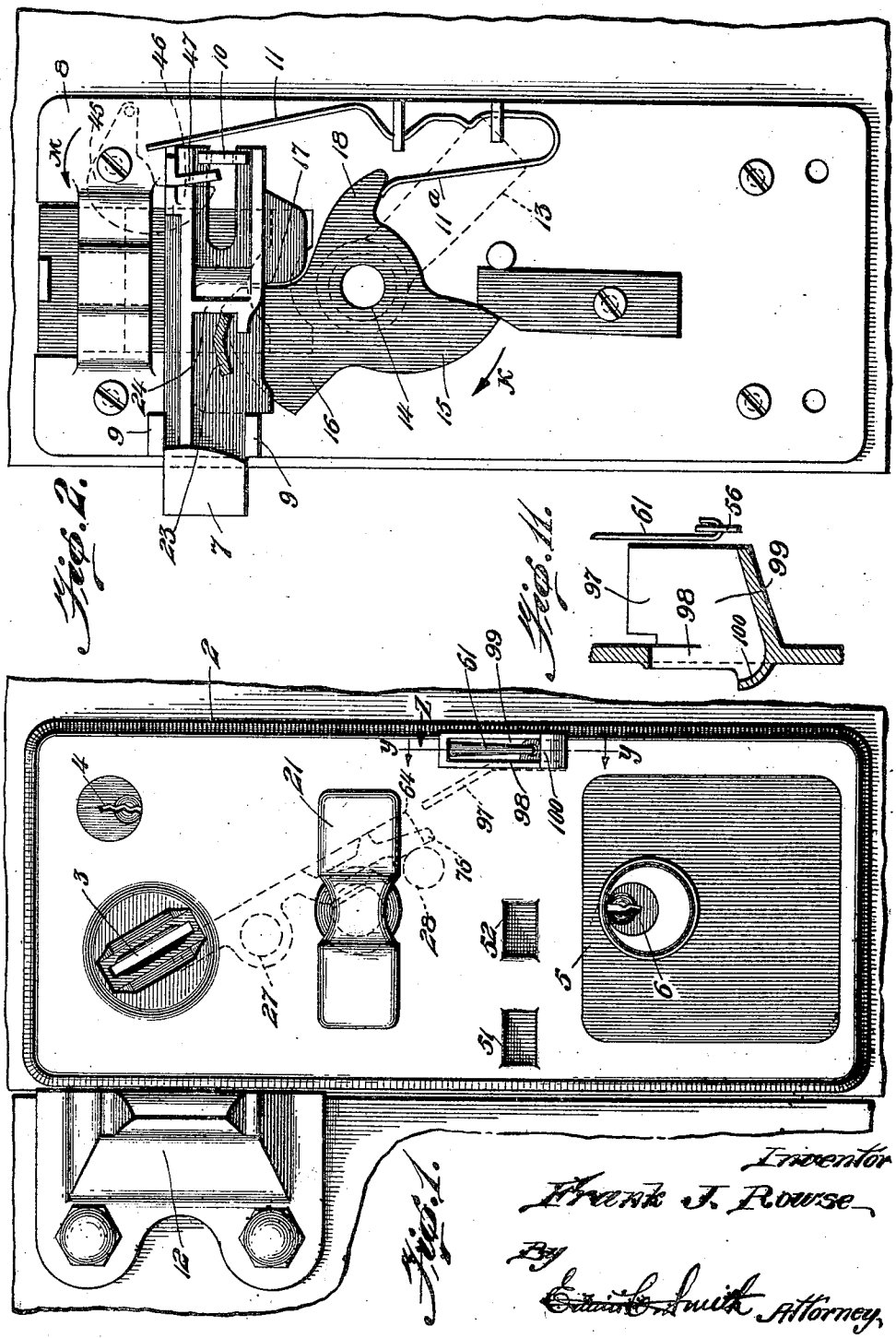

Fig. 2.

Fig. 4.

Fig. 1.

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COIN CONTROL SERVICE APPARATUS

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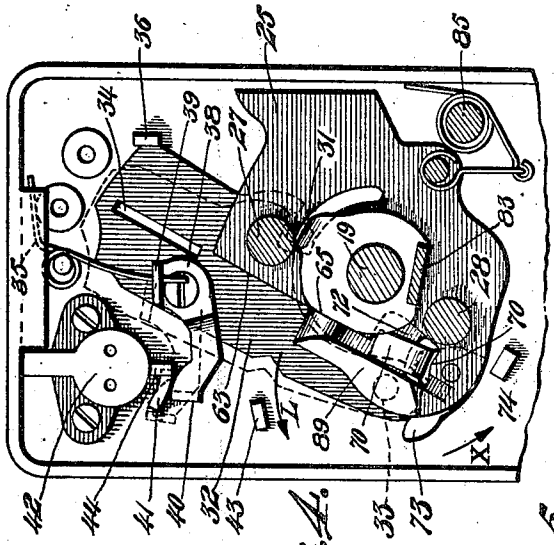

Fig. 4.

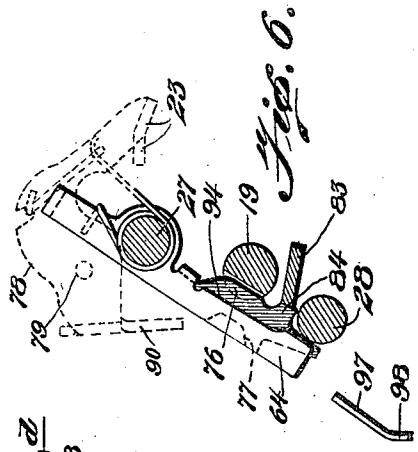

Fig. 6.

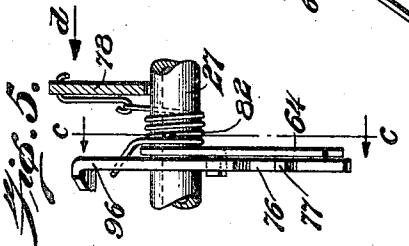

Fig. 5.

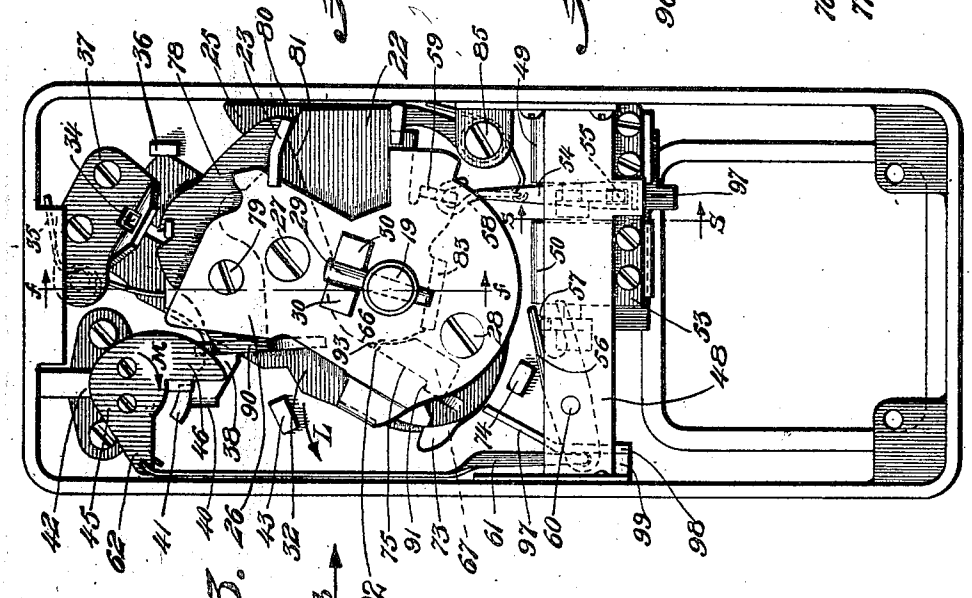

Fig. 3.

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Fig. 7.

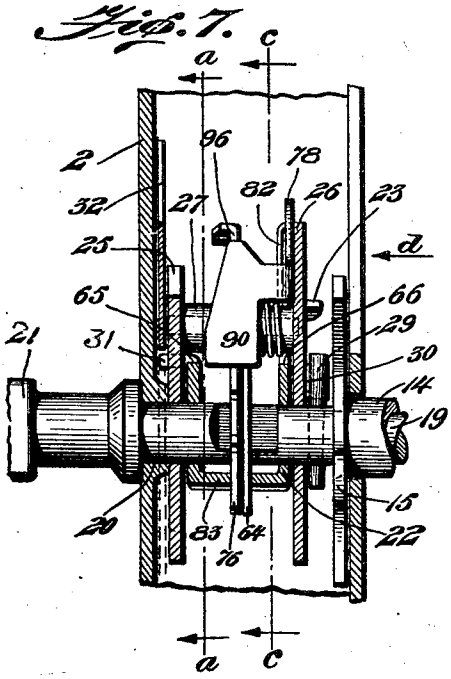


Fig. 8.

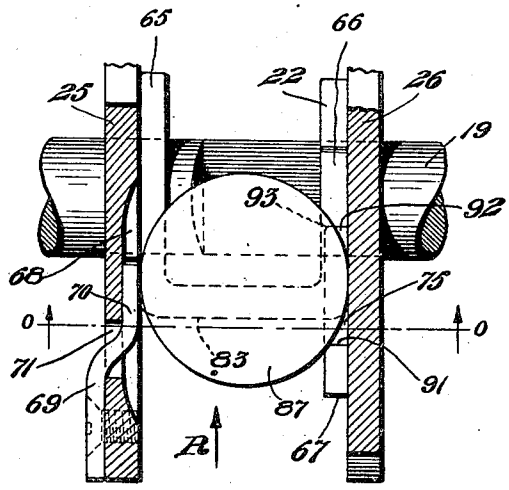


Fig. 10.

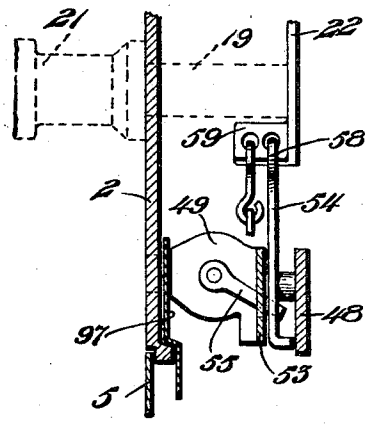
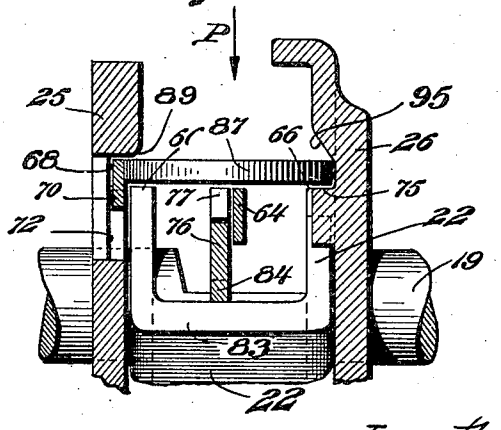


Fig. 9.



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Patented Jan. 5, 1926. 1,568,770

UNITED STATES PATENT OFFICE.

FRANK J. ROWSE, OF PAWTUCKET, RHODE ISLAND.

COIN-CONTROL SERVICE APPARATUS.

Application filed June 15, 1923. Serial No. 645,655.

To all whom it may concern:

Be it known that I, FRANK J. ROWSE, a citizen of the United States, residing at Pawtucket, in the county of Providence, and State of Rhode Island, have invented certain new and useful Improvements in Coin-Control Service Apparatus, of which the following is a specification.

My invention relates to coin controlled service apparatus and particularly to such devices, commonly known as coin locks, as are described in Letters Patent of the United States No. 1,043,033, dated October 29, 1912, and in my application for Letters Patent of the United States, Serial No. 471,172, filed May 20, 1921. These locks are used principally in connection with "pay toilets," so called.

The purpose of my invention is to provide an automatic mechanical check upon the coins received as compared with the number of times the authorized attendant has entered the compartment. If the attendant is lazy or regardless of his duty, he may omit to clean the compartment and renew its supplies, thus defrauding the patron who has paid for service. On the other hand he may be dishonest and for pay permit others to use his key, thus defrauding the proprietor of the lock. The manner of automatically restricting these frauds by means incorporated in the lock, as well as other improvements are hereinafter described.

The accompanying drawings forming a part of this specification show respectively:

Fig. 1. a front elevation of my lock.

Fig. 2. the back plate by which the lock proper is secured in place, together with appertaining parts.

Fig. 3. a view of the lock proper from the rear, with the back plate removed.

Fig. 4. a rear view of the upper portion of the lock proper, parts thereof being in section along line *a—a*, Fig. 7.

Fig. 5. a detail of the coin controlling levers, viewed in the direction of arrow *b* Fig. 3.

Fig. 6. a view partly in section on the line *c—c*, of Fig. 5 or of Fig. 7, looking in the direction of the arrow *d* Fig. 5 or Fig. 7.

Fig. 7. a detail of the coin control, partly in section, on the line *f—f* of Fig. 3 looking in the direction of the arrow *b*.

Fig. 8. an enlarged view of details of the coin control, looking in the direction of the arrow P Fig. 9.

Fig. 9. an enlarged detail, sectional view on the line *o—o* of Fig. 8, looking in the direction of the arrow R.

Fig. 10. a partial sectional view on line S—S of Fig. 3, looking in the direction of the arrow *b* showing counter operating mechanism.

Fig. 11. a detail, in section of Fig. 1 on the line *y—y* looking in the direction of the arrow Z.

Hereinafter, the following terms have the significance here defined. "Coin control" is that mechanism through which retraction of the bolt is secured by the interposition of a "coin." "Coin" is the thing prescribed for effecting the retraction of the bolt, whether actual currency or a special token devised for the purpose; except where the term coin may be expressly qualified to indicate something different. "Washer" is anything that may be deposited in lieu of a coin with fraudulent purpose. "Key control" is that device whereby the attendant, inspector or other authorized person gains access to whatever is controlled by the lock, without use of a coin: "Exit handle" is that instrumentality whereby one who has entered a compartment which is accessible through a coin controlled lock, leaves said compartment. "Coin carrier" is the device which receives and retains the coin, carries it through its functioning period and until it is released and deposited in the coin receptacle at the bottom of the case.

Fig. 1 shows the exterior of my improved coin controlled lock with its case 2, provided with the coin slot 3 leading to the coin control, and keyhole 4 of the key control. The bottom of the interior is the coin receptacle for the deposited coins to which access is gained by removal of the cover 5 which is secured by a key lock indicated by 6.

The bolt 7 is mounted on the back plate 8, movable between lugs 9—9 and on the lug 10 which is made a part of the back plate 8 (Fig. 2). The spring 11, suitably anchored

to the back plate, pressing against the rear end of the bolt 7, normally projects the latter to engage the keeper 12.

The exit handle 13, shown in broken lines in Fig. 2, is mounted on a hollow shaft or spindle 14 which, on the interior face of the back plate 8, (that face which when the lock is in position constitutes one interior wall) carries a cam 15 which, with other functions, serves to retract the bolt 7. This is accomplished by the lobe 16 which when the cam is turned in the direction of the arrow K encounters the shoulder 17 of the bolt, propelling and retracting it. The bolt spring 11 is anchored midway of its extremities, and the lower portion is so formed as to engage the lobe 18 of the cam 15, to return said cam and the exit handle connected with it to normal position.

The coin carrier is a unitary mechanism mounted, as will be described, upon the shaft 19 which has a bearing 20 at the front of the case 2 (Fig. 7) and at the rear of the case, in the hollow shaft 14 above described. At the outer end of the shaft 19 is the access or coin operating handle 21. The opposite or inner end of the shaft 19 is fitted to bear in the hollow shaft 14 as aforesaid. On the shaft 19 is a cam plate 22 which moves with the shaft 19 only when a coin is deposited in the coin slot. This cam plate controls a projection 23 which, when the cam plate turns with the shaft, engages the vertical flange 24 of the bolt 7 (Fig. 2). As the cam plate 22 turns with the shaft 19 this projection 23 propels and retracts the bolt 7. The cam plate 22 is of a U or channel formation, each wall having a bearing for the shaft 19, (Fig. 7). The cam plate 22 is mounted on the shaft 19 between the two side plates 25 and 26 of the coin carrier, which side plates are maintained at the proper distance apart by spacing posts 27 and 28 of suitable construction, (Fig. 3 and Fig. 6).

The side plates 25 and 26 are secured to the shaft 19 by the pin 29 which projects from the shaft between two projections 30—30 on the side plate 26 of the coin carrier (see Fig. 3). The side plate 25, being that adjacent the front of the lock, is formed with an arcuate slot (Fig. 4) concentric with the shaft, through which slot extends the projection 31 from the cam plate which protrudes beyond the face of the side plate 25. The latter bears against the hub of the bearing 20 which rises above the inner wall of the case. Within the space thus provided between the wall of the case and the side plate 25 is a shutter 32 to close the coin slot 3. The shutter 32 is swung on a pin 33 secured to the inner wall of the case 2 near the bearing 20. A secondary coin slot 34 in the shutter 32 normally registers with the coin slot 3 of the case. It is held to such registration by the spring 35 which presses the shutter 32 against the stop 36 on the inner wall of the case. The spring 35 is held by a member 37 which, besides affording anchorage for the spring 35, also supplies a guide for the coin. It is formed with an inwardly turned and slotted portion, so disposed as to insure the coin being properly directed into the coin carrier. The spring 35 does not engage the shutter 32 directly, but engages a small catch lever 38 that is mounted on the shutter by its short, and substantially vertical arm 39. The long, or substantially horizontal arm 40 of the catch lever has its extremity bent at right angles to the body, toward the inner wall of the case. On the inner wall of the case is an arcuate projection 41 concentric with the cylinder lock 42 which is of the key control. When the shutter 32 is moved in the direction of the arrow L, propelled by the projection 31 of the cam plate 22, the latter being moved through the interposition of a deposited coin, the reaction of the spring 35 tends to raise the long arm 40 of the catch lever so that when the shutter has been moved to the extent of its travel, the extremity of said arm 40 moves behind the arcuate projection 41 and holds the shutter in its displaced position. A stop 43 on the inner wall of the case and below the cylinder lock prevents excessive movement of the shutter in the direction of the arrow L. Depending from the cylinder of the lock 42 is a projection 44 in such position that when the cylinder of the lock is turned to retract the bolt, this depending projection 44 engages the long arm 40, releasing it from the arcuate projection 41 and permitting the shutter to return to its normal position, its secondary coin slot 34 registering with the coin slot 3.

The cylinder lock 42 works upon the bolt 7 through the bell crank lever 45 attached to the cylinder of the lock. The arm 46 of the bell crank is so disposed as to engage the projection 47 on the bolt 7 when the cylinder is turned in the direction of the arrow M.

Mounted on the cross girt 48, below the coin carrier are two counting devices 49 and 50, of known construction, their faces registering with the two sight openings 51 and 52 (Fig. 1). These counting devices are directly secured to a plate 53 which is secured to the said girt but slightly separated from it by suitable spacing devices. Within the space so created works a link 54 which engages the lever 55 of the counting device 49, and a forked arm lever 56 which engages the lever 57 of the other counting device 50. The link 54 has an opening through which the lever 55 of the

counting device 49 extends, and its upper end is formed as a hook 58 to engage an inwardly projected lug 59 of the cam plate 22, (Fig. 10 and Fig. 3). The lever 56, fulcrumed on the girt 48 at 60, (Fig. 3) is connected by a link 61 with the horizontal arm 62 of the bell crank lever 45 on the cylinder lock, so that, when the coin control is used, its operation is registered on one counter and when the key control is used registration is made by a supplemental counter, thus checking against each other, the operations of the key control and of the coin control. Between the faces of the counters and the case is a manually operated shutter 97 to close the sight openings 51 and 52, and accessible only to whoever opens the coin receptacle, (Fig. 10).

The two side plates 25 and 26 of the coin carrier are so spaced that coin 87 will slide freely between them. Such a coin, inserted through the coin slot 3 of the case, passes the auxiliary coin slot 34 of the shutter and is guided upon and held to the upper end 96 of the coin lever 76. The said upper end 96 of this lever is turned at substantially right angles with its body toward the coin slots, and its upper corner is bevelled or otherwise formed to receive the coin with certainty. The coin travels along the top edge of the lever 76 and of the lever 64 and also the edge 63 of the side plate 25, over the edges 65 and 66 of the cam plate 22 to its seat. Here it rests upon the levers 64 and 76 and on the edge 75 of a projection 67 of the side plate 26 (Fig. 9). It also has a shoulder 91 which arrests the coin in its travel through the carrier. When in its seat, the coin is beneath a shoulder 89 of the side plate 25 and under an inclined face 95 of the side plate 26, which incline normally prevents ejectment of the coin. Directly across the carrier from the projection 67 the side plate 25 is formed with a groove or coin clearance 68. If this groove is filled, the coin cannot escape from between the side plates. If the groove is clear, under pressure from below, the coin will be pushed upward, sliding over into the groove 68 through the wedging reaction of the inclined face 95, thus permitting it to escape by the inclined face 95. Obstruction to the coin entering the groove is provided in the lever 69 mounted on the outside of the side plate 25 and having an arm 70 extending through an arcuate slot 71 in the side plate 25 to fill the groove 68 (Fig. 3 and Fig. 8). To clear the groove the arm 70 moves into a depression 72 of the same depth as the slot 68. When the coin carrier is in normal position the arm 73 of the lever 69 encounters the hub of the shutter 32, holding the arm 70 in the groove 68. When the coin carrier with coin is turned in the direction of the arrow X, the arm 73 encounters the stop 74 which encounter effects the withdrawal of the arm 70 from the groove 68. The cam plate 22, reacting to its return spring, bears by its tie portion 83 against the coin control lever 76 pressing it against the coin which, when released by the arm 70 moving out of the groove 68, is discharged from the coin carrier. The coin control lever 76 bears against the coin by the projection 77. Should a washer be substituted, this projection would penetrate the washer, the extent of penetration being sufficient to throw the mechanism out of time so the bolt is not worked, yet to discharge the washer so it cannot remain and interfere with the subsequent use of a good coin. The function of the auxiliary lever 64 is to shroud or guard the projection 77 so the coin can ride over it without catching on it. The extremity of this auxiliary lever rests on the spacing post 28, its bottom at 94 is cut away so that it cannot press upon the tie portion 83 of the cam plate 22 or encounter the shaft 19. The coin control lever has a downward projection 84 which does encounter said tie portion 83 of the cam plate 22, and causes the latter to turn under reaction of a coin. The under side of the coin control lever 76 is cut away to clear the shaft 19 which likewise is formed with clearance for the levers 64 and 76.

On the side plate 26, and adjacent the spacing post 27 is a lever 78 fulcrumed at 79 (Fig. 3 and Fig. 6). It is this lever which is formed with the projection 23 that is controlled by the cam plate 22. The projection 23 normally bears upon the cam plate at 80, and it also is forked or slotted to straddle the edge of the side plate 26. When the cam plate 22 is turned with the coin carrier, through interposition of a coin, the projection 23 of the lever 78 remains at 80 in which the position it encounters the bolt 7. If however there is no coin in the coin carrier, the projection 23 rides down the edge 81 of the cam plate, which remains stationary. The projection 23 is thus depressed below the plane of engagement with the bolt 7. One spring 82 mounted on the spacing post 27 between the lever 64 and the lever 78 serves to maintain the coin control lever 76 with the auxiliary lever 64, and the lever 78 in appropriate position. The lever 78 extends a canopy 90 over the levers 64 and 76, which guides and holds the deposited coin to its course of travel.

In the case of inserting a wrong coin, which in the nature of things would be of smaller diameter, such wrong coin passes through the coin carrier freely. It passes from the lever 64 to the fixed plate 97 which is an extension of the side wall 98 of the pocket 99 provided for such wrong coins (Fig. 1 and Fig. 6). Such a coin is prevented from falling into the case, but rather is directed properly to the pocket 99

by the link 61 connecting the forked arm lever 56, which link acts as a back to the pocket. The pocket 99 is formed with an upturned lip 100 which projects from its bottom beyond the front of the case so that the returned coin can be readily removed, (Fig. 8).

The operation of my apparatus is as follows:—The patron inserts a coin or token at the coin slot 3 (Fig. 1) and it passes thru the slot 34 of the shutter 32. (Fig. 4.) The canopy 90 of the lever 78 directs the coin to the coin control lever 76 and to the ways on the side plates 25 and 26 of the coin carrier, along which it travels to the coin seat. (Fig. 3 and Fig. 6.) On reaching its station in the coin seat it is located therein by the shoulder 91 (Fig. 3 and Fig. 8), to which shoulder it is held by the arm 70 of the lever 69. The coin is further held in its seat by the shoulder 89 (Fig. 9) which is parallel with the face of the coin and the face 95 which is inclined to the face of the coin. When the patron turns the operating handle 21 clockwise, as viewed in Fig. 1, the coin is brought to bear upon the projection 77 of the coin control lever 76 (Figs. 5–7 and 9). The coin control lever 76, by its projection 84, presses against the tie portion 83 of cam plate 22 causing the cam plate to turn with the coin carrier to which the operating handle is attached by the shaft 19 (Fig. 6 and Fig. 9.) Inasmuch as the cam plate 22 turns with the coin carrier as tho a port thereof, it maintains the lever 78 (mounted on the coin carrier) in fixed position relative to the coin carrier because the projection 23 of the lever 78 rests upon the cam plate. The projection 23 is thus constrained to move in a circular path. In this path lies the vertical flange 24 of the bolt 7 when the latter is in its "shot" position. (Fig. 2.) Continued turning of operating handle 21 causes the projection 23 to encounter the flange 24 and retract the bolt. Substantially coincident with the retraction of the bolt 7 is the encounter by the projection 73 of the lever 69 by the projection 74 of the case (Fig. 3), which causes a clockwise movements of the lever 69, as viewed in Fig. 3 and Fig. 4 removing the extremity 70 of the lever 69 from the coin channel (see also Fig. 9). This extremity is in fact the key which locks the summarized combination in operative relation thru the coin. The projection 77 of the coin control lever 76 bears against the coin impelled by the return spring of the cam plate 22. (Fig. 3.) The coin, pressed thus against the inclined face 95, is forced against the extremity 70 of the lever 69. When the extremity 70 is removed as described, the coin is forced to the left as viewed in Fig. 9, the right hand edge rising under the pressure of the coin control lever 76 and following the incline 95 until the coin is forced free and thus ejected from the coin carrier. Each time a coin passes thru the coin carrier as described the counter 49 is caused to register thru the link 54 which connects the counter arm 55 with the cam plate 22. (Fig. 3 and Fig. 10.)

In turning with the coin carrier sufficiently to withdraw the bolt 7, the cam plate 22 also causes the shutter 32 to close the coin slot 3 thru the instrumentality of the projection 31 of the cam plate, which projection encounters and moves the shutter. (Fig. 4 and Fig. 7.) When the shutter 32 has been moved sufficiently to close the coin slot 3, the spring controlled catch lever 38 engages, by its arm 40 the projection 41 (Fig. 4). It is thus impossible for another patron to insert a coin and have access to the compartment until the shutter shall have been released.

The patron leaves the compartment by turning the exit handle 13 (Fig. 2) which withdraws the bolt 7 thru encounter by the lobe 16 of the cam 15 (attached to the exit handle) with the shoulder 17 of the bolt. This operation, while it permits egress, leaves the coin slot 3 still closed and service inaccessible to another patron.

The attendant whose duty it is to maintain the service by keeping the compartment clean and its supplies renewed, gains access by means of his "porter's key" inserted in the key hole 4 and turned to rotate the cylinder lock 42 in the direction of the arrow M (Fig. 3). Such movement of the lock cylinder swings the arm 46 of the attached lever 45 into engagement with the projection 47 of the bolt 7 and withdraws the latter. (Fig. 2.) Another projection 44 on lock encounters the arm 40 of the catch lever, disengaging it from the projection 41 and permitting the shutter to reopen the coin slot 3. The other arm 62 of the lever 45 is connected by the link 61 and the lever 56 with a second counter 50 so that each time the "key control" is operated, such operation is recorded by the second counter 50.

The rendering of service by my apparatus calls for a definite cycle of events:—

1. The unlocking of the apparatus thru deposit of a coin and accompanying registration of the coin deposit; and occupation of the compartment:

2. Exit of the patron; by use of the exit handle:

3. Opening of the compartment by use of the "key control" thru instrumentality of the porter's key; registration of such opening; and refurbishing of the compartment.

There is therefore a double check on the use of the compartment and reliability of the attendant. Theoretically both counters should register the same—there should be recorded as many nonpaid admittances as paid admittances. Should the registered

operations of "key control" exceed the registered operations of the "coin control" the presumption would be that some one is improperly admitting patrons by use of the "key control" either as a matter of accommodation of or profit, and in either case defrauding the proprietor. There is no good excuse for failure to care for the compartment because in any case, the attendant must go to the door and use his key to release the shutter in order to make the service available for a new patron. The proprietor is thus reasonably assured that he is not being defrauded thru misuse of the porter's key and that his patrons are not being defrauded thru default in rendering the service for which they pay.

Without limiting myself to the precise form and arrangement described, I claim:

1. In a coin control service apparatus the combination with a casing formed with a coin slot, a shutter for the coin slot, detaining means to hold the shutter closed, and a bolt mounted in the casing, of a coin propelled device to retract the bolt and to close the shutter thru reaction of a propelling coin, a key controlled device separate and distinct from the coin propelled device to retract the bolt and to encounter and release the shutter detaining means, an exit handle separate and distinct from the other bolt controlling devices to only retract the bolt, counter to register the combined coin control bolt retractions and concurrent closings of the shutter and operative connections between the counter and the coin control device, and a counter to register the combined key control retractions of the bolt and concurrent releases of the shutter detaining means and operative connections between said second counter and the key control device.

2. In a coin control service apparatus, the combination with a bolt, a case therefor formed with a coin slot and with a detent, a shutter to close the slot, means on the case to mount the shutter so it can swing, a catch to engage the detent to hold the shutter when the latter has closed the slot, a bolt retracting device and means to propel same to retract the bolt thru reaction of a coin, of a key control device to release the shutter catch from the detent, means to open said shutter when released, a lever secured to the key control device to engage and retract the bolt concurrently with releasing the shutter, a counter to record the number of operations of the key control device and connections thru which the lever, in retracting the bolt operates the counter.

3. A coin controlled apparatus, in combination with a coin carrier having side plates, members to space those side plates, a shaft to which the coin carrier is secured, and means to move the shaft and coin carrier, of a cam member of U form free on the shaft between the side plates of the coin carrier, and a lever mounted free on one of the spacing members and adjacent the cam member to react thereon and move it with the coin carrier through encounter of said lever with a placed coin, when the coin carrier is moved.

4. A coin controlled apparatus, in combination with a coin carrier having side plates, members to space and secure said side plates, a shaft on which the coin carrier is mounted, and means to move the shaft and carrier, of a cam member free on the shaft between the side plates of the coin carrier, said cam member being formed with two sides and a tie portion between them, and a lever mounted on one of the spacing members in position to encounter said tie portion, and react thereon through encounter with a coin in the carrier to move the cam member when the coin carrier is moved.

5. A coin controlled apparatus, the combination with a coin carrier having sides, one of which is formed with a groove and the other with a groove and overhanging abutment, a shaft on which the carrier is secured, and means to move the shaft and carrier, of a cam member formed with two sides and a connecting tie, the edge of one side cooperating with the abutment of the carrier to constitute a guideway for the coin and means reacting to a placed coin to connect the carrier and the cam member to move together, for the purpose specified.

6. In a coin controlled apparatus, the combination with a side plate formed with obstructions and an opposed side plate spaced from the first plate a distance corresponding to the diameter of the coin and formed with a clearance opposite said obstructions by which the coin can escape the latter, of a lever mounted on the second plate having an arm entering the clearance to close the same and hold the coin to the obstructions of the opposite plate, and means to shift the lever to release the coin.

7. In a coin controlled apparatus, the combination with a side plate formed with obstructions and an opposed side plate spaced from the first plate a distance corresponding with the diameter of the coin and formed with a clearance opposite said obstructions by which the coin can escape the latter and further having an opening, of a lever mounted on the outside of the plate and having an arm extending through the opening into said clearance to hold the coin to the obstructions of the opposite plate, and means to shift the lever to remove its arm from the clearance and release the coin.

8. In a coin controlled service apparatus, the combination with the case 2, one wall of which is pierced with a coin slot 3, a shut-

ter for said slot and a bolt, of a coin control to work the bolt through the agency of a coin, means connecting the coin control and shutter to close the shutter, a key control to work the bolt without the agency of a coin, means actuated by key control to release the shutter when working the bolt, individual counters for the coin control and for the key control and connecting means between each control and its counter to separately record the operations of each control.

9. In a coin controlled apparatus, the combination with side plates spaced to receive a coin, one of which plates is formed with obstructions to prevent discharge of a placed coin, the other plate being formed with clearance to permit escape of said coin, of a lever movable to interpose one of its arms in said clearance to hold the coin to obstructions of the opposite side plate, and means to move said lever to withdraw its arm from the clearance and release the coin.

10. In a coin controlled apparatus, the combination with two side plates, spacing posts for connecting said plates and maintaining them at prescribed distance, a shaft, means to secure shaft and plates, and means to turn them, of a cam member between said plates and free on the shaft, a coin control lever mounted on one of the spacing posts and in line of encounter with a portion of the cam member when reacted upon by a coin, and means to hold a coin between said side plates to effect the encounter of said lever and cam member for the purpose specified, when the shaft is turned.

11. In a coin control apparatus, the combination with a coin carrier, a shaft on which the coin carrier is secured and means to turn the shaft and carrier, of a cam member within the coin carrier and free upon the shaft, a coin control lever mounted within the coin carrier and movable with it in a path of encounter with said cam member, an auxiliary lever 64 adjacent the coin control lever to guide the coin to its seat within the coin carrier without the said coin sustaining interference to its passage by said coin control lever, and means to hold the coin to its seat to react thru the coin control lever to propel the cam plate when the shaft and carrier are turned.

12. In a coin controlled apparatus, the combination with the side plates of the coin carrier, one of said plates being formed with obstructions to prevent the passage of a coin, of a lever carried by the opposite side plate with an arm to encounter and hold the coin to the aforesaid obstructions, means to station the lever for encounter by the coin and means to withdraw the lever and permit discharge of said coin.

13. In a coin contral apparatus, the combination with a coin carrier having coin retentive obstructions and an arcuate slot thru one side, the said coin carrier being movable between a coin receiving station and a coin discharging station, and means to move the carrier, of a lever mounted on the carrier and having one arm extending thru the arcuate slot, means to interpose, at the receiving station, said arm between one side of the carrier and the coin to hold the latter to the obstructions of the opposite side of the carrier, and means to withdraw said arm from the coin at the discharging station to discharge the coin.

14. In a coin control service apparatus, the combination with a case formed with a coin slot and a detent formation 41, a girt 48 within the case, a shutter to close the coin slot, a pin on the case upon which the shutter swings, and a bolt, of a coin control to work the bolt and move the shutter to closed position, a counter mounted on the girt and operative connections between said counter and the coin control, a catch on the shutter to engage the detent formation 41 when the shutter is in closed position, a key control having a lever arm to directly engage the bolt, and a projection 44 to encounter and detach the shutter catch from the detent formation 41, a second counter mounted on the girt, a lever 56 to work the second counter, also mounted on the girt, and a link 61 to operatively connect said second counter with the key control.

In testimony whereof I affix my signature.

FRANK J. ROWSE.