Feb. 18, 1969 R. K. BOLEN 3,428,216

VENDING MACHINE AUTOMATIC LOCKING CASH BOX

Filed July 18, 1967 Sheet 1 of 3

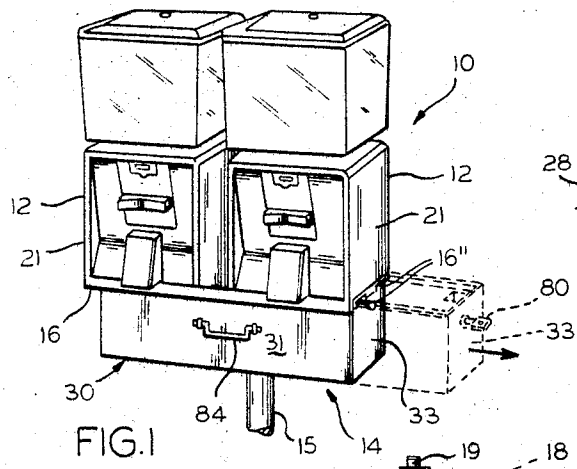


FIG.1

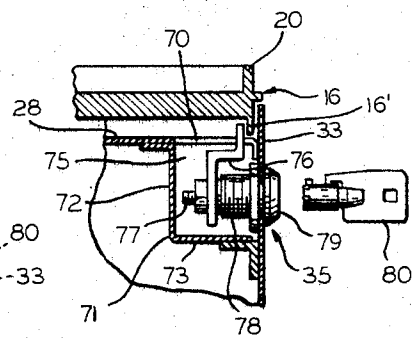


FIG.10

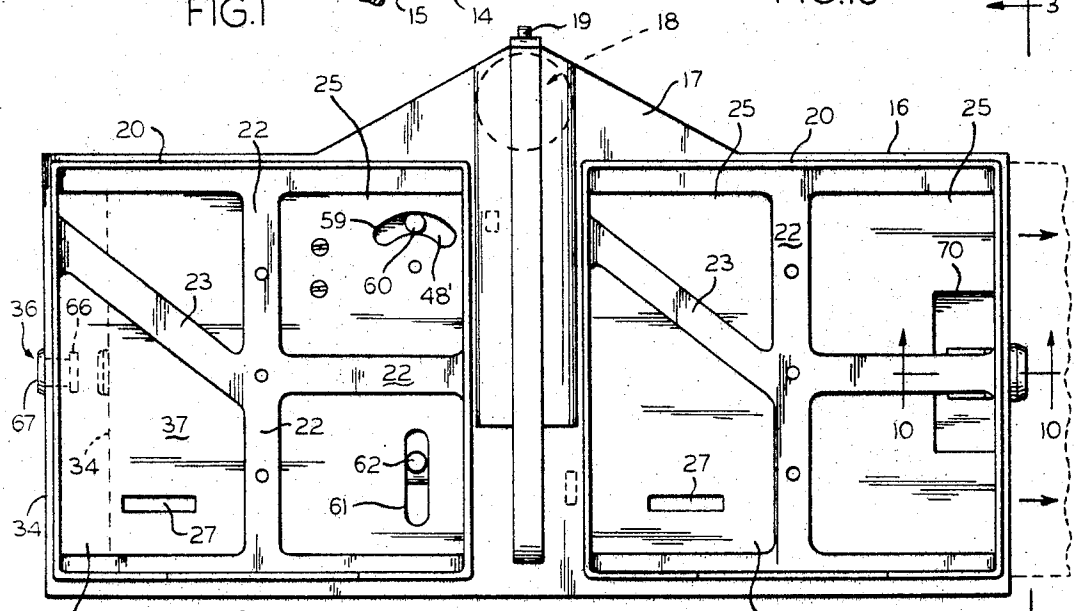


FIG.2

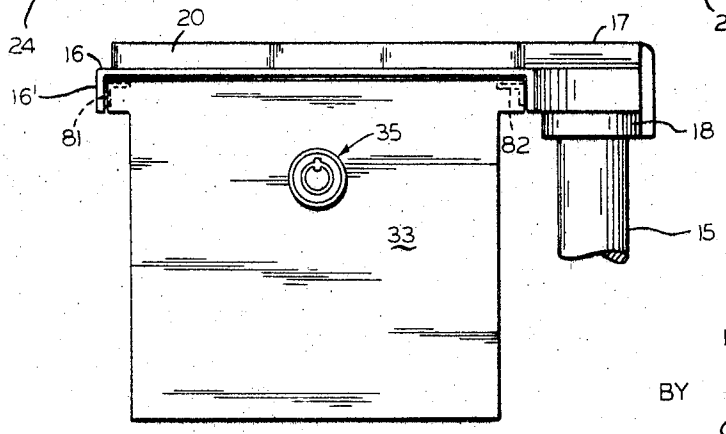


FIG.3

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VENDING MACHINE AUTOMATIC LOCKING CASH BOX

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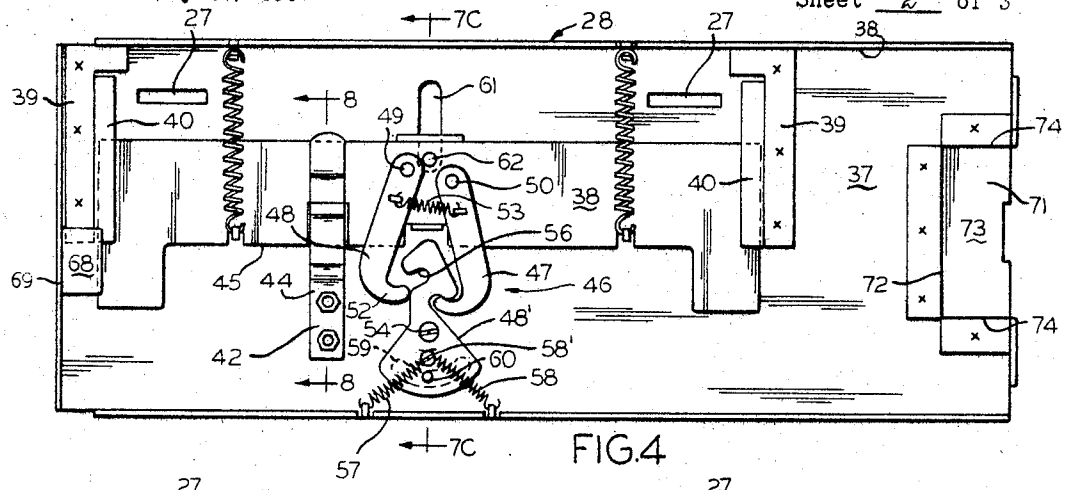


FIG.4

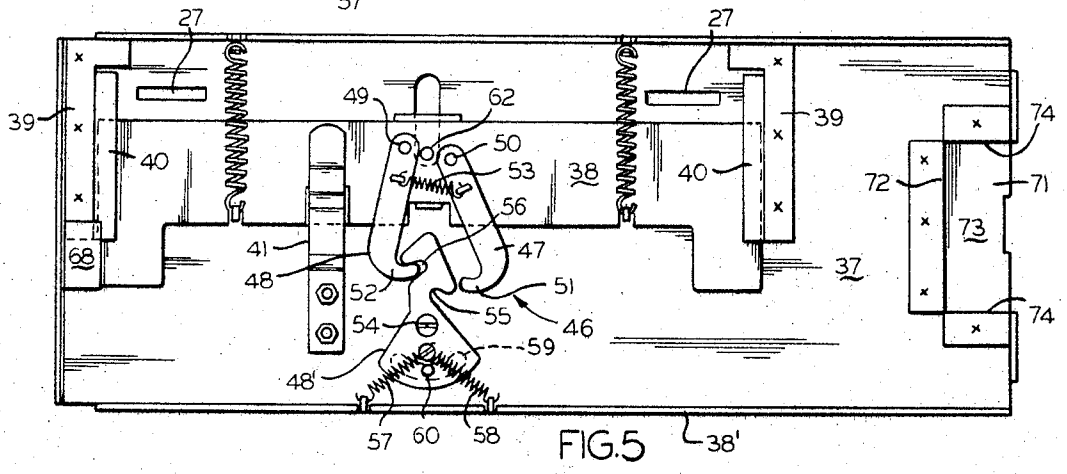


FIG.5

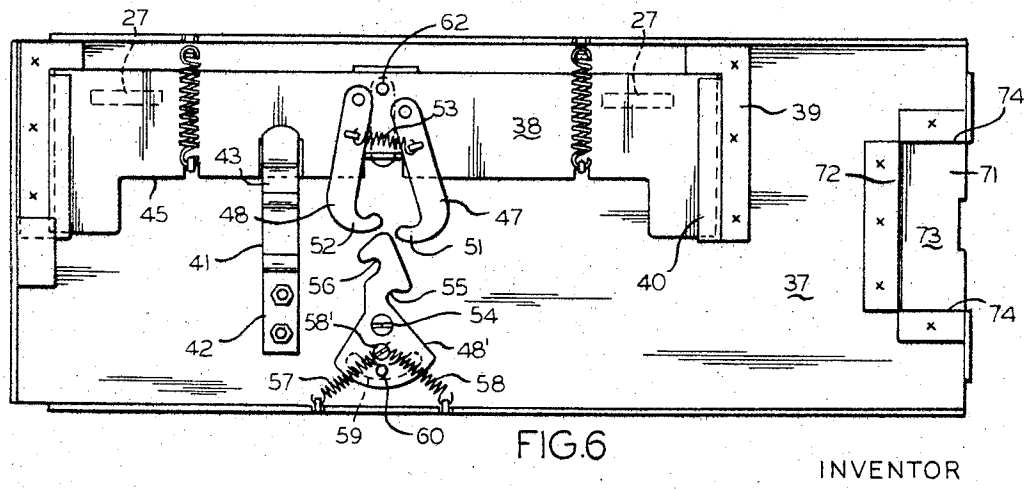


FIG.6

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VENDING MACHINE AUTOMATIC LOCKING CASH BOX

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FIG.7

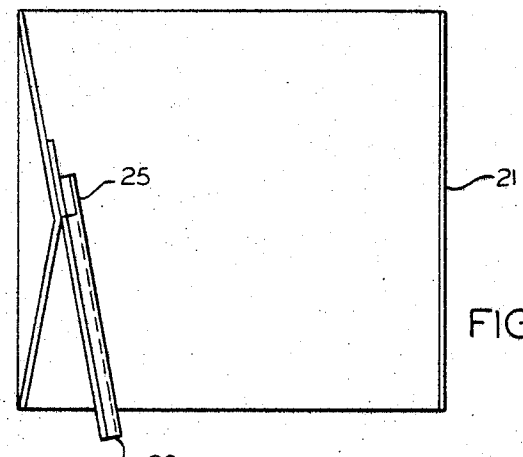


FIG.7A

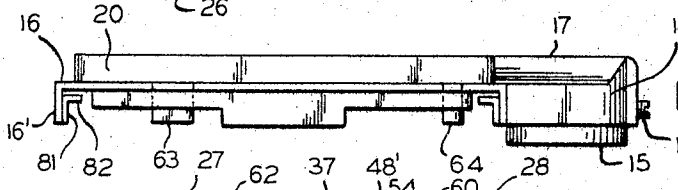


FIG.7B

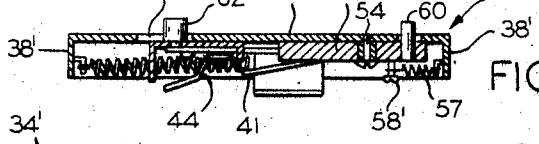


FIG.7C

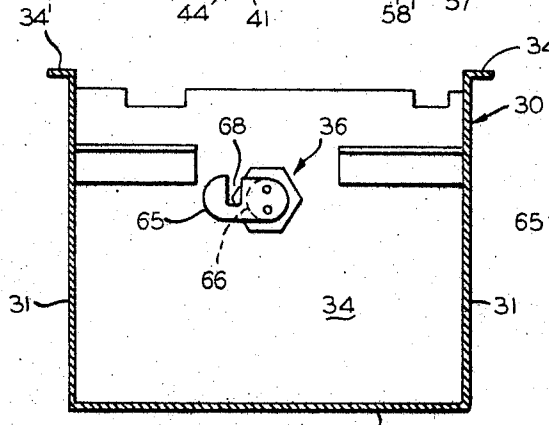


FIG.7D

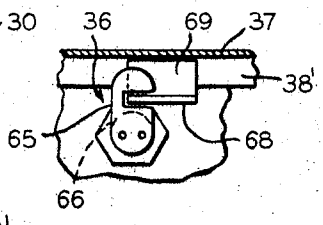


FIG.9

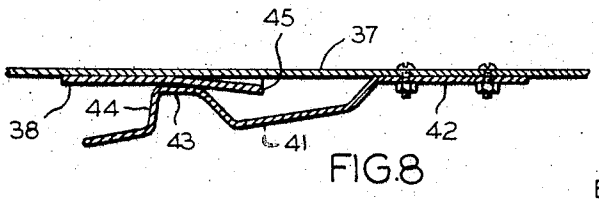


FIG.8

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United States Patent Office

3,428,216

Patented Feb. 18, 1969

3,428,216

VENDING MACHINE AUTOMATIC LOCKING CASH BOX

Richard K. Bolen, Morris, Ill., assignor to The Northwestern Corporation, Morris, Ill., a corporation of Illinois

Filed July 18, 1967, Ser. No. 654,132

U.S. Cl. 221—154 9 Claims

Int. Cl. G07f 9/06

ABSTRACT OF THE DISCLOSURE

An automatic locking cash box for bulk vending machines and vending machine stands is provided with a cover having coin slots through which coins from the coin chutes of the vending machines may drop into the box. The cover is provided with means for closing said coin slots and actuating means responsive to tripping mechanisms for moving said coin slot closing means into operative positions automatically when said coin box is removed from the vending machine or from the vending machine stand.

BACKGROUND OF THE INVENTION

This invention relates generally to merchandise vending machines and to vending machines mounted on the shelves of stands with coin boxes removably positioned beneath said shelves, such as disclosed in applicant's pending patent application entitled, "Vending Machine Assembly Including a Stand With a Coin Box Therein," Ser. No. 571,751, filed Aug. 11, 1966, now Patent No. 3,390,753. More particularly, the invention relates to improvements in said cash boxes in which the cash box is provided with a cover which may be locked thereon but which has slots for admitting coins therethrough from the vending machines. Means is provided for automatically closing the coin slots as the coin box is removed from the vending machine or the stand.

Heretofore, the vending machine operator or serviceman who serviced the machines on location necessarily had access to the interior of the coin or cash box of the machine and to the coin contents thereof. Misappropriation, theft and loss of collected coins by such servicemen employees and/or others was not uncommon. However, with the introduction of the vending machine assemblies with removable coin boxes such as disclosed in applicant's above-mentioned pending patent application, it was no longer essential or necessary for the servicmen to have access to the coins of the coin box. The filled coin boxes could be entirely removed from the machine or stand and an empty cash box substituted for the filled one. However, it was obvious that unless the cash boxes were provided with covers the removal of which could be independently controlled, i.e., locked or unlocked, the problem could not be solved. Furthermore, it was necessary to provide access means to the interior of the boxes for the coins from the vending machines. Moreover, it was necessary to afford a structure which would provide independent means for controlling said coin access means in order to safeguard against unauthorized removal of coins from the cash box through said access means.

SUMMARY OF THE INVENTION

The cash box of this invention comprises a container of suitable configuration, size and construction adapted to be

removably positioned in a vending machine or in a stand for a vending machine so that the coins from the coin chute of the vending machine may be deposited in said coin box. In the embodiment chosen for illustration, the coin box is of the type for use with vending machines mounted on the shelves of stands of the type disclosed in my aforementioned co-pending patent application. The box may be slidably positioned beneath the shelf of the stand on which shelf the vending machines are mounted. The box is provided with a removable cover which may be locked in position and the means for unlocking said cover may be retained by the owner of the machines or the employee in charge of coin control at a central location.

The cover is provided with slots positioned in alignment with the lower end of the coin chute of the vending machines to enable the coins from the machines to drop through the slots into the cash box. Means for blocking or closing said coin slots is provided on said cover, said means being controlled by actuating means likewise contained or mounted on said cover. The actuating means is in turn controlled by trigger mechanisms mounted in the machine or in the vending machine stand shelf so that removal of the box from the stand or machine automatically enables the triggering mechanism to cooperate with the actuating mechanism to release the locking means thereby closing the coin slots.

Hence the coin box which the serviceman removes from the machine or stand is in a completely closed and locked condition. The serviceman then replaces the removed box by an empty box in which the coin slot locking means has been pre-set in open position prior to said cover having been locked on the box preferably at the central location by the coin control employee or the machine owner. The filled coin box is then transported by the serviceman employee to the office or central location where the coin control employee may unlock the cover and remove the coins from the box.

Means for locking the cash box to the stand or the vending machine is incorporated in the box, the key or control means of which may be in the possession of the service operator.

It is therefore an important object of this invention to provide an automatic self-locking cash box for vending machines and vending machine stands.

Another important object is to afford a cash box having means for admitting coins thereto but designed so that access to the interior of the box may be controlled by someone other than the vending machine service employee.

Still another object of this invention is to provide a cash box and vending machine or vending machine stand in which the triggering mechanism for closing the coin access means of the cash box is incorporated in the machine or stand.

Still a further object is to afford a cash box with a removable cover having separate means for locking the cash box in operative position and separate means for locking the cover on the cash box.

Yet a further object is to provide means in the cover adapted to cooperate with the triggering means for releasing or actuating the coin access closing means.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel features of construction, arrangement and a combination of parts hereinafter fully described, illustrated in the accompanying drawings and

particularly pointed out in the appended claims, it being understood that various changes in the form, proportion, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

For the purpose of facilitating an understanding of my invention, I have illustrated in the accompanying drawings a preferred embodiment thereof, from an inspection of which, when considered in connection with the following description, my invention, its mode of construction, assembly and operation, and many of its advantages should be readily understood and appreciated.

Referring to the drawings in which the same characters of reference are employed to indicate corresponding or similar parts throughout the several figures of the drawings:

FIG. 1 is a perspective view of a coin box embodying the principles of my invention mounted beneath a pair of vending machines in turn mounted on a stand, a fragmentary portion of which is shown and showing in dotted outline the coin box being removed therefrom;

FIG. 2 is a top plan view of the shelf of the stand of FIG. 1 with the coin box mounted thereunder and showing in dotted fragmentary outline the coin box being removed therefrom in the direction shown by the arrows;

FIG. 3 is an end view taken on the plane of line **3—3** in FIG. 2 of the drawings and viewed in the direction indicated;

FIG. 4 is a bottom view of the cover of the coin box showing the coin slot blocking mechanism held in fully open position by the actuating mechanism;

FIG. 5 is a view similar to FIG. 4 but showing the slot blocking mechanism cocked or preset preliminary to being triggered for closing the coin slots;

FIG. 6 is a view similar to FIGS. 4 and 5 but showing the coin slot blocking member in fully closed position with the actuating mechanism in operative position after it had been triggered and released;

FIG. 7 is an exploded partially sectional and partially end view of the vending machine stand shelf and coin box assembly showing in FIG. 7*a* the bottom portion of the vending machine with the coin chute therein, in FIG. 7*b* the vending machine stand shelf, in FIG. 7*c* the coin box cover in section taken on the plane of line **7*c*—7*c*** in FIG. 4 of the drawings, and in FIG. 7*d* the coin box in section taken on the plane of line **7*d*—7*d*** in FIG. 4 of the drawings;

FIG. 8 is an enlarged fragmentary sectional view showing a detail of construction;

FIG. 9 is a fragmentary sectional view showing another detail of construction; and

FIG. 10 is a fragmentary sectional view, taken on the plane of line **10—10** in FIG. 2 of the drawings, showing a detail of construction.

DETAILED DESCRIPTION OF THE INVENTION

In FIG. 1 of the drawings, reference numeral **10** indicates generally a pair of coin controlled bulk vending machines mounted on a stand or pedestal, a fragmentary portion of which is identified generally by reference numeral **14** and which pedestal may be of the type disclosed in my aforementioned co-pending patent application. Stand **14** includes a support column **15** and a shelf **16** mounted thereon. The shelf **16** may be formed with a bracket member **17** of triangular configuration extending rearwardly therefrom. The bracket member **17** may be formed with a tubular collar **18** opening downwardly therefrom and internally threaded so that it may be readily mounted on the top of column **15**. A set screw **19** may be provided to lock the shelf in place.

Shelf **16** is formed with a continuous depending flange **16'** encircling the marginal edges thereof. One of the end wall flanges **16'** is formed with a plurality of spaced-apart recesses or cutouts **16''** opening to the bottom edge thereof. The function of these cutouts will be disclosed as the description proceeds.

As in the aforementioned co-pending patent application, the shelf **16** is provided with a pair of rectangular-shaped upstanding rims **20, 20** adapted to receive thereon in encircling relationship the bottom marginal edges of pedestals **21** of the vending machines **12**. The areas of the shelf **16** circumscribed by the rectangular or square shaped rims **20** are substantially open except for a plurality of cross arms or support members such as **22**, one of which **23** is obliquely or angularly disposed with relation to the pair of cross arms **22** positioned in 180° alignment. This then provides an open space **24** of somewhat larger area than the other spaces **25** defined by the various cross arms **22**. The purpose of this space will become apparent as the description proceeds.

Directing attention to FIG. 7*a* which illustrates the pedestal **21** of the vending machine **12**, it will be noted that a coin chute **25** is positioned therein with its bottom end **26** depending below the bottom edge of the pedestal **21**. Thus the bottom end **26** of the coin chute **25** extends down through the open space **24** until it almost abuts a coin slot **27** formed in a coin box cover indicated generally by reference numeral **28**. The cover **28** is designed to lock on and close the top or open end of a cash box indicated generally by reference numeral **30**.

The coin box **30** is of generally rectangular cross-section as defined by side walls **31, 31**, integrally formed bottom wall **32** and a pair of end walls **33** and **34**. The top marginal edges of the side walls **31** may be outwardly flanged as at **34'** (see FIG. 7*d*). The purpose of this will become apparent as the description proceeds.

Coin box end wall **33** is provided with means indicated generally by reference numeral **35** for locking the box in position under the shelf **16** (see FIG. 10), and end wall **34** is provided with means indicated generally by reference numeral **36** for locking the cover **38** onto the box **30** (see FIGS. 7*d* and 9). Both locking means are independent one of the other and will be disclosed in greater detail as the description proceeds.

Turning now to the novel cash box co ver **28** and the triggering, actuating and lock-out mechanisms associated therewith, attention is directed to FIGS. 4 through 8 inclusive. The lid or cover **28** comprises the top wall **37** the marginal edges of which are bent perpendicularly downward to form flanges **38'**, said flanges encircling the top wall **37**. The coin slots **27** are formed in spaced relationship in the top wall **37** and positioned so that when the coin box is in operative position, said slots are positioned one directly under each of the coin chutes **25** of each vending machine **12**.

It should be noted that when the cover **28** is locked onto the cash box **30** by the locking means **36** the only access to the interior of the box is through the coin slots **27**. To insure automatic closing or lock-out of these slots at all times when the box itself is not in operative position beneath the vending machine or stand, novel lock-out means is provided which will now be described in detail.

The lock-out means comprises a lock-out plate or strip **38** slidably mounted to the under surface of the top wall **37** by means of brackets **39—39**, the inner marginal edges **40—40** of which are struck from and bent outwardly from the brackets **39** so as to support the marginal edges of the lock-out strip **38** in sliding relationship. A pair of coil springs **40—40** are mounted and positioned to maintain the lock-out strip in a normally coin slot blocking relationship as shown in FIG. 6 of the drawings. To insure the normal coin slot lock-out positioning of the lock-out strip **38**, a lock-out leaf spring **41** is afforded. Said leaf spring **41** has one end **42** affixed to the inner surface of the cover **37** and has an intermediate portion bent inwardly in a direction toward the top wall **37** so as to afford a vertical surface or segment **44** (FIGS. 7*d* and 8). Normally this vertical segment **44** abuts the adjacent edge

45, thereby maintaining the plate 38 in the lock-out position shown in FIG. 5 of the drawings. In order to permit the plate 38 to be moved to a position unblocking the coin slots 27, the leaf spring must be bent away from the plate 38 to disengage the vertical segment 44 from abutting the edge 45 of the plate, as shown in FIGS. 7*c* and 8.

To maintain the lock-out plate 38 in a position whereby the coin slots 27 are open or unobstructed (see FIGS. 4 and 5), a novel locking or actuating mechanism is provided. This mechanism comprises a cooperating cam and pawl arrangement indicated generally by reference numeral 46 and includes a pair of lock-out pawls or hook-like members 47, 48 adapted to cooperate with a cam 48'. Pawls 47, 48 are pivotally connected to the lock-out plate 38 as at 49, 50, it being noted in FIGS. 4, 5 and 6 that pivot 50 is positioned closer to plate edge 45 than is pivot 49. Consequently, since the pawls are of equal length, the hook end 51 of pawl 47 is positioned below the plane of hook end 52 of pawl 48 (see FIGS. 4, 5 and 6). The reason therefor will become apparent as the description proceeds. Intermediate the length of the hooks 47, 48 the same are joined together by a coil spring 53 (see FIGS. 4, 5 and 6 of the drawings).

The cam 48' is pivotally mounted to the plate 37 by a centrally positioned pivot member 54. The portion of the cam 49 adjacent the pawl 47, 48 is formed with two indentations 55 and 56 respectively, each opening to opposite sides of the pawl with indentation 55 being positioned further from the outer end of the cam than indentation 56. The hook ends 51, 52 of the pawls 47 and 48 are adapted to cooperate with the indentation 55, 56 to hold the lock-out plate 38 in unobstructing positions as shown in FIGS. 4 and 5 of the drawings. When hook end 51 is in operative position in indentation 55, it will be noted that the lock-out plate 38 is positioned further from the coin slots 27 than when the opposite hook end 52 is in operative position in the indentation 56. Again the purpose thereof will become apparent as the description proceeds.

The cam 48' is maintained in a normally upright position, the plane of which is perpendicular to the major axis of the plate 38, by a pair of coil springs 57, 58 disposed in angular relationship one to the other and connecting the cam, at a point 58' below the pivot point 54, to the edge of the cover 37 as shown in the several figures of the drawings.

The cover top wall 37 is formed with an arcuate slot 59 positioned above the cam 48' as shown in FIGS. 2, 4, 5 and 6 of the drawings. Through this slot protrudes a lug 60 formed or connected to the cam 48'. It will likewise be noted in FIGS. 2 and 4–6 of the drawings that a straight slot 61 is also formed and spaced apart but in aligned position with the slot 59 in the cover top wall 37. Through this slot 61 another lug 62 protrudes, this lug being mounted on the lockout plate 38. Lugs 60 and 62 respectively are adapted to cooperate with triggering members or lugs 63 and 64 respectively, which depend in aligned positions from the shelf 16 (see FIG. 7*b*), when the cash box with the lugs 60 and 62 protruding therefrom is slid into operative position in the shelf 16 and when the same is removed therefrom in the direction of the arrows shown in FIGS. 1 and 2 of the drawings. The operation of the triggering and lockout mechanism will subsequently be disclosed in greater detail.

As was previously indicated, separate locking mechanisms are provided for locking the cover to close the cash box 30 and to lock the cash box itself in position beneath the vending machine or the shelf 16 on which it is supported. Referring to FIGS. 7*d* and 9 of the drawings, it will be noted that the cover locking mechanism 36 comprises a slotted lug 65 mounted on a rotatable shaft 66 channeled through the end wall 34 and terminating on the outside thereof in a locking member 67 which may be controlled by a key (not shown). The lug 65 is slotted as at 68 so that when the same is rotated or turned by the key to the upright position shown in FIG. 9, the slot embraces the edge of a horizontal leg 68 of a bracket 69. The bracket is mounted on the flange 38' of the top wall 28 so that when the slotted lug 65 is moved into upright operative position and engages the bracket leg 68, the top cover is securely locked on the coin box 30.

The opposite end of the cover 28 is formed with a rectangular opening or cutout 70 and affixed thereto or integrally formed therewith and depending therefrom, is a housing 71 having a wall 72, bottom wall 73 and a pair of end walls 74. These walls define an enclosure 75 open to the top and one end of the cover plate. However, when the cover is operatively positioned, the end wall 33 of the box effectively closes the open end of the enclosure leaving only the opening 70 at the top thereof.

The enclosure 75 is adapted to house therein the means 35 for locking the box in operative position in the stand. Simultaneously the walls 72, 73 and 74 complete the closure of the coin box while at the same time affording access for the locking means to the enclosure 75 through the top opening 70.

The box locking means 35 comprises a tongue 76 mounted on a rotatable shaft 77 positioned through a locking tumbler 78 journalled through the cash box end wall 33 and terminating in an outer boss 79 having a keyhole formed therein adapted to receive a key 80. The locking tongue 76 may be rotated in and out of operative position by said key. Thus, the tongue 76 may be rotated from a horizontal position to a vertical plane after the cash box has been moved into operative position. When positioned in said vertical plane, the outer end of the tongue abuts the depending flange 16' of the shelf 16, thereby locking the cash box in immovable position on the stand.

The cash box 30 may be slidably supported beneath the shelf 16 by any suitable means but, as shown in FIGS. 3 and 7 of the drawings, comprises a pair of channels or brackets 81, 81 of inverted L-shaped cross-section mounted to the inside of the depending flange 16' with their horizontal legs 82, 82 in spaced relationship with the bottom of the shelf 16. The cash box 30 is slid into position by first inserting the ends of the side wall flanges 34' in the space between the bracket leg 82 and the bottom of the shelf 16 so that the cash box is supported by the flanges 34' and the bracket 82. It should further be noted that as the cash box is slid into position beneath the shelf 16, the recesses 16'' formed in the depending end flange 16' of the shelf permit the upwardly protruding lugs 60 and 62 to pass therethrough without obstruction.

OPERATION

The empty cash box is furnished to the serviceman or operator by the vending machine owner or the coin-control employee at the central office or service location of the owner. The cash box as supplied to the employee has the cover 28 locked thereon and the key of the lock 36 is retained by the owner or coin-control employee. However, prior to locking the cover in position, the lockout plate 38 is set in the position shown in FIG. 4 of the drawings with the lockout pawl 47 engaged in the recess 55 of the cam 48'.

When the service operator reaches the location of the stand 14, he inserts the cash box endwise so that the cash box flanges 34' are inserted with the flanges 34' supported by the bracket 81. The box is pushed or slid in a direction opposite to that shown by the arrow in FIG. 1. As the cash box slides into position, the lug 60 mounted on the cam 48' is brought into engagement with the depending triggering lug 64. This causes the cam 48' to rotate in an arcuate path, moving the recess 55 of the cam so that the hook 51 of the lockout pawl 47 is disengaged therefrom. This, of course, releases the lockout plate 38 so that the springs 40 draw the same toward closure of the coin slots 27. However, before the upper edge of the plate 38 reaches the coin slots 27, the recess 56 moves into engagement with the hook 52

of the other pawl **48**, thereby cocking the lockout plate **38** in the position shown in FIG. 5 with the coin slots **27** remaining unobstructed or open. The rotation of the cam **48** is accomplished against the action of the spring **58** so that as soon as the box has moved sufficiently for the lug **60** to have passed the position of the trigger lug **64**, the cam **48'** is returned to its upright position.

The coin box now having passed the triggering lugs **63** and **64**, the box continues to slide until it reaches the full operative position with the end wall **34** in abutment with the end portion of the depending flange **16'** of the shelf **16**. In this position the coin slots **27** are positioned directly below, and in alignment with, the bottom ends **26** of the vending machine coin chutes **25**. The key **80** is then used in the lock **35** to rotate the tongue **26** into engagement with the depending flange **16'** of the shelf, thereby locking the box in position under the shelf.

When it is desired to remove the cash box, the key **80** is inserted into the lock **35**, the tongue **76** is rotated thereby to a horizontal position disengaging the same from the shelf flange **16'** so that the box may be pulled out in the direction indicated by arrows in FIGS. 1 and 2 of the drawings. When it is pulled out sufficiently so that the lug **60** is brought into engagement with the triggering lug **64**, cam **48'** is again rotated arcuately but this time in the opposite direction and against the action of the spring **57**. This time the recess **56** of the cam **48'** is rotated out of engagement with the hook end **52** of the pawl **48**, thereby completely releasing the lockout plate **38** so that the springs **40** move the plate into the position shown in FIG. 6 of the drawings and thereby effectively locking or closing the coin slots **27**. Thus, by the time the cash box **30** is removed from the stand, the coin slots are closed. They cannot be reopened, except by removal of the cover, by virtue of the bottom edge of the lockout plate **45** engaging the vertical segment **44** of the release spring **41**.

It should be noted in FIG. 8 of the drawings that a portion of the lockout plate **38** is formed so that the same is spaced from the cover top wall **37** sufficiently so that a firm immovable engagement between the lockout plate **45** and the vertical segment of the release spring **41** is insured. The filled cash box may then be transported to the coin-control operator who has retained the key to the cover lock **67**. To facilitate transportation, a carrying handle such as **84** may be pivotally mounted on the side **31** of the cash box **30**.

From the foregoing description, it should be apparent that I have provided a novel automatic self-locking cash box for vending machines which enables the machine to be serviced without affording access to the contents of the cash box to the serviceman but which provides access for coins to drop into the cash box from the coin chutes of the vending machines. These coin access means, however, are automatically closed as the cash box is being removed from operative position beneath the vending machines and/or the shelves of the stands on which they may be mounted.

What I claim and desire to secure by Letters Patent of the United States is:

1. A coin controlled merchandise vending machine having a coin chute and a coin box, said coin chute having one end adapted to receive coins inserted into the machine and a free end adapted to guide the said coin to said coin box

said coin box having a cover adapted to close said coin box, said cover having at least one coin slot aligned with the end of the coin chute positioned to receive coins from said coin chute;

locking means for locking said cover on said coin box;

independent locking means for locking said coin box in operational position within said vending machine;

lockout means associated with said cover for closing said coin slot;

triggering means adjacent said cover; and

actuating means on said cover responsive to said triggering means for operating said lockout means as said coin box is moved in and out of operational position with said vending machine.

2. The vending machine of claim **1** in which:

said first-mentioned locking means comprises a bracket having a horizontal leg depending from an end of said cover;

a slotted lug mounted on a rotatable shaft, said rotatable shaft journaled through an end wall of said coin box; and

key-controlled locking means for controlling the rotation of said shaft and attached bracket from a horizontal position to a vertical position whereby the edge of said bracket horizontal leg is retained in the slot of said slotted lug.

3. The vending machine of claim **1** in which:

said second-mentioned locking means comprises a tongue mounted on a rotatable shaft, said rotatable shaft journalled through an end wall of said coin box;

key-controlled locking means for controlling the rotation of said shaft and attached tongue from a horizontal position to a vertical position a stand for said vending machine, said standing having a shelf;

said shelf formed with a depending marginal flange, said tongue adapted to abut said flange when rotated to its vertical position thereby locking said cash box in position within said vending machines, and said tongue positioned in an enclosure opening to the top of said cash box cover.

4. The vending machine of claim **1** in which:

said lockout means comprises a plate slidably mounted beneath said coin slot; and

spring means connecting said plate and said cover, said spring means normally urging said plate to a position blocking said coin slot.

5. The vending machine of claim **3** in which:

means is provided for preventing the unauthorized movement of said plate from the coin-slot closing position from outside the cash box, said means comprising a leaf spring mounted beneath said cover, said leaf spring having a segment formed perpendicular to said plate and normally abutting the edge of said plate when the same is positioned in said coin-slot closing position.

6. The vending machine of claim **1** in which:

said actuating means comprises hooking means mounted on said lockout means; and

hook-engaging means mounted on said cover, said hook-engaging means responsive to triggering means to release said hooking means whereby to release said lockout means for movement to a coin slot closing position.

7. The vending machine of claim **4** in which:

said hooking means comprises a pair of pawls with hook-like ends, said pawls being pivotally mounted in said lockout means, said hook-engaging means comprising a cam pivotally mounted beneath said top wall, said cam having a pair of recesses opening to opposite edges of said cam, said pawls adapted to releasably engage portions of said cam adjacent said recesses, and said cam rotatable about a perpendicular axis in response to triggering means to release said pawls.

8. The vending machine of claim **5** in which said vending machine is mounted on the shelf of a stand:

said triggering means comprises at least one triggering lug depending from said stand shelf; and

at least one lug positioned on said cam and protruding upwardly in the path of said triggering lug whereby said cam is caused to rotate when said cam lug is moved past said triggering lug thereby moving at least one of said pawl hooks out of engagement with at least one of said recesses.

9. The vending machine of claim 6 in which:

said top wall has an arcuate slot formed therein, said cam lug protruding through said slot;

a straight slot formed in said top wall;

a lug mounted on said lockout plate and protruding through said straight slot; and

a second lug depending from said stand shelf and adapted to abut said lockout plate lug whereby to stop the movement of said cash box in the event said lockout plate is improperly positioned.

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