

[54] **PARKING LOT COIN RECEPTACLE**

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[73] Assignee: **Parking Company of America**, Santa Ana, Calif.

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**Related U.S. Application Data**

[63] Continuation of Ser. No. 851,984, Aug. 21, 1969, abandoned.

[52] U.S. Cl. .... **232/1 R, 232/9, 232/55**

[51] Int. Cl. .... **G07b 15/00**

[58] Field of Search ..... **232/1 R, 7, 1 D, 14, 12, 57, 232/59, 58, 9**

[56] **References Cited**

**UNITED STATES PATENTS**

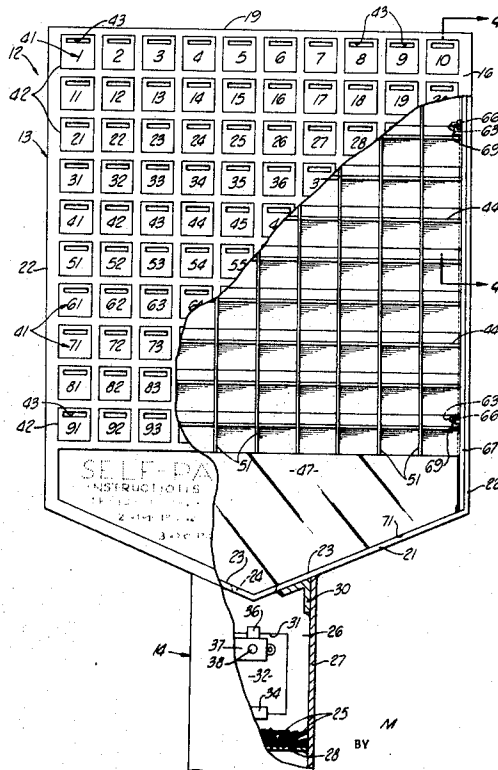
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[57] **ABSTRACT**

A closed box has formed on one wall a plurality of numbered slots to receive coins. The slots are in register with corresponding pigeonhole compartments inside the box, the compartments having sloping bottom walls. Each numbered slot relates to a corresponding stall in a self-service parking lot on which the box is located. After parking in a numbered stall, a customer goes to the box and inserts the appropriate coin through the correspondingly numbered slot. At intervals, an attendant arrives to inspect the coin compartments through a transparent rear cover to see that all occupied stalls are properly paid for. The coins are thereupon released by moving the transparent cover away from the compartments, allowing the coins to drop from the sloping bottom walls through a restricted opening into a receptacle, and warning notes are placed on nonpaying vehicles. Access to the interior of the box is afforded by an opening covered by a locked member, but the coin compartments and the receptacle cannot be reached by the servicing attendant.

**5 Claims, 4 Drawing Figures**



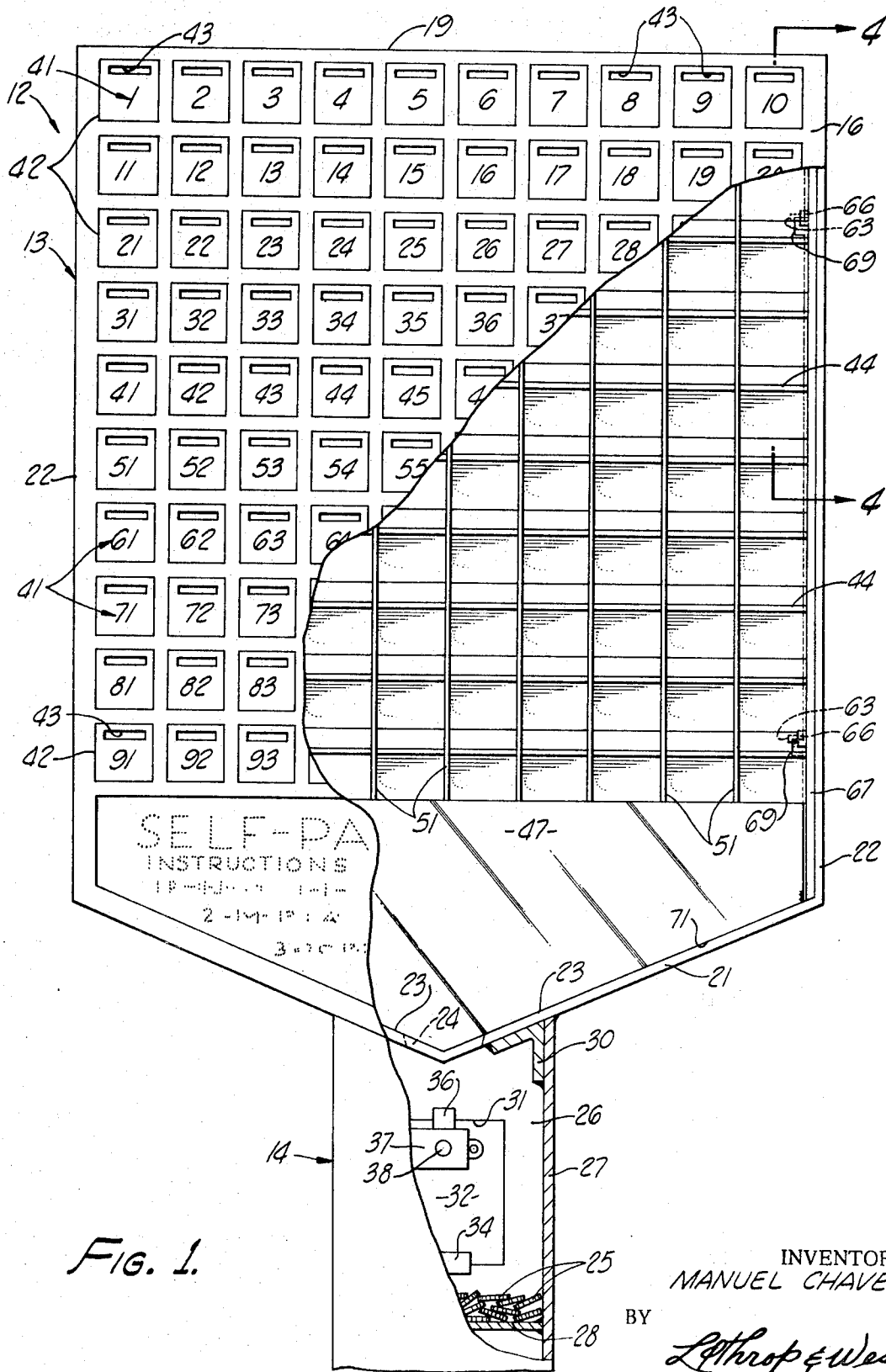


FIG. 1.

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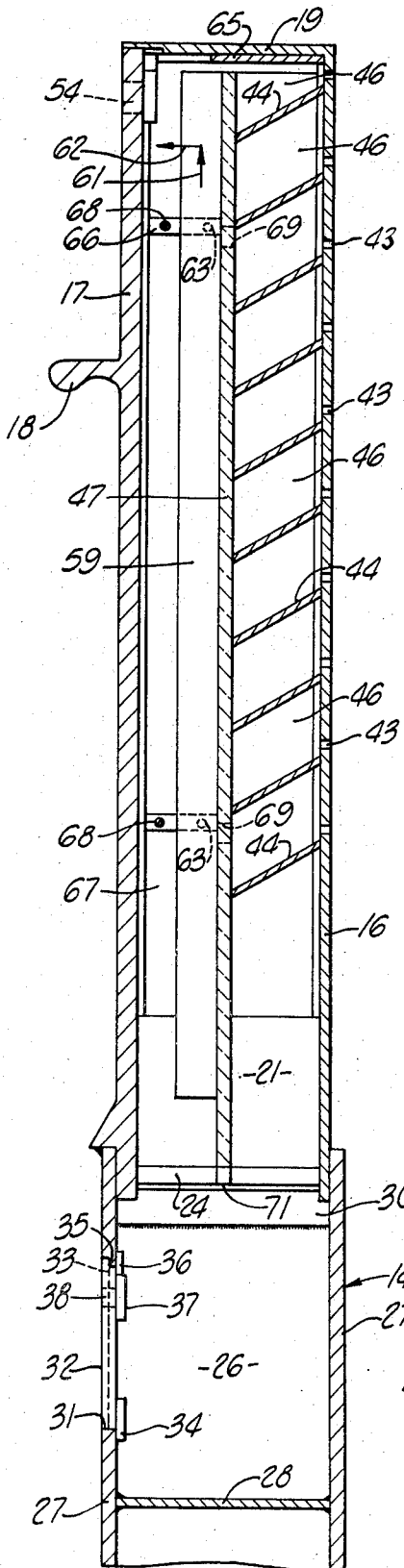


FIG. 3.

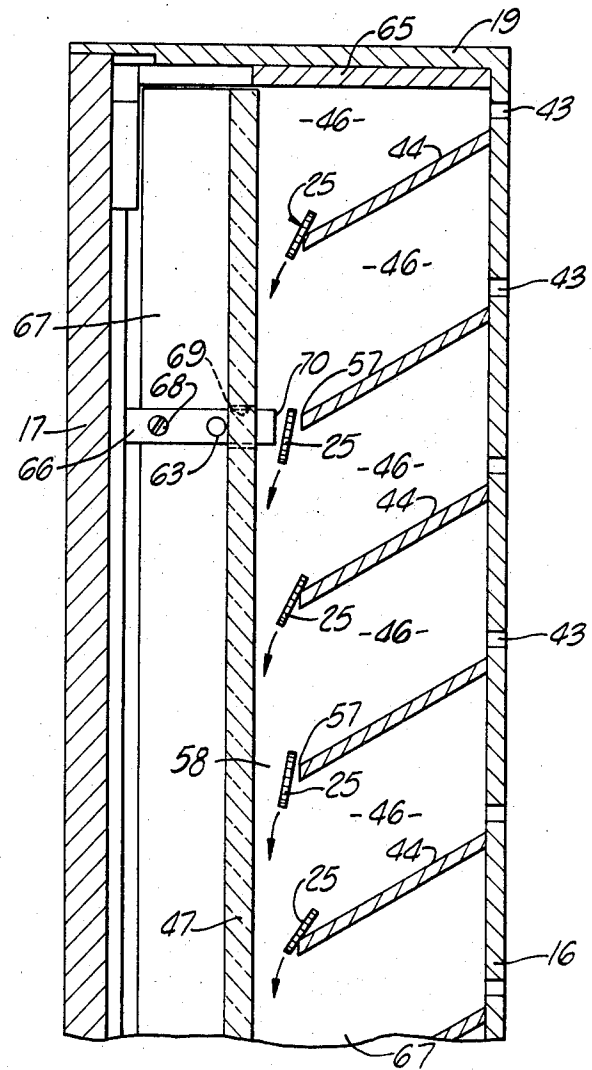


FIG. 4.

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**PARKING LOT COIN RECEPTACLE****REFERENCE TO RELATED APPLICATION:**

This is a continuation of my copending patent application Ser. No. 851,984, filed Aug. 21, 1969, now abandoned for Parking Lot Coin Receptacle.

**SUMMARY OF THE INVENTION:**

The invention relates to improvements in receptacles for collecting and temporarily storing coins in predetermined cubicles within a box relating to corresponding vehicular stalls in a self-service parking lot.

It is an object of the invention to provide a coin receptacle which not only affords a ready means for determining which stalls have been paid for but which also provides the customer with a convenient, secure depository for the parking fee placed in the receptacle.

It is another object of the invention to provide a coin receiving and storing device which can be utilized not only in conjunction with self-service parking lots but also in other environments wherein a fee is to be paid for the occupancy of any designated space, such as at a theater having assigned seat numbers.

It is a further object of the invention to provide a coin receptacle which, while affording a high degree of security against pilfering, including pilfering by the attendant of the parking lot, also readily enables an authorized person to empty the receptacle.

It is an additional object of the invention to provide a parking lot coin receptacle which is sturdy and reliable yet relatively economical both as to initial cost and maintenance.

It is another object of the invention to provide a generally improved coin receptacle.

Other objects, together, with the foregoing, are attained in the embodiment described in the accompanying description and illustrated in the accompanying drawings.

**BRIEF DESCRIPTION OF THE DRAWINGS:**

FIG. 1 is a fragmentary front elevational view showing the box mounted on the upper end of a pedestal, the lower end of the pedestal (not shown) being firmly secured to the real property forming the parking area, portions of the front wall of the box and the pedestal being broken away to reveal certain interior structure;

FIG. 2 is comparable to FIG. 1, but being a rear elevational view;

FIG. 3 is a vertical, median, sectional view, the plane of the section being indicated by the line 3-3 in FIG. 2; and

FIG. 4 is a fragmentary, sectional view, to an enlarged scale, the plane of the section being indicated by the line 4-4 in FIG. 1.

**DESCRIPTION OF A PREFERRED EMBODIMENT:**

While the coin receptacle of the invention is susceptible of numerous physical embodiments, depending upon the environment and requirements of use, very substantial numbers of the herein shown and described embodiment have been made and used in self-service parking lots, and all have performed in an eminently satisfactory manner.

The coin receptacle of the invention, generally designated by the reference numeral 12, includes a box

13 affixed to a pedestal 14 installed at a convenient location in a self-service parking lot (not shown) having a plurality of numbered stalls indicated, for example, by painting the outline of the stalls on the blacktop or concrete, with a painted numeral identifying each stall.

The box 13 includes a vertical front wall 16, a vertical back wall 17 having a handle 18 thereon, a top 19, a bottom 21 and a pair of opposite sidewalls 22.

The bottom wall 21 preferably includes a pair of oppositely inclined portions 23 (see FIGS. 1 and 2) separated by a narrow central opening 24. The slope of the inclined portions 23 is sufficient to direct coins 25 dropped thereon downwardly and toward the central chute 24, thence downwardly into a storage vault 26. The bottom structure is strengthened by angle irons 30.

The vault 26 is defined by the four vertical walls 27 of the hollow pedestal 14 and by a horizontal bottom plate 28 suitably mounted on the walls 27. Access to the vault is afforded by an opening 31 in the rear one of the four pedestal walls 27, the opening being normally closed by a closure plate 32 provided with stepped margins 33 along the top and both sides (see FIGS. 2 and 3) formed to abut against corresponding stepped shoulders 35 in the top and side edges of the vault opening 31.

A downwardly projecting, offset lip 34 on the bottom of the closure plate 32 and an upwardly projecting offset latch bolt 36 engage the inner surfaces of the adjacent pedestal wall 27 and thereby prevent unauthorized removal of the closure plate 32.

A conventional dead bolt type of lock 37 on the plate 32 includes a tumbler 38 operated by a key (not shown). In removing the closure plate 32, the key is inserted in the tumbler and rotated so as to retract downwardly the latch bolt 36. Then, using the inserted key as a handle, the upper portion of the plate is inclined away from the pedestal, followed by lifting out the plate and exposing the opening 32 through which the coins 25 within the vault are withdrawn by hand.

The embodiment shown and described herein can be utilized in a self-service parking lot having one hundred numbered stalls, or less. Accordingly, on the outer face of the front wall 16, one hundred numerical indicia 41 are afforded. Each indicia is enclosed, for convenience, within a delineated square outline 42, and above each of the numerals is a slot 43 large enough to receive a coin or folded piece of paper money inserted therethrough by the occupant of the correspondingly numbered parking stall.

As appears most clearly in FIG. 3, a coin 25, upon being inserted through the slot 43, falls downwardly onto the floor 44 of a corresponding adjacent coin compartment 46. The cubicle floor 44 is inclined downwardly and inwardly away from the slot 43 at a sufficient angle such that the coin, under the influence of gravity, slides down the floor until it encounters a barrier member 47. This positions the coin 25 at a location remote from the slot 43, which lessens the possibility of theft from the compartment 46. With the coin being located below and spaced inwardly from the front wall 16, it is next to impossible to remove the coin by fishing it out through the slot 43. Without a feature of this type, however, the coins may be stolen from the compartments rather easily by inserting a bent wire through the slots 43 to hook around the coins and pull them back out of the compartments through the slots.

The barrier 47 is preferably a vertical plate of transparent material which snugly covers the after ends of all of the one hundred compartments 46 and thereby confines the coins 25 which have been inserted into the respective cubicles.

The one hundred compartments 46 are defined by the front wall 16; by the sidewalls 22; by the inclined floors 44; and by a plurality of equally spaced, vertical, parallel divider walls 51. Consequently, when the barrier 47 is located in the closed position shown most clearly in FIG. 3, each of the cubicles 46 is isolated from the others, and a coin (or paper money) inserted in any one of the compartments can readily be seen through the transparent coin barrier 47 and thereby related to a particular stall. For greater ease in identification, the transparent barrier 47 can itself be marked with indicia, such as numerals, corresponding to the adjacent compartment identified by the numerals on the front face 16.

The numerals 31 and 32, for example, would be marked on the transparent barrier 47 as appears in FIG. 2 (the exemplary numerals 31 and 32 being shown in broken line and identified by the reference numeral 52) to identify the corresponding cubicles adjacent thereto.

Thus, by removing the strong metal back plate 17, as by opening the key-operated locks 54, tilting the upper portion of the plate backwardly and lifting the plate, the operator can immediately determine by inspection which compartments have coins located therein.

An immediate record is thereupon made of which compartments do not have coins deposited in them. This records is subsequently used to check against the stall occupancy to ascertain which stalls, if any, are being occupied without a corresponding payment in the box. Special notices are placed on vehicles occupying stalls which have not been paid for.

After making a record, as stated above, the operator releases the coin barrier 47, thereby allowing the coins and paper money in the various compartments 46 to slide down over the rear edges 57 (see FIG. 4) of the floors 44, thence to drop by gravity down the vertical channel 58 defined on the rear by the coin barrier 47 and to fall into the subjacent vault 26.

Movement of the coin barrier 47 from the coin confining position shown in FIG. 3 (wherein the barrier abuts the rear edges 57 of the compartments) to the coin releasing position shown in FIG. 4 (wherein the barrier is spaced from the edges 57 and defines the channel 58) is effected by grasping one or more of the spaced vertical ribs 59 mounted on the rear face of the coin barrier 47 and lifting the barrier, first vertically in the direction of the arrow 61 (see FIG. 3), thence horizontally rearwardly in the direction of the arrow 62 until the rear face of the barrier 47 abuts the limit stops 63 (see FIG. 4).

The limit stops 63 conveniently comprise elongated machine screws inserted in corresponding tapped openings in horizontal cleats 66 mounted on vertical side plates 67, the vertical side plates 67 being arranged in face-to-face relation with the corresponding box sidewalls 22 (see FIG. 1). The cleats 66 are secured to the side plates 67 by fasteners 68 as well as by the limit stop member 63. For stiffening, a horizontal top plate 65 joins the tops of the side plates 67.

Adjacent each of the four cleats 66, the two lateral vertical margins of the coin barrier 47 are recessed, as at 69, to accommodate the cleats and thereby allow the barrier 47 to be moved rearwardly into abutment with the limit stops 63.

After the barrier has been moved to the rearward coin-release position shown in FIG. 4 and the contents of the cubicles have dropped into the vault, the operator urges the barrier 47 forwardly (in the direction opposite the arrow 62) until it clears the front ends 70 of the cleats. At this juncture, the operator, grasping one or more of the barrier ribs 59, urges the barrier vertically downwardly (in the direction opposite the arrow 61) until the bottom edge 71 of the barrier 47 bottoms against and is supported by the correspondingly V-shaped bottom wall 21 of the box.

The peripheral edge of the barrier 47 is substantially complementary to the interior surface of the box 13. This means that there is no access to the cubicles 46 in either position of the barrier 47. As a result, the money cannot be stolen from the cubicles by the attendant who releases the coins, which is a matter of considerable importance to the parking lot owner. The central opening 24 above the vault 26 is restricted, and the money lies on the bottom plate 28, so that again the money cannot be reached by the attendant servicing the coin receptacle. Consequently, the coin receptacle of this invention protects against theft, while, nevertheless, requiring no security measures for the attendant who periodically releases the coins and checks the parking lot. This is accomplished by a simple design and without the use of cams, levers or other mechanism.

The distance between the front ends 70 of the cleats 66 and the rear edges 57 of the compartment floors 44 is substantially identical with the thickness of the movable coin barrier 47. As a consequence, the coin barrier 47 abuts very firmly against the rear edges 57 of the compartments and thereby effectively eliminates any cracks and prevents any coins from sliding out of the compartments prematurely.

It, therefore, can be seen that there has been provided a versatile, secure and reliable coin receptacle for particularly efficient use in a self-service parking lot.

The foregoing detailed description is to be clearly understood as given by way of illustration and example only, the spirit and scope of this invention being limited solely by the appended claims.

I claim:

1. A parking lot coin receiving device comprising box means defining an enclosed chamber, said box means having a front wall, a receptacle beneath said chamber, means defining a restricted opening of substantially smaller lateral dimension than that of said chamber for providing communication between said chamber and said receptacle, means in said chamber defining a plurality of compartments, said front wall having a slot therethrough for each of said compartments for permitting coins to be introduced through said front wall into said compartments, each of said compartments having a bottom wall sloping from said front wall to an inner edge,

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a barrier wall in said chamber, said barrier wall having a first position in which it is adjacent said inner edges of said bottom walls for holding coins in said compartments,

and releasable means for permitting said barrier wall to be moved only a limited distance to a second position in said chamber in which it is remote from said inner edges for releasing coins in said compartments and allowing said coins to drop through the space between said inner edges and said barrier wall into said receptacle via said restricted opening, the peripheral edges of said barrier wall being substantially complementary to the interior of said chamber so that there is no access around said barrier wall to said compartments irrespective of the position of said barrier wall.

2. A device as recited in claim 1 in which said barrier

wall is made of transparent material.

3. A device as recited in claim 2 in which said box means includes a rear wall in spaced adjacency with said barrier wall, said rear wall being movable for permitting access to said barrier wall for moving said barrier wall.

4. A device as recited in claim 3 including in addition a separate lockable closure means for said receptacle for permitting independent access to said receptacle.

5. A device as recited in claim 4 in which said means defining said restricted opening includes downwardly convergent walls extending from the periphery of said chamber to the upper end of said receptacle for directing coins released from said compartments into said receptacle.

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