

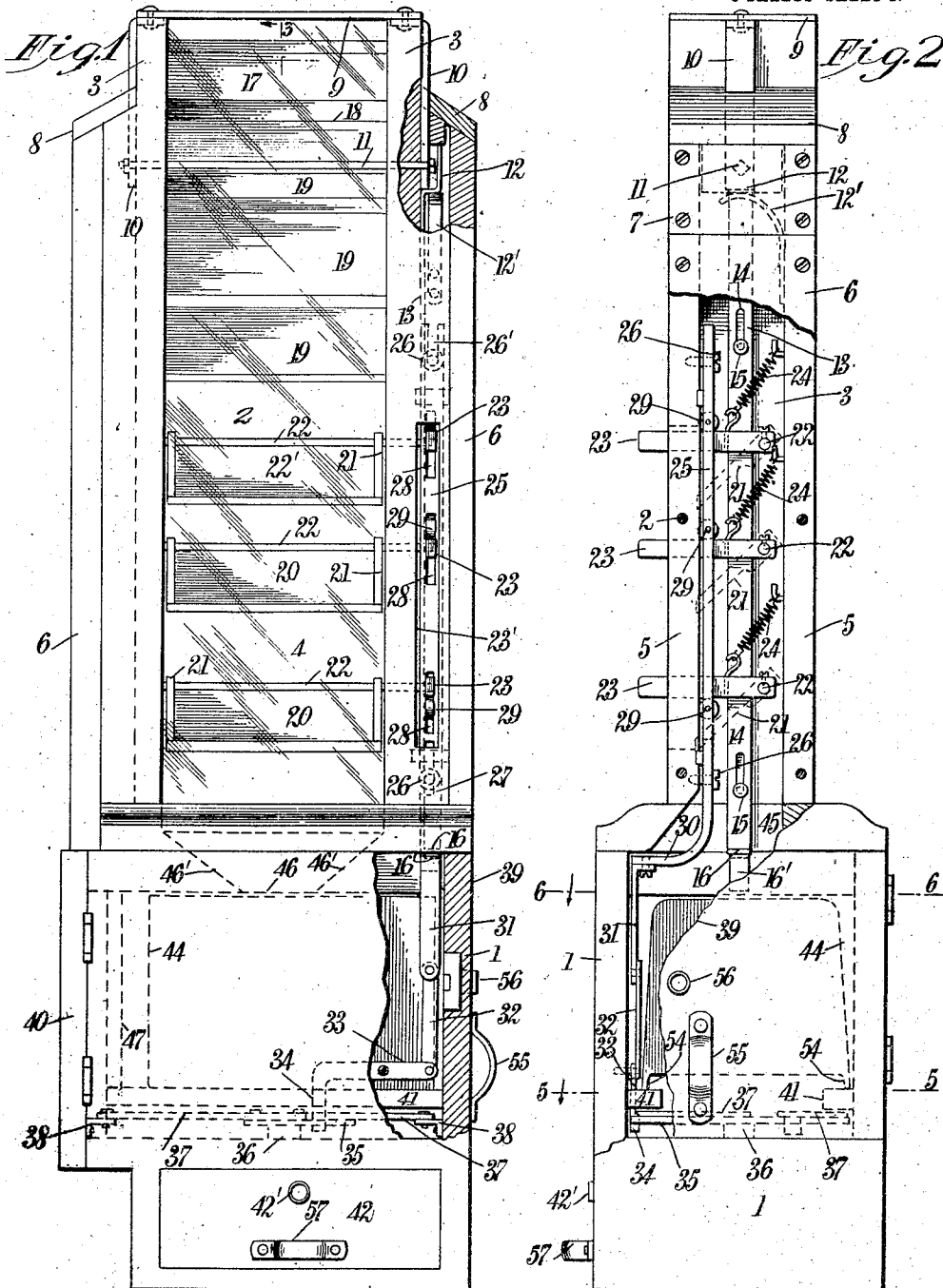
G. C. STEWART.
FARE RECEIPTACLE.

APPLICATION FILED JAN. 16, 1912.

1,047,587.

Patented Dec. 17, 1912.

3 SHEETS—SHEET 1.



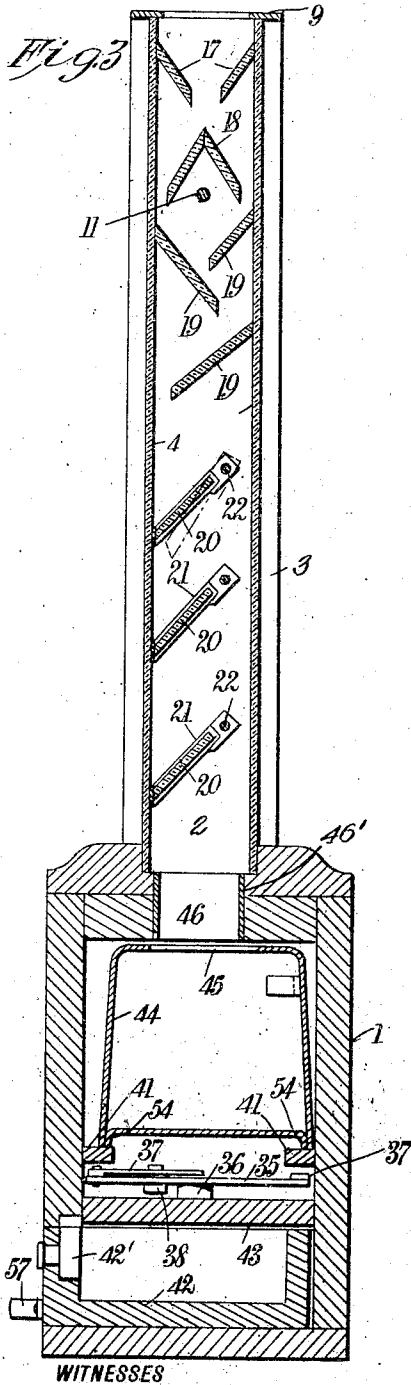
WITNESSES
F. E. Alexander
Wm. F. Nickel

INVENTOR
George C. Stewart
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ATTORNEYS

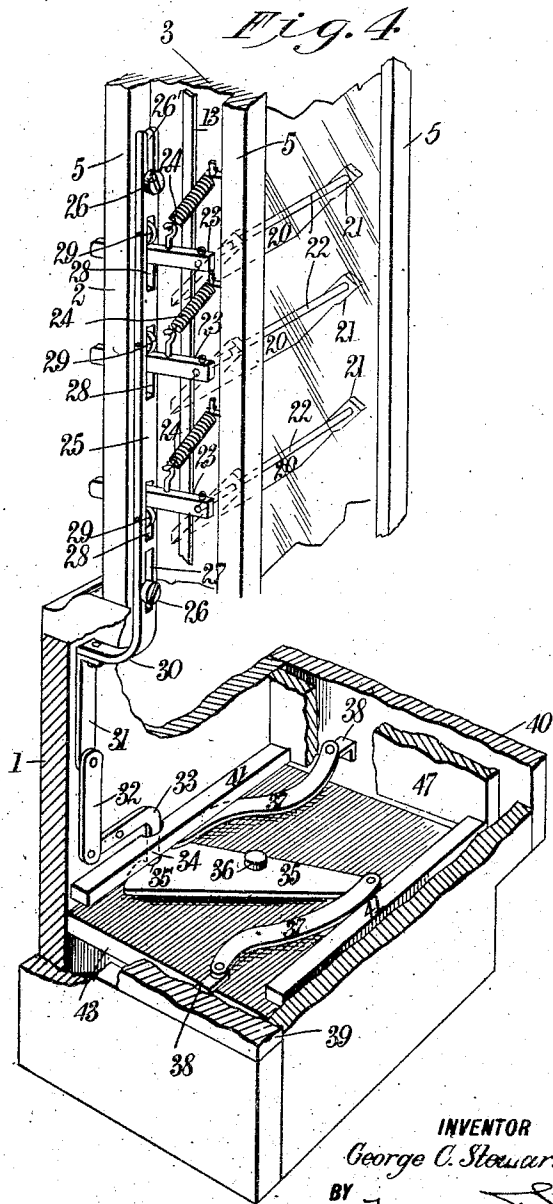
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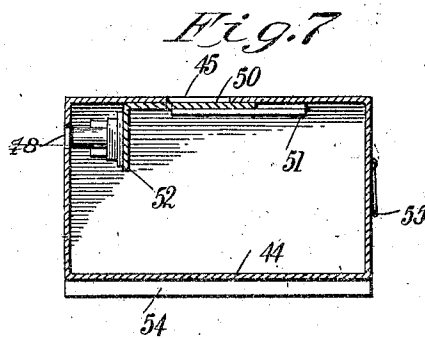
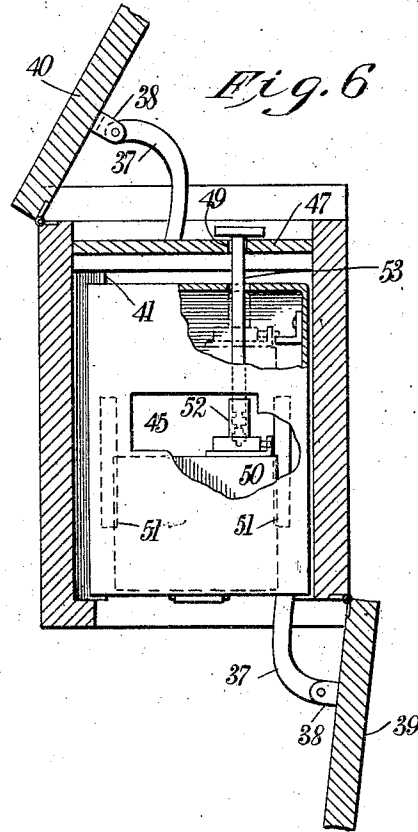
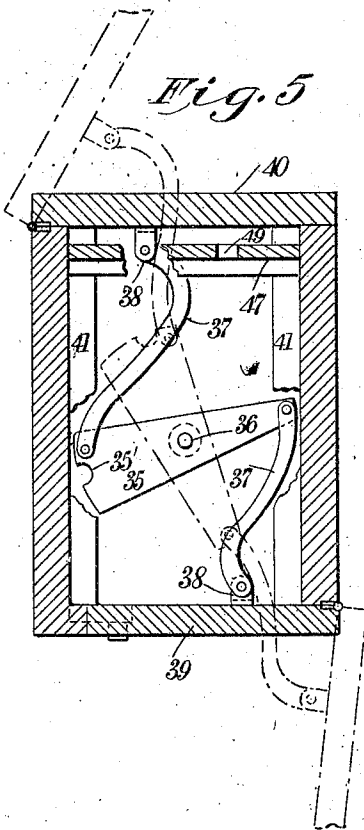
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UNITED STATES PATENT OFFICE.

GEORGE CLAUDE STEWART, OF LOUISVILLE, KENTUCKY.

FARE-RECEPTACLE.

1,047,587.

Specification of Letters Patent.

Patented Dec. 17, 1912.

Application filed January 16, 1912. Serial No. 671,428.

To all whom it may concern:

Be it known that I, GEORGE C. STEWART, a citizen of the United States, and a resident of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and Improved Fare-Receptacle, of which the following is a full, clear, and exact description.

My invention is an improvement in receptacles in which are deposited the fares of passengers of pay-as-you-enter cars and other vehicles used for public transportation; and it aims to provide a device of this sort which will be of superior construction and efficiency for the purposes which it is designed to serve. I have found that fare boxes of this type which have been heretofore used are so constructed as to have the disadvantage that coins inserted into the mouth can be stopped while in the course of dropping down into the money-box at the base of the receptacle. This makes it possible for a dishonest employee to unlock the receptacle to remove the money-box, and after taking the money-box out, to shake down the loose coins without accounting for the same.

It is one of the objects of my invention to obviate any possibility of the fare receptacle being partly robbed in this way; and to this end I provide mechanism on the interior thereof which will lock the door through which the money-box is inserted and removed, and which at the same time is connected to certain moving parts by means of which any coins in the upper part of the receptacle will be shaken down into the money-box whenever the mechanism is operated to unlock the door to permit the money-box to be removed. The door thus cannot be unlocked to remove the money-box without the loose coins being shaken down and deposited in the money-box along with the other coins in this fashion.

My improved receptacle is also constructed further with a view to prevent the opening in the money-box through which the coins are dropped in the mouth of the receptacle, being closed up before the box is removed. If the money-box could be closed before its removal from the receptacle, or even before the door through which it is removed is unlocked, it would be possible to prevent a few loose coins from dropping into the box by causing them to fall upon the closed exterior thereof; and these coins could be ap-

propriated when the box is removed by an unscrupulous employee, the same as in the case above mentioned.

My improved fare box is also provided with a small utility drawer for the convenience of the conductor; and other features and advantages thereof will be fully set forth in the accompanying description and pointed out particularly in the appended claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which the same characters of reference indicate the same parts in all the views.

Figure 1 is a front elevation, partly in section, showing my improved fare box and some of the mechanism on the interior of the same; Fig. 2 is a side elevation of the parts shown in Fig. 1, partly broken away to show the interior construction; Fig. 3 is a vertical longitudinal section on the line 3—3 of Fig. 1; Fig. 4 is a fragmentary perspective view showing the lower part of the receptacle casing broken away to illustrate the mechanism by means of which the doors are locked in place; Fig. 5 is a horizontal sectional view on the line 5—5 of Fig. 2; Fig. 6 is a horizontal sectional view on the line 6—6 of Fig. 2; and Fig. 7 is a vertical longitudinal section of the money-box which is carried in the bottom of the fare receptacle to receive the coins after they are deposited.

On the drawings the numeral 1 indicates the lower part of the fare receptacle, which is box-like in form; and 2 indicates a chute or conduit which rises from the upper side of the base 1 and has an open mouth through which the coin is passed at the top. This vertical chute or conduit 2 comprises a pair of opposite sides 3, which are made of wood or metal; and these sides 3 are connected by plates 4, of glass or other transparent material, which completely close in the interior of the chute or conduit.

The sides 3 are provided with longitudinal flanges 5 along their edges, these flanges extending outward, as shown on Figs. 2 and 4. To these flanges are secured boards 6, acting as lids or covers, between which and the outer surface of the sides 3, at the bottom of the flanges 5, is a space in which some of the operating parts are mounted. The board or cover 6 on the right of the box will terminate some distance below the top

of the flanges 5 on that side, and the remainder of the space between the two flanges will be closed by a similar cover 7. The vertical space between the flanges 5 and the cover 6 on each side of the box is covered by means of blocks 8, so as to prevent the entrance of dust or dirt between the cover 6 and the sides 3, which might clog or damage the mechanism.

The upper open end or mouth of the chute or conduit 3 is provided with a metal lining 9, this lining being in the form of a rectangular frame, and being secured to the sides 3 of the box by means of straps 10. These straps 10 are united at their lower ends by means of a bolt 11, which is passed through the box from the right-hand side and secured by a nut on its left end, as shown on Fig. 1. The head of this bolt 11 is covered and hooded by means of the bent end 12 of a sliding guard 13 having longitudinal slots 14 which receive fastening screws 15. These fastening screws secure the guard 13 to the right-hand side 3 of the chute. The lower end of this guard has an outwardly-bent end shown at 16, and this outwardly-bent end is normally engaged on its under side by an intumed lug 16', carried by one of the doors at the base of the fare receptacle. The office of this lug 16' is to lock the guard 13 at the upper limit of its vertical movement; and it is normally held in this position by means of a spring 12' engaging a shoulder below the portion 12, this spring being secured to one of the side flanges 5, as shown in Fig. 2. The effect of this construction is to keep the guard in position, with the portion 12 over the head of the bolt 11, when the lug 16' is beneath the lug 16. As a result, the bolt 11 cannot be removed, and this will prevent the taking off of the frame or lining 9. This lining 9 also serves the purpose of holding in position the glass plates 4, and if taken away, these glass plates, which are mounted in suitable grooves formed in the inner surfaces of the sides 3, could be pulled out to give access to the interior of the box, and thus facilitate the removal of the contents.

Below the open mouth at the top of the chute or conduit 3, are two downward and inward-inclined plates 17; and directly below the space between the lower edges of these two plates are arranged two other plates 18, united together along their upper edges. Other plates 19 are arranged in the manner shown on Fig. 3; below the plates 18; and beneath the plates 19 is a series of parallel inclined plates 20. These plates are preferably made of glass, but almost any material would do. Any money passed into the mouth of the chute 3 will slide down along the sides of the plates 17, 18 and 19, and drop upon the plates 20, whence they will pass down into the bottom of the recep-

tacle when these plates 20 are moved to release the coins.

The plates 20 are secured at their opposite terminal edges to arms 21, mounted upon spindles 22. These spindles are secured in bearings provided in the sides 3, and terminate at their right ends, as shown in Fig. 1, in operating arms 23, which are rigidly secured thereto. These arms 23 extend outward through the front flange 5 on the right, and to each of these arms is connected a retaining spring 24, the other ends of each of these springs being secured to the rear flange 5 on the right, as shown. These springs are normally under tension to hold the lower ends of the plates 20 against the front plate 4, the lower ends of these plates 20 being beveled off to make a snug fit for that purpose.

On the inside of the front flange 5, to the right, is arranged a sliding bar 25. This sliding bar is secured to the flanges by means of screws 26, and is notched at its upper end, as shown at 26', to permit it to move with respect to the upper screw; and slotted at its lower end, as shown at 27, to enable it to move with respect to the lower screw. Three intermediate slots are formed in this bar, as shown at 28, to allow the arms 23 to pass therethrough; and in the upper end of the two upper slots 28 is a roller 29, a similar roller 29 being arranged in the lower end of the lowermost slot 28. These rollers eliminate friction between the arms 23 and the bar 25 when the arms are depressed to move this bar.

The opposite ends of the spindles 22 may be provided with arms similar to the arms 23, connected to springs similar to the springs 24, the extra arms and springs being housed in a longitudinal space on the left side of the receptacle 1, if desired. This construction is not shown on the drawings, but obviously I may employ the extra arms and springs to enable the plates 20 to be held against the front plate 4 tightly along the entire length of their lower edges. The arms housed in the left side of the casing, however, will not extend outwardly through the front as do the arms shown at 23 on the right.

The lower end of the bar 25 is bent forward, as shown at 30, and has a downward-extending projection 31 arranged close to the front wall of the base 1 of the receptacle. This projection 31 is pivotally connected by means of a link 32 to a horizontal lever 33, pivotally mounted on the front wall of the base 1 of the receptacle, and having a downturned end 34. This downturned end fits in a notch 35' formed in one end of a locking bar 35, pivoted at 36 in the base 1. The ends of this locking bar 35 are pivotally connected to a pair of links 37; and the outer ends of these links are pivotally con-

connected by means of lugs 38 to doors 39 and 40 placed at the right and left of the base 1. Whenever the bar 25 is moved downward it raises the bent end 34 of the lever 33 and allows the doors to be pulled to open position, the bent end 34 releasing the locking bar 35, as will be apparent from an inspection of Fig. 4.

The bars 41 are arranged on the interior of the base 1, along the front and back walls, to support the money-box which receives the coins dropping down into the base 1 through the chute 2. The base 1 is also provided with a drawer 42 in the bottom, having a lock 42' and a handle 57, this drawer being for the convenience of the conductor, and designed to receive loose change, transfers, and the like.

43 indicates a horizontal partition separating the drawer 42 from the space which receives the money-box 44. This money box is supported by the strips or flanges 41 above the locking bar 35 and the links 37; and if desired I may substitute for the strips 41 a board extending from the front wall to the rear wall of the receptacle, thus completely housing the locking mechanism beneath the money-box.

The money-box 44 has an opening 45 in its top, which, when the box is in position, is directly in line with an opening 46 in the bottom of the chute or conduit 2. This opening 46 has sloping sides 46'; and the coins which are dropped into the chute pass through the opening 46 into the box 44.

At the right end of the base 1, adjacent the door 40, is arranged a transverse vertical partition 47, this partition having an aperture 49 therein which registers with an opening 48 in the rear wall of the box 44.

50 is a slide for closing the opening 45 in the box 44, and this slide moves in guides 51 on each side of the opening 45 on the interior of the money-box. The slide supports a lock 52; and 53 is the key for this lock, which passes through the openings 48 and 49, to lock the slide 50 in closed position.

The box 44 may have a ring 55 at one end to enable it to be more conveniently handled. The box 44 may be provided with longitudinal flanges 54 along its lower edges, these flanges 54 serving as supports and resting upon the strips or flanges 41.

55 is a handle for the door 39 at the right of the base 1, to facilitate opening this door; and 56 is a lock to secure the door in closed position.

In operation, the coin is inserted by the passenger into the upper end of the chute 3, and drops past the baffle-plates 17, 18 and 19 upon one of the plates 20. The money-box 4 being in position in the base 1, with the opening 45 uncovered and in line with the opening 46, the coins will drop into the

money-box 44 whenever the conductor depresses the lower lever 23 on the right-hand side of the box. The doors 39 and 40 will be locked at this time, so that all access to the money-box 44 is prevented. The receptacle will be strongly made, the sides 3 and the walls forming the base 1 being strongly secured together, and the glass plates 4 being held in position by means of the frame 9 and the bolt 11. This will make it impossible for any one to obtain access to the interior of the box by removing the plates 4, or otherwise tampering with or damaging the box, short of almost completely destroying the same.

It is to be observed that the upper and middle arms 23 are so related to the bar 25 that their outer ends can be depressed without moving this bar; while the lower arm 23 is so related to the bar 25 that whenever the outer end of this arm 23 is depressed it pulls the other two arms down with it. Hence, the conductor, whenever a coin is dropped in and caused to rest on the upper plate 20, will need to take only one look to see that it is of the right denomination, and then depress the outer end of the lowermost arm 23 to permit the coin to drop into the box 44. Should a number of coins be dropped in in quick succession, the upper arm 23 can be operated to spill part of them on the middle plate 20; or both the upper and middle arms can be operated to distribute them over the three pivotally-mounted plates, to enable the conductor to see all the coins before he permits them to drop into the money-box at the bottom. At the end of the run or at the end of the day, when the box 44 and contents are to be removed, the doors 39 and 40 must first be unlocked. In order to release them and make it possible to open the same, the lower arm 23 must be depressed. This will force down the bar 25, raising the bent end 34 of the lever 33, and liberating the locking bar 35. The doors 39 and 40 can then be pulled open together.

It will be noted that, when the mechanism is manipulated to release the doors 39 and 40, the same act causes the lower plates 21 to swing downward, and any coins which may be resting upon these plates will drop down into the box 44. Hence, by this construction it is not possible for a dishonest employee to trap any money in the chute 3 when the doors 39 and 40 are being opened, and the box 44 removed, and get possession of these coins before they drop into the box, for his own use. It is also to be noted that the door 40 at the left completely covers the key 53, and this key cannot be turned to close the openings 45 and seal up the box 44 until the doors 39 and 40 are swung open. If the slide 50 could be operated to close the opening 45 before the mechanism is operated to release the doors 39 and 40, it would

be possible for a dishonest employee to close up the box 44 and then operate the lowermost arm 23, so as to cause any loose coins in the chute 3 to fall through the opening 46 upon the top of the box 44, without going inside of the same. Then, when the doors 39 and 40 are opened, the box could be removed, and any loose change caught on the top of it could simply be pocketed. With my receptacle, the likelihood of such pilfering is entirely obviated, because the box when it is put into the base 1 is open at the top, and the opening in the top cannot be closed until the doors 39 and 40 are opened to permit the removal of the box. As stated above, before these doors can be opened, the bar 30 has to be depressed, and the act of depressing this bar will shake down any coins on the plates 20, and allow them to drop into the box 44 along with the rest of the money collected in the course of the day.

When the doors 39 and 40 are opened by an employee authorized to do so at the car-barn at the end of a run or at the close of the day, the box 44 is closed and locked by means of the key 53, which is kept in place in the base 1 for this purpose. The closed box is then taken out and sent to the central office, where it is opened with a duplicate key by the treasurer or his assistant.

It will be apparent from the above description that with my improved fare receptacle all coins taken from the passengers and deposited in the mouth of the receptacle must drop into the box 44 before the base of the receptacle can be opened and the box removed; and, hence, the danger of loss to the car company through the petty thieving of dishonest employees is reduced to the lowest possible minimum.

I wish to have it understood that I may make certain changes in the shape, size and arrangement of the parts such as fairly fall within the scope and spirit of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a fare receptacle, the combination of a base, adapted to receive a money-box, a chute or conduit extending upward from said base and communicating with the interior thereof, said chute having a side consisting of a plate of transparent material, and having an open mouth at its top, a lining or frame for said mouth engaging the upper edge of said plate of transparent material, straps secured to said frame or lining and extending along the sides of said chute away from said mouth, and a bolt passing transversely through said conduit and engaging said straps to secure the same in place.

2. In a fare receptacle, the combination of a base adapted to receive a money-box, with a chute or conduit communicating with

said base and extending upward therefrom, said chute or conduit having a side consisting of a plate of transparent material, and having an open mouth, means surrounding said open mouth and engaging the said plate at its upper edge to prevent the removal of the same, means connected to said engaging means to secure the same in place, a bar slidably secured to the side of said chute and having a bent end to cover and shield said last-named means, said bar having a bent portion at its lower end, a door carried by said base, and a lug carried by said door in position to engage the bent lower end of said bar and hold said bar with its upper end in shielding position when the door is closed.

3. In a fare receptacle, the combination of a base adapted to receive a money-box, a chute communicating with the inside of said base and extending therefrom in position to deliver into said money-box, movable means mounted inside of said chute to arrest coins deposited therein, means for operating said means to release said coins to drop into said box, a door for said base, a locking bar pivotally mounted inside of said base, a link connecting said bar to said door, a lever adapted to engage said bar and lock the same against movement, and means for connecting said lever to the means for operating the arresting means mounted in the conduit, whereby, when the operating means for the arresting means is moved, the door will be unlocked to allow coins in the chute to drop into the box before the said box is removed.

4. In a fare receptacle, the combination of a base adapted to receive a money-box, a chute extending from said base in position to deliver into said box, means for closing said box against access from without, a door for said base covering said closing means, movable means mounted in the chute or conduit in position to arrest coins deposited therein, means for actuating said movably-mounted means to release said coins, and means for locking said door, connected to said actuating means for the arresting means to be operated in unison therewith, whereby any coins in the chute will be discharged into the box before the door can be opened to release the said box.

5. In a fare receptacle, the combination of a base adapted to receive a money-box, a chute or conduit connected to said base in position to deliver thereto, means movably mounted in said chute to arrest coins deposited therein, means for operating said means to release said coins, a pair of doors connected to said base, means for closing said box, one of said doors covering said closing means, the box being removable through the other door, and locking means securing said doors in closed position, said

locking means being connected to the means for actuating the arresting means mounted in the conduit, whereby the box cannot be closed up and removed from the receptacle without first precipitating thereinto any coins arrested in the said chute or conduit.

6. In a fare receptacle, the combination of a base adapted to receive a money box, a chute or conduit extending upward therefrom and communicating with the interior of the base, said conduit having a side consisting of a plate of transparent material, means engaging the upper edge of said plate to secure the same against movement, means connected to said engaging means to fasten said engaging means in position, a strip arranged along the side of said conduit to shield said fastening means, and resilient means for holding said strip in such shielding position.

7. In a fare receptacle, the combination of a base adapted to contain a money box

and having a chute or conduit extending upward therefrom and communicating with the interior of the base, said conduit having a side consisting of a plate of transparent material, means engaging the upper edge of said plate to secure the same against movement, means connected to said engaging means to fasten said engaging means in position, a strip arranged along the side of the chute to shield said fastening means, said strip having a bent end, a door in said base, and a lug carried by said door to engage the bent end of said strip to hold the said strip in shielded position when the said door is closed.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE CLAUDE STEWART.

Witnesses:

ARTHUR E. FRANKS.

CHARLES L. LANG.