H. A. MULLETT.

FARE BOX.

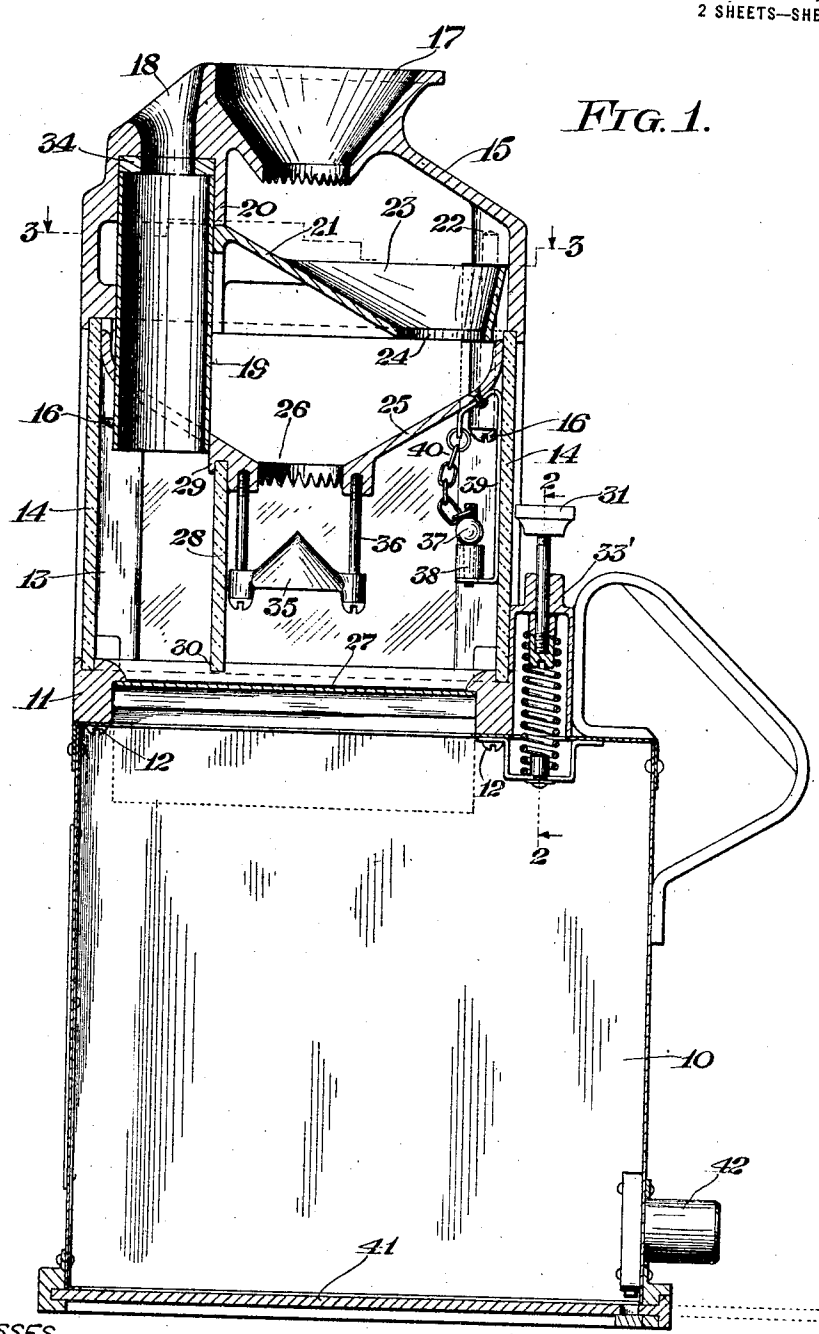
APPLICATION FILED OCT. 14, 1918.

1,353,970.

Patented Sept. 28, 1920.

2 SHEETS—SHEET 1.

FIG. 1.



WITNESSES.

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2 SHEETS—SHEET 2.

FIG. 2.

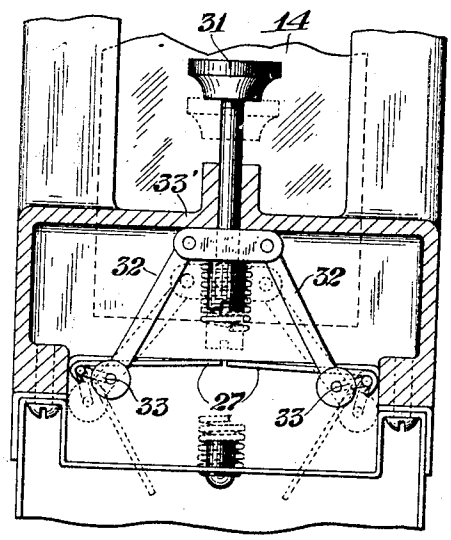
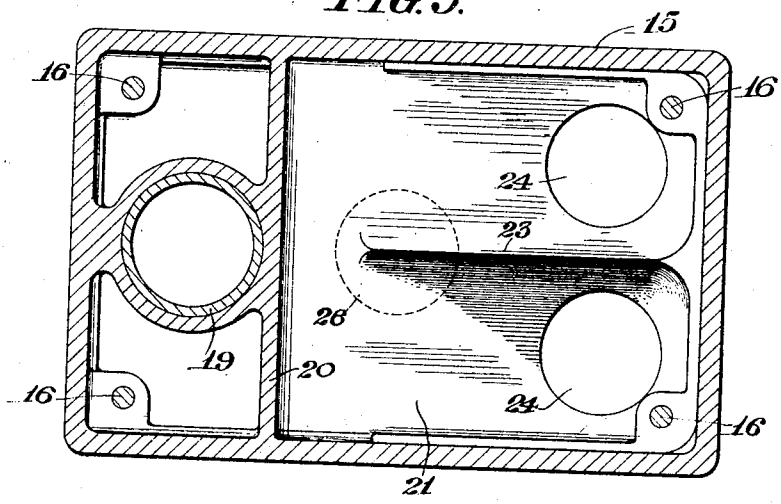


FIG. 3.



WITNESSES.

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UNITED STATES PATENT OFFICE.

HOWARD A. MULLETT, OF WAUWATOSA, WISCONSIN, ASSIGNOR TO THE MILWAUKEE ELECTRIC RAILWAY & LIGHT COMPANY, OF MILWAUKEE WISCONSIN, A CORPORATION OF WISCONSIN.

FARE-BOX.

1,353,970. Specification of Letters Patent. Patented Sept. 28, 1920.

Application filed October 14, 1918. Serial No. 258,029.

To all whom it may concern:

Be it known that I, HOWARD A. MULLETT, a citizen of the United States, and resident of Wauwatosa, in the county of Milwaukee, Wisconsin, have invented new and useful Improvements in Fare-Boxes, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

This invention has for its object to provide a fare box having separate means for receiving tickets whereby the tickets will be conducted directly to the display chamber and will not be required to travel through the tortuous coin passage where they would be liable to form an obstruction.

Another object of the invention is to provide the display chamber with a partition dividing it into compartments for displaying the tickets separate from the coins.

Another object of the invention is to provide such a fare box with means for preventing the removal of the fare therefrom.

With the above and other objects in view the invention consists in the fare box as herein claimed and all equivalents.

Referring to the accompanying drawings in which like characters of reference indicate the same parts in different views:

Figure 1 is a central sectional elevation of a fare box constructed in accordance with this invention;

Fig. 2 is a sectional view thereof on the plane of line 2—2 of Fig. 1; and

Fig. 3 is a sectional plan view on the plane of line 3—3 of Fig. 1.

In these drawings 10 indicates the fare box proper which is provided with suitable means of support and carries on it the means for receiving and displaying the fares before they are dropped into the box.

The rectangular base frame 11 of the superstructure is fastened to the edges of the opening in the top of the box 10 as by means of screws 12, which may also serve to clamp upright corner posts 13 thereto. Glass panels 14 are fitted in suitable grooves provided for them in the base frame 11 and the corner posts, and a top 15 forms a cover for the rectangular display chamber thus formed and is secured to the corner posts as by means of screws 16.

The top 15 is provided with a funnel-like hopper or mouth 17 to receive coins and also a somewhat smaller but similar mouth 18 to receive tickets, the opening through the former being of sufficient size to permit the passage of coins used as fares and the opening through the latter being smaller than the smallest coin and slightly smaller than the width of tickets used as fares so as to require the tickets to be slightly bent in order to pass therethrough.

A vertical cylindrical tube 19 of considerably larger internal diameter than the opening through mouth 18 is secured within the top 15 and forms a conduit for conducting the tickets from the ticket mouth 18 to the display chamber.

A downwardly projecting flange 20 extends across the interior of the top 15. A baffle 21 is secured within the top 15 preferably by means of the screws 16 passing through the corners thereof at one end to clamp them against the bosses 22 of the top in which said screws are threaded, while the other end of the baffle bears against the downwardly extending flange 20. This baffle is so shaped as to form two funnel shaped chutes merging at their upper ends beneath the coin mouth 17 and diverging with a partition 23 between them and terminating in a pair of openings 24 near the corners of the top 15.

A funnel shaped baffle or hopper 25 is supported within the display chamber, preferably by means of the same screws 16 which clamp the baffle 21 and top 15 to the corner posts 13, and conducts the coins from the openings 24 to a central discharge opening 26 through which they fall onto the pair of swinging trap doors 27 which form the bottom of the display chamber.

The ticket conducting tube 19 extends through an opening in the hopper 25 to deposit the tickets on the bottom of the display chamber and glass partition 28 fitting in a grooved flange 29 across the bottom of the hopper 25 and seated in notches 30 of the base frame 11 divides the display chamber into two compartments to keep the tickets separate from the coins.

Suitable means is provided as usual for opening the trap doors 27 to permit the

fares to drop from the display chamber into the storage receptacle 10 and, as shown, such means consists of a spring-pressed plunger 31 having links 32 connecting it with crank arms 33 on the pivotal pins of the trap doors 27. A suitable inclosing housing 33′ for the trap door operating mechanism is shown as formed integral with two of the corner posts.

Suitable provision is made for preventing the withdrawal of fares from the fare box in addition to the protective features already described. A hardened steel ring 34 is set in the ticket passageway between the shoulder thereof and the end of the tube 19. This serves to prevent the ticket opening 18 being enlarged by filing away the cover, for the cover, like most of the other metal parts, is preferably of aluminum to reduce the weight of the fare box.

The lower edges of the coin opening 17 and of the opening 26 of the hopper 25 are toothed to form downwardly projecting spurs to make it more difficult to shake coins therethrough when the fare box is inverted. Also this latter opening is guarded by a conical weight 35 slidably mounted on a pair of parallel guides 36 and adapted to block the opening 26 when the fare box is inverted. At such times the weight 35 slides on the guides to a position where it fills the opening 26 and prevents the coins passing therethrough.

An indicator may be provided to show that the fare box has been inverted, such for instance as the ball weight 37 on a stem which normally is seated in a socket 38 on a bracket 39 and which will fall out of its seat when the fare box is inverted and cannot be replaced except by reaching through the normally locked box 10. The weight 37 is suspended by a chain 40, as usual.

A slide 41 closes the bottom of the box 10 and is locked in place by means of a lock 42.

With the fare box of this invention the desirable tortuous passage is provided for coins to effectively prevent their removal by means introduced through the receiving opening, and at the same time the obstruction of such passageway by cardboard tickets is avoided by providing the separate passageway leading to the display chamber. The tickets are displayed separately but are discharged into the storage box by the same operation which discharges the coins. Removal of fares is effectively prevented, the tortuous passageway, the toothed edges of the openings, and the sliding weight 35 being effective against the withdrawal of coins and the opening 18 smaller than the width of the ticket requiring the ticket to be bent to permit of its passage therethrough serving to prevent the removal of the tickets. As soon as the ticket is forced through the opening 18 and into the tube 19 it tends to straighten out so as to be incapable of withdrawal through the opening. The tube 19 is of sufficient size to permit the ticket to freely fall therethrough into the display chamber.

What I claim as new and desire to secure by Letters Patent is:

1. In a fare box, the combination of a ticket receiver having a funnel-shaped mouth of soft metal with a contracted throatway having a hardened metal ring at its end of a diameter less than the width of the ticket to require flexing of the ticket as it is forced therethrough, and a conduit below the ring of greater area to allow the ticket to straighten out after being flexed.

2. A fare box comprising a coin receiver, a display chamber into which the coin receiver discharges, a separate ticket receiver having a contracted throatway requiring the tickets to bend as they pass therethrough, said ticket receiver also discharging into the display chamber, and a partition across the display chamber to divide the same into separate compartments for the tickets and the coins.

3. In a fare box, a coin receiver, a display chamber into which the coin receiver discharges, a separate ticket receiver, a tube extending from the ticket receiver through the coin receiver and discharging into the display chamber, and a partition across the display chamber between the outlet of the tube and the outlet of the coin receiver.

4. In a fare box, a base frame, corner posts thereon, glass panels fitting on the base frame between the corner posts to form a display chamber, a top fitting on the corner posts and the glass panels, screws connecting the corner posts with the top, there being a coin-receiving opening and a ticket-receiving opening in the top, a tube extending downwardly from the ticket-receiving opening, a deflector mounted on said screws and positioned beneath said coin-receiving opening, a hopper also mounted on said screws and positioned beneath the deflector and provided with a discharge opening and an opening through which the tube extends, a receptacle secured to the base frame, and a suitably operated door in the base frame for controlling communication between the display chamber and the receptacle.

5. In a fare box, a coin receiver comprising a mouth, a deflector beneath the mouth, a hopper beneath the deflector provided with a circular discharge opening, the deflector having an opening offset from said mouth and said discharge opening, guides extending below the discharge opening, a weight slidable on said guides and having a conical end forming a valve to close the discharge opening when the fare box is inverted, and a receptacle beneath said discharge opening.

6. In a fare box, the combination of a hopper having a circular discharge opening and sides sloping toward the opening, said hopper having a depending flanged edge surrounding said opening and provided with teeth, guides extending below the opening, a weight slidable on said guides and having a conical end forming a valve to close the discharge opening when the fare box is inverted, and a receptacle beneath said discharge opening.

In testimony whereof I affix my signature, in presence of two witnesses.

HOWARD A. MULLETT.

Witnesses:
NORMA LIENHARD,
H. B. PRINTUP.