

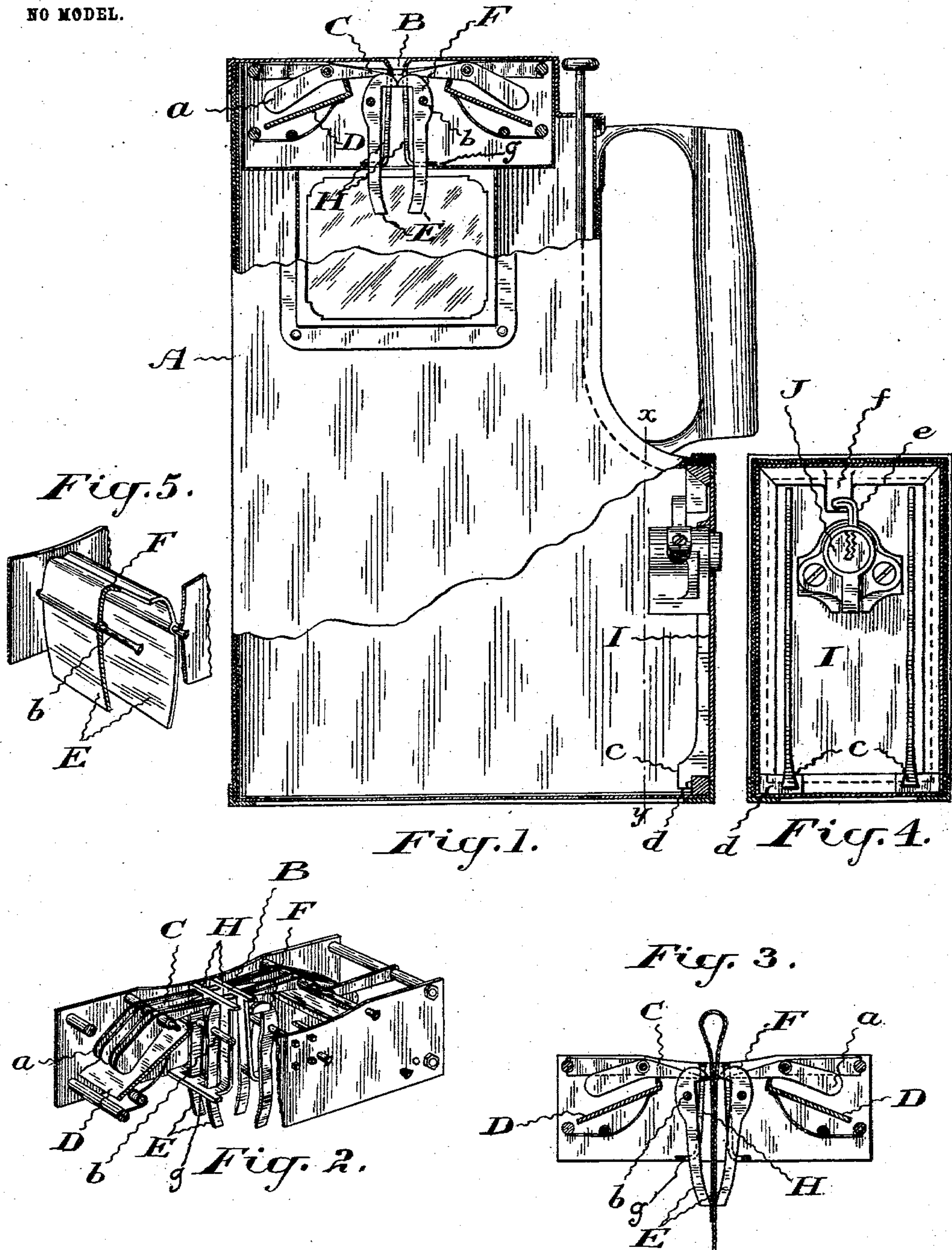
No. 739,832.

PATENTED SEPT. 29, 1903.

J. H. COLEMAN.
FARE BOX.

APPLICATION FILED SEPT. 2, 1902.

NO MODEL.



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FARE-BOX.

SPECIFICATION forming part of Letters Patent No. 739,832, dated September 29, 1903.

Application filed September 2, 1902. Serial No. 121,827. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HENRY COLEMAN, of the village of Tottenham, in the county of Simcoe, Province of Ontario, Canada, have
 5 invented certain new and useful Improvements in Fare-Boxes, of which the following is a specification.

The object of this invention is to devise means for rendering it impossible to remove
 10 cash or tickets from a fare-box by means of an implement known as a "digger" or by any similar means; and it consists, essentially, of a lever pivoted at each side of the passage-way for fares and so shaped that the inser-
 15 tion of a digger or similar tool between the upper ends of the levers brings the lower ends of the levers together to restrict or absolutely close the passage-way, so that either the parts of the digger are closed together or
 20 the lower part of the passage-way absolutely closed, either against the further insertion of the digger or the exit of coins or tickets, substantially as hereinafter more specifically described and then definitely claimed.

25 Figure 1 is a sectional elevation of a fare-box provided with my improvements. Fig. 2 is perspective view of the mechanism, partly broken away. Fig. 3 is a sectional elevation of the mechanism, showing a digger inserted
 30 between the levers. Fig. 4 is a sectional elevation through the line xy in Fig. 1 looking toward the back of the box. Fig. 5 is a perspective detail of a modification of the mechanism shown in Figs. 1, 2, and 3.

35 In the drawings like letters of reference indicate corresponding parts in the different figures.

A is the casing of a fare-box, and B the passage-way for fares, opening with the usual
 40 slot through the upper end of the box. This passage-way is formed by the plates H, one at each side. These plates are rigidly secured to the sides of the box and are slotted to permit of the levers E playing through
 45 them. These levers are pivoted at b and hang vertically on each side of the passage-way B. Inwardly-extending heads F are formed on these levers, and their tails E are also preferably bent inwardly toward one an-

other. These tails are also preferably bent 50
 sidewise, so that they are "staggered" or "break joint" with one another, as indicated in Fig. 2. It will be noticed that the levers are pivoted comparatively close to their upper ends. From this arrangement it follows 55
 that the levers hang vertically, and when the latter are shaped and proportioned as shown their heads will normally lie in close proximity to one another and their tails somewhat separated and in contact, or nearly so, 60
 with the stops g , formed by the bottoms of the slots in the plates H, which latter are preferably L-shaped, as shown. These stops are useful in preventing the heads of any one set of levers completely closing the passage- 65
 way when the box is turned partly on its side to receive a fare. The levers are preferably sufficiently long to permit of the largest coin or ticket used as a fare passing between the levers without contacting simultaneously 70
 with both the heads and tails. The heads of the levers being inclined downwardly toward the center, the fare readily separates them, and thus brings the tails together. As soon as the fare passes the heads the tails open up 75
 again and the fare drops through into the box. The operation of these levers in preventing the box being robbed is substantially as follows: Anything in the shape of a digger inserted between the heads F causes the 80
 tails G to come together. The levers are so shaped and proportioned that the tails are thus caused to either completely close the passage-way or else to compress the parts of the digger so tightly together that no money or 85
 tickets can be taken out. If the digger be forced still farther into the box, the pressure on the tails of the levers will have a tendency to cause the heads F to squeeze the upper parts of the digger closely together. As the 90
 levers are pivoted near their upper ends, they have a powerful leverage at their heads and the digger is very effectively closed up.

The operation of the levers is clearly indicated in Fig. 3, in which the levers are so 95
 shaped and proportioned that the closely-pressed parts of the digger may just pass simultaneously between both the heads and

tails of the levers. It is evident that it is absolutely impossible for any coin to be shaken into the digger and withdrawn through the passage-way between the levers. The tails of the levers might be bent inwardly sufficiently to completely obstruct the passage-way, in which case the digger could not be forced between the tails without sufficient force being employed to damage the apparatus. It is not absolutely essential that the tails of the levers either overlap or meet, as they will be quite effective as long as they come sufficiently close to prevent the exit of a coin when the digger is inserted between the levers. The heads *F* of the opposed sets of levers preferably touch, or nearly so, and their tops are inclined inwardly and downwardly toward the center line to facilitate the passage of fares between them. It will be seen that the essential features of these opposed sets of levers is that they be so proportioned and hung that any digger or tool inserted between their upper ends brings the lower ends in such relationship to one another as to entirely prevent the exit of tickets or coin either independently or between the parts of the digger.

While I prefer to employ two sets of levers, as illustrated in Figs. 1, 2, and 3, yet most of the advantages of my invention may be obtained with one pair of levers, provided they be made of sufficient width to extend across or substantially across the full width of the passage-way for fares. Such a wide pair of levers is illustrated in Fig. 5.

It is evident that a considerable degree of utility may be obtained by using a lever or levers at one side only of the passage-way for fares, as such a lever or levers would cooperate with the opposed plate *H* to act in the same manner as a pair of opposed levers.

In my fare-box I continue to employ the pivoted needles *C*, with weighted tails tending always to maintain them with their points raised, as described and claimed in my prior United States patent, No. 608,107, dated July 26, 1898. I also use the spring-actuated plates *D*, as in my prior patent.

The door *I* is of novel construction. Instead of hinging it I provide it with two lugs *c*, which engage the lugs *d*, formed at the bottom of the casing. The bolt *e* of the cylinder-lock *J* engages the back of the lug *f* when the door is locked. (See Figs. 1 and 4.) Thus when the bolt is turned back the door may be lifted away entirely and the contents of the fare-box emptied. I find this arrangement stronger and more convenient than hinging the doors in the ordinary manner. It will be seen that the lugs *c* are really ribs and extend up almost to the top of the door, so that their upper ends form stops to prevent the door being lifted when the door is in the closed position.

I may say that what is known as a "digger"

consists of a piece of flat steel bent round till the two parts are substantially parallel to one another, but one shorter than the other. When the digger is inserted between the needles, they are pressed back by the spring of the metal, and coin or tickets are easily shaken onto the long end and thence slid out between the parts of the digger. My present invention, it will be seen, entirely prevents this.

What I claim as my invention is—

1. In a fare-box having a fare-slot, the combination of a pair of vertical levers pivoted opposite one another, one at each side of the said slot and a plate between the levers forming a passage-way for fares, the said levers being so shaped and proportioned that the spreading apart of either pair of opposed ends by the passage of a tool or fare will cause the other ends to restrict or close the passage-way for fares, substantially as described.

2. In a fare-box having a passage-way for fares, plates forming the sides of the passage-way, in combination with a lever pivoted outside of the said passage-way, the said lever being so shaped and located that the forcing outward of either end will cause the other to cross the plate and restrict or close the said plate, substantially as described.

3. In a fare-box having a passage-way for fares, vertically-slotted plates forming the opposite sides of the said passage-way, in combination with two sets of opposed vertical levers pivoted opposite one another so as to work through the said slots, the said levers being so shaped and proportioned that the spreading apart of either of the sets of opposed ends by the passage of a tool or fare will cause the other ends to restrict or close the passage-way for fares, substantially as described.

4. In a fare-box having a passage-way for fares, vertically-slotted plates forming the opposite sides of the said passage-way and having stops formed at the lower ends of the slots in combination with a pair of vertical levers pivoted opposite one another so as to work through the said slots, the pivot-points being so placed that the upper ends of the levers are normally in close proximity to one another and their lower ends substantially in contact with the stops, substantially as described.

5. In a fare-box having a passage-way for fares, a pair of vertical levers pivoted opposite one another, one at each side of said passage-way and provided with heads having their tops slanting downward and inward toward the center line, the levers being so shaped and proportioned that the heads are normally in close proximity and their lower ends somewhat separated, substantially as described.

6. In a fare-box a casing *A* having a door-opening formed therein provided with the

lugs *d* and *f*, in combination with the door I
larger than the opening and fitting in front of
the said lugs; lugs or hooks *c* formed on the
door and adapted to engage the backs of the
5 lugs *d* which fit between the lugs *c* and the
back of the door; means for preventing the
door being lifted when in the closed position;
and a lock provided with the bolt *e* which may

be engaged and disengaged with the back of
the lug *f*, substantially as described.

Tottenham, August 27, 1902.

JOSEPH HENRY COLEMAN.

In presence of—

JOHN MCGLANE,

GEO. P. HUGHES.