

W. H. HORNUM.
Fare-Box.

No. 205,646.

Patented July 2, 1878.

Fig. 1.

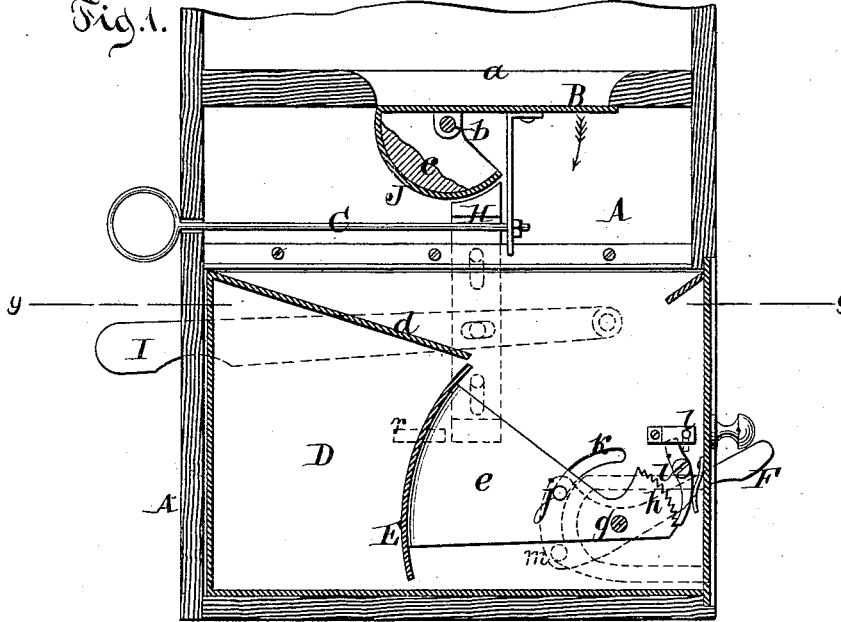
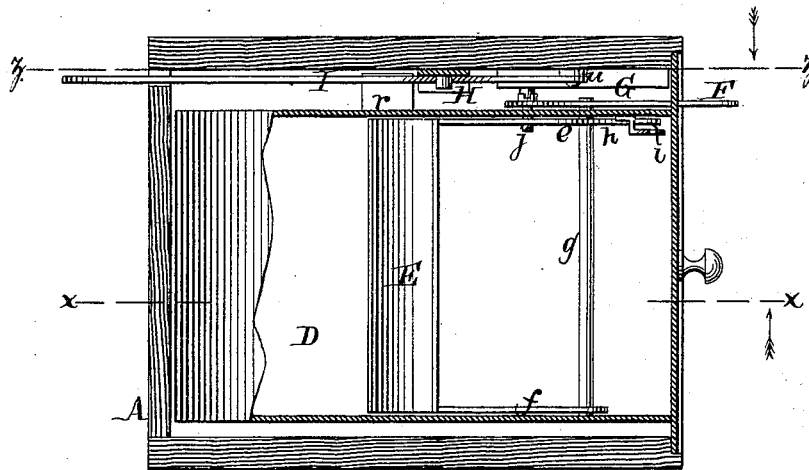


Fig. 2.



Witnesses.
 Chas. Wahlers.
 Hermann Wahlers

Inventor.
 William H. Hornum
 by his Attys
 Vansantvoord & Hauff

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Fig. 3.

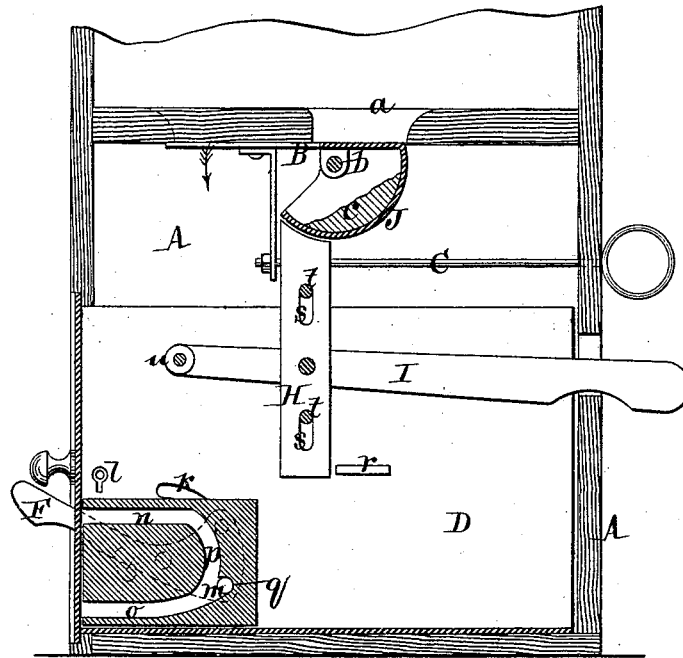
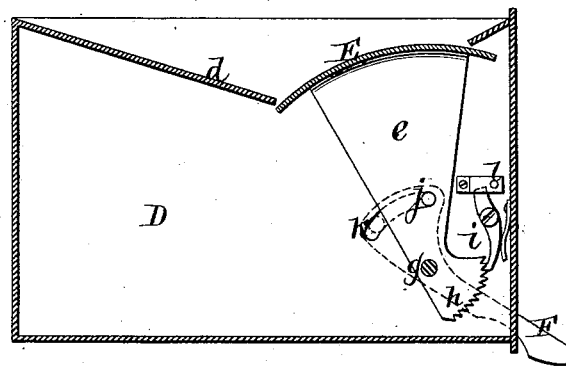


Fig. 4.



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 by his attys
 Van Santvoord & Hauff

UNITED STATES PATENT OFFICE.

WILLIAM H. HORNUM, OF NEW YORK, N. Y., ASSIGNOR TO THE HORNUM
PATENT REGISTER MANUFACTURING COMPANY.

IMPROVEMENT IN FARE-BOXES.

Specification forming part of Letters Patent No. **205,646**, dated July 2, 1878; application filed
June 8, 1878.

To all whom it may concern:

Be it known that I, WILLIAM H. HORNUM, of the city, county, and State of New York, have invented a new and useful Improvement in Fare-Boxes, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a vertical section of my fare-box when the same is closed, the plane of section being indicated by the line *x x*, Fig. 2. Fig. 2 is a horizontal section of the same in the plane *y y*, Fig. 1. Fig. 3 is a vertical section of the same in the plane *z z*, Fig. 2. Fig. 4 is a longitudinal vertical section of the money-drawer when the same is closed.

Similar letters indicate corresponding parts.

In fare-boxes such as those described in the patent of J. B. Slawson, No. 21,372, the money-drawer, when withdrawn from the fare-box, is open, and dishonest collectors have an opportunity to abstract a portion of the contents of the box.

The object of my invention is to shut off this opportunity, the money-drawer in my fare-box being combined with mechanism so arranged that said drawer must be firmly closed before it can be withdrawn from the box. With the money-drawer and the tilting-platform in the fare-box is combined a mechanism which prevents the money-drawer from being withdrawn before the platform is tilted, so that the money deposited on said platform must be dropped before the money-drawer can be withdrawn.

In the drawing the letter A designates the body of my fare-box, constructed with an opening, *a*, in its top part, beneath which is located a tilting platform, B, the latter having its fulcrum on a transverse shaft, *b*. The platform B carries a weight, *c*, which has a tendency to keep the same in its upper position, and it is connected to a rod, C, which extends through one side of the box A, and which, by being pulled outward, serves to tilt the platform.

The letter D designates a money-drawer, which rests on the bottom of the box A, the same being arranged to be introduced and withdrawn through one side thereof. This

drawer D is partially covered by a plate, *d*, which is inclined, so that the money that may fall thereon is caused to drop into the drawer, while in the uncovered portion thereof is arranged a lid, E. I provide the lid E with cheeks *e f*, and mount these cheeks on a shaft, *g*, so that the lid is adapted to be swung to either of the positions shown in Figs. 2 and 4 on said shaft, and to be locked by a suitable contrivance. For locking the lid E, I make use of a toothed segment, *h*, formed on the cheek *e* of the lid, a lever-pawl, *i*, engaging with said segment and a lever, F, which is situated exterior of the money-drawer D, and has its fulcrum on the shaft *g*, while it is connected to the cheek *e* of the lid by a pin, *j*, working in a curved slot, *k*, which is formed in the side of the money-drawer.

To close and lock the lid E, the outer end of the lever F is simply swung downward, so as to raise the inner end of the lever, and with it the lid, from the position shown in Fig. 1 to that of Fig. 4. The lid E is held or locked in the position to which it may be thus adjusted by the action of the pawl *i* on the toothed segment, so that it is necessary to disengage the pawl from the segment to permit of opening the lid. This is accomplished by means of a key inserted into a key-hole, *l*, formed in the side of the money-drawer, (see Figs. 1 and 3,) and which, when turned, acts on the tail end of the pawl *i*, so that an improper person is prevented from gaining access to the money-drawer after it has been closed.

In order to prevent the abstraction of any portion of the contents of the money-drawer D after the same is withdrawn from the box A, except by a proper person, I make use of a stop or contrivance by which the drawer is prevented from being taken from the box except in a closed and locked state. This stop consists of a grooved or slotted plate, G, (see Fig. 3,) which is secured to the inside of the box A, and in whose groove is fitted a pin, *m*, projecting laterally from the locking-lever F. The groove in the plate G is formed with an upper and lower horizontal portion, *n* or *o*, the lower part *o* being curved upward at its inner end, with a curved part, *p*, connecting the parts *n o* at one end, and a recess, *q*, the latter being

formed at the junction of the parts *o* and *p* of the groove.

Now, the pin *m* of the locking-lever *F* is so arranged that when the lid *E* of the money-drawer is open and the money-drawer is placed in the box, said pin is received in the lower part *o* of the groove, and when the drawer is pushed home is caused to enter the recess *q* by the upward curvature of the lower part of the groove at its inner end. The lid *E* is thus moved a short distance in the direction of its closing, but not sufficiently to interfere with the dropping of money into the drawer, while the pin *m* is brought in a plane above that of the part of the groove by which it entered. The pin *m*, by being attached to the locking-lever *F*, is held against a downward movement, under normal conditions, by the action of the pawl *i* and toothed segment *h* on the lid *E*, to which the lever is connected. Hence the pin *m* is prevented from being returned to the lower part *o* of the groove after the money-drawer has been placed in position; and in order to permit of removing the drawer, it is necessary to move the pin, through the medium of the locking-lever *F*, upward into the plane of the upper part *n* of the groove, by which movement the lid *E* of the drawer is closed.

The object of the recess *q* of the groove is to prevent an upward movement of the pin *m*, so as to close the lid of the money-drawer by accident, the recess constituting a stop, and making it necessary to pull the money-drawer outward a sufficient distance to clear the recess before the pin *m* is permitted to move upward.

In order to insure that no money is left on the platform *B* when the money-drawer *D* is withdrawn from the box, I make use of a contrivance to prevent the withdrawal of the drawer except when the platform is in a tilted position, and which consists of a lug, *r*, projecting from one side of the drawer, a vertical slide, *H*, a lever, *I*, which is connected to this slide, and serves to raise the same, and a projection, *J*, formed on the platform. The slide *H* is provided with guide-slots *s*, and moves on pins *t*, which project from the inner side of the box *A*, contiguous to the side of the money-drawer having the lug *r*, from which side of the box projects also the pin *u*, forming the fulcrum of the lever *I*.

The shape of the projection *J* of the platform may be varied, and in the example shown it is made in form of a semi-cylinder, and to carry the weight *c*, by which the platform is kept in its upper position.

When the slide *H* is in its lower position, as shown, it is in the path of the lug *r* of the money-drawer, and hence it is necessary to raise the slide both when the drawer is introduced and withdrawn.

When the platform *B* is in its upper position its projection is directly over the slide *H*, and the latter is thereby prevented from being raised. The slide thus remains in the path of the lug *r* of the money-drawer till the platform *B* is tilted, and, consequently, the money deposited thereon must be dumped into the money-drawer before the latter can be withdrawn.

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

1. The combination, in a fare-box, of a money-drawer provided with a lid which is adapted to be locked, a tilting platform for dumping the money dropped into the fare-box down in the money-drawer, and a stop which prevents the money-drawer from being withdrawn before the platform is tilted up and the money deposited thereon has been dumped into the money-drawer, substantially as and for the purpose set forth.

2. The combination, in a fare-box, of a money-drawer provided with a lid which is adapted to be locked, a stop which prevents the money-drawer from being withdrawn before its lid is locked, a tilting platform for dumping the money into the money-drawer, and a stop which prevents the money-drawer from being withdrawn before the platform is tilted up, all constructed and adapted to operate substantially as shown and described.

3. The combination, with the money-drawer *D* and its swinging lid *E*, of the toothed segment *h*, lever-pawl *i*, and locking-lever *F*, all adapted to operate substantially as described.

4. The combination, with the box *A*, the money-drawer *D*, and its swinging lid *E*, of the locking-lever *F*, having the laterally-projecting pin *m*, the grooved plate *G*, and a device for locking the lid of the money-drawer, all constructed and adapted to operate substantially as described.

5. The combination, with the box *A*, of a tilting platform, *B*, having the projection *J*, a vertical slide, *H*, lever *I*, and a money-drawer, *D*, having the lug *r*, all adapted to operate substantially as described.

6. The combination, with the box *A*, tilting platform *B*, having the projection *J*, the vertical slide *H*, and lever *I*, of a money-drawer, *D*, having the lug *r* and swinging lid *E*, a locking-lever, *F*, having the laterally-projecting pin *m*, the grooved plate *G*, and a device for locking the lid of the money-drawer, all constructed and adapted to operate substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 7th day of June, 1878.

WILLIAM H. HORNUM. [L. S.]

Witnesses:

J. VAN SANTVOORD,
E. F. KASTENHUBER.