

UNITED STATES PATENT OFFICE.

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STREET LETTER-BOX.

No. 811,611.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALBERT J. ARSENAULT, a citizen of the United States, residing at Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Street Letter-Boxes, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention relates to letter-boxes to be used in streets and other places where mail is deposited that is to be collected by officials and taken to the post-office.

The letter-boxes now commonly employed in this country are provided with an opening through which mail is deposited into the box, and near their lower end at one side are provided with another opening closed by a door, through which opening the contents of the box are removed. The door for this discharge-opening is locked and only the authorized persons have the key thereto. In accordance with my present invention I provide a letter-box of this type with an open lower end adapted to be closed by a movable bottom, and I employ a locking device for the movable bottom which is operated or controlled by the door which closes the usual discharge-opening, so that in order to open the movable bottom for the discharge of mail it is necessary first to unlock the usual door and by opening the latter unlock the bottom.

The particular features wherein my invention resides will be more fully hereinafter described, and then pointed out in the claims.

Figure 1 shows a street letter-box partially broken out to illustrate my invention, the dotted lines showing the door open and the bottom of the box in a position to permit the discharge of the letters and other matter into the bag, which is partially shown. Fig. 2 is a horizontal section in the line x , Fig. 1. Fig. 2^a shows a modification to be referred to. Fig. 3 shows a modified form of letter-box. Fig. 4 is a section in the line x' , Fig. 3; and Fig. 5 is a view of the box shown in Fig. 3 below the dotted line x^2 .

Referring to the drawings, A represents the side walls or body of the usual metallic letter-box commonly employed in city streets; A', its top; A², the usual balanced cover for the slot through which letters, &c., are inserted in the box, and a^2 the usual hinged door closing an opening in the side of the box and through which the mail-matter

in the old construction box has been withdrawn, said door having the usual lock a^3 . The parts thus far described are such as are usually found in mail-boxes now in common use. In accordance with my invention I provide a mail-box of this character with an open lower end into which is fitted a frame B in any suitable way, the upper end of the frame being shown as entering the open lower end of the mail-box. The frame B is open at its bottom and presents a depending skirt b , from which project suitable lugs b' , which serve to receive hooks 2 at the upper end of the bag C, that is suspended at the lower end of the box to receive the letters when the bottom of the box is moved to permit the letters to be discharged. The frame B is shown as provided with guideways to receive a bottom D, represented in Figs. 1, 2, and 2^a as a plate provided at one end with a handpiece d , that may be engaged and drawn outwardly into the dotted-line position when the usual door a^2 , having the lock a^3 , is opened into the dotted-line position, Fig. 1. This door is provided with a locking device a^4 , shown as a projection of sector shape, and the bottom plate D, Figs. 1 and 2, is shown as provided with a coacting part, shown as a notch d^2 , that when the bottom plate is shoved into the box to sustain the mail-matter comes in line with the locking device a^4 , so that the door of the box may be closed and locked, and the locking device at such time will enter the notch in the bottom plate and prevent the movement of the bottom plate. The locking device also serves to prevent the possibility of the collector of the mail-matter from leaving the box without properly locking the same, as the door cannot be closed until the bottom of the box has been pushed into its operative position, at which time only the locking device enters the notch in the bottom plate. The door a^2 has the usual side flanges a^x , that are not wholly withdrawn from the box when the door is opened. The hinges e of the door are secured thereto and to the bar e' at the bottom of the box and preferably sustained by the frame B.

Figs. 1 and 2 show the parts or device co-acting with the locking device as a slot; but my invention would not be departed from if the coacting parts or device was made as a lump d^5 , (see Fig. 2^a), extended longitudinally of the bottom D, said lump containing a notch properly located to be entered by the locking device when the door a^2 is closed.

Figs. 3 to 5 show a modification of my invention in which instead of the bottom D being made to slide longitudinally the bottom is shown as composed of two plates E E'.
 5 The plate E has at its edge a lip e^2 , that underlies the edge of the plate E'. The outer edges of each of these plates is connected with rods e^3 e^4 , the rod e^3 at one end of the box having a handpiece e^5 , and at the opposite
 10 ends of said rods each rod has connected with it a toothed sector, as f f' , the teeth of which engage one the other. In this modification the toothed sectors are arranged outside the end of the box, and a hood f^2 , connected with
 15 the box, shields the sectors and prevents them being tampered with when the box is closed. The bottom plate E has at its end opposite that where is located the sector an upright stand or device g , having a hole, and
 20 the inner side of the door a^2 has a stop g^2 and a locking device g^3 , the latter being shown as a pin projected from the inner side of the door and entering a hole in the device g , whereas the stop g^2 serves to arrest the bot-
 25 tom plate when the same is turned upwardly in the act of closing the bottom of the box.

To discharge the mail-matter from the box, Figs. 3 to 5, the usual door a^2 must be first unlocked and opened, thereby withdrawing
 30 the locking device from the hole in the device g , and thereafter the handpiece e^5 may be engaged and the rod e^3 turned, and as said rod is turned the segment f , connected therewith at its opposite end, in engagement with
 35 the segment f' , connected with the rod e^4 , causes the bottom plates to be moved, the movement of the bottom plates downwardly with relation to their meeting ends opening the bottom of the box, so that the mail-mat-
 40 ter resting thereon may be dropped into the usual bag.

From the above it will be seen that the gist of my invention resides in taking the ordi-
 45 nary letter-box now in common use, substituting for the fixed bottom thereof a movable bottom which can be opened to permit the contents of the box being discharged through said open bottom, and also providing a lock-
 50 ing device carried or controlled by the usual door a^2 , through which the mail has heretofore been removed, which locking device is adapted to engage and lock the movable bot-
 55 tom in its closed position when the door a^2 is closed, and which locking device is also so arranged that it will be impossible to close the door a^2 except when the movable bottom is closed.

The drawings show and the specification describes two embodiments only of my in-
 60 vention.

Having fully described my invention, what I claim as new, and desire to secure by Let-
 65 ters Patent, is—

1. In a mail-box having an opening in its lower end for the discharge of mail, a mov- 65
 able closure for said opening, a door closing an opening in the side of the box above the opening in the lower end thereof, and means carried by the door to lock the closure in closed position. 70

2. A mail-box having a movable bottom provided with an opening combined with a door having an attached locking device adapted to enter the opening in the movable bot- 75
 tom as the door is closed provided the movable bottom occupies its closed position.

3. A mail-box having a lower open end, an open frame secured to said lower open end, a movable bottom for said frame, a door clos- 80
 ing an opening in the side of the mail-box above the frame, and a locking device for the movable bottom, said locking device being connected to the door.

4. In a mail-box, a body having an open- 85
 ing in its lower end, and provided with a door carrying a locking device, and a bottom to close said lower open end, said bottom having a member coacting with the locking device to prevent the closing of the door until the bot-
 90 tom occupies its closed position.

5. A mail-box having an opening in its lower end for the discharge of mail, a mov- 90
 able closure for said opening, a door closing an opening in the box above the lower end thereof, and means carried by and movable 95
 with the door to engage the closure and lock the same in closed position.

6. A mail-box having an open lower end, an open frame detachably secured to the lower end of the mail-box, a movable bottom 100
 for said frame, a door closing an opening in the mail-box above the frame, and a locking device carried by the door and movable there-
 105 with and adapted to engage the bottom and lock the same in closed position when the door is closed.

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

ALBERT J. ARSENAULT.

Witnesses:

GEO. W. GREGORY,
 BERTHA F. HEUSER.