J. S. McDONALD.

LOCK FOR MAIL BOXES.

APPLICATION FILED AUG. 7, 1916.

1,235,707.

Patented Aug. 7, 1917.

2 SHEETS—SHEET 1.

Fig. 3.

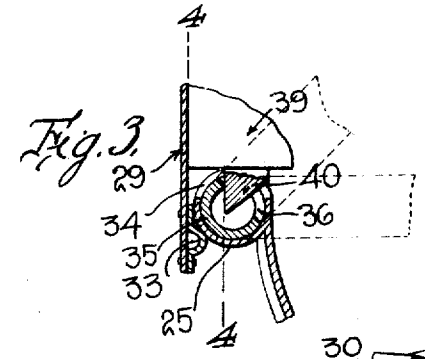


Fig. 1

Fig. 4.

Inventor

J. S. McDONALD

By Watson E. Coleman

Attorney

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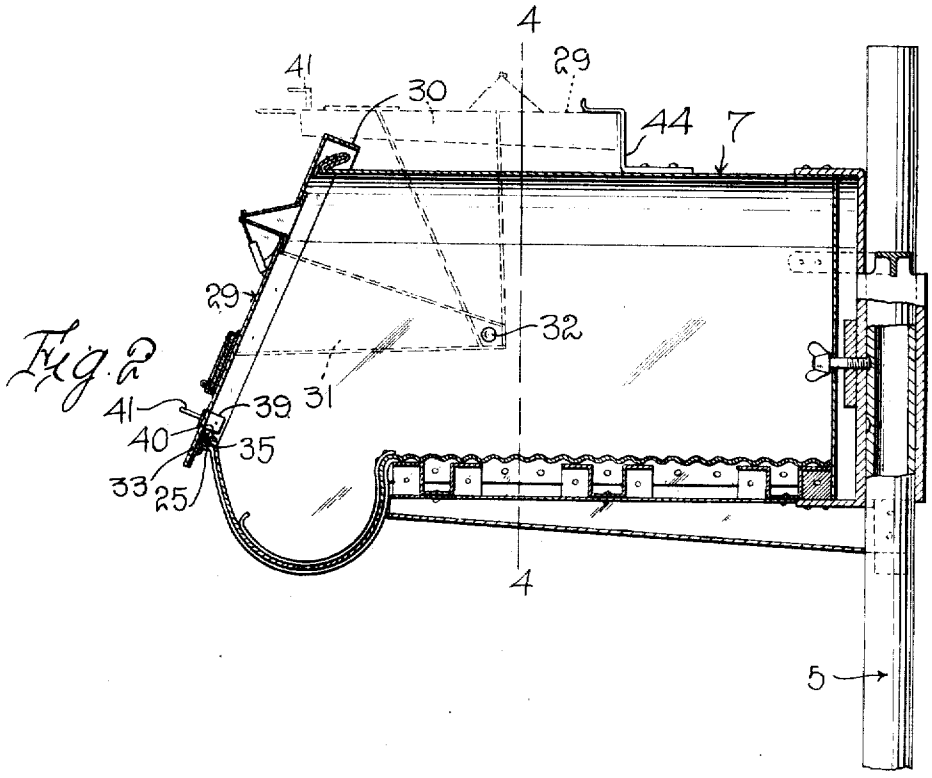


Fig. 2

Inventor

J. S. McDONALD

By Watson E. Coleman

Attorney

UNITED STATES PATENT OFFICE.

JESSE S. McDONALD, OF ELBERTON, GEORGIA.

LOCK FOR MAIL-BOXES.

1,235,707. Specification of Letters Patent. Patented Aug. 7, 1917.

Application filed August 7, 1916. Serial No. 113,573.

To all whom it may concern:

Be it known that I, JESSE S. McDONALD, a citizen of the United States, residing at Elberton, in the county of Elbert and State of Georgia, have invented certain new and useful Improvements in Locks for Mail-Boxes, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to mail boxes and similar receptacles, and has for its primary object to provide certain improvements particularly designed for use in connection with mail boxes whereby the convenience and serviceability of the same in practical use will be increased.

It is one of the more important objects of the invention to provide an improved swinging door or closure mounted upon the body of the box and simple and effective means for positively locking said door in its closed position.

The invention has for a more particular object to provide a key-actuated lock carried by the door, and a movable element mounted in the bottom wall of the box with which the lock bolt is adapted to co-act to secure the door in its closed position, said element being operable independently of the lock whereby the door may be opened to obtain access to the interior of the box.

With the above and other objects in view, my invention consists in the novel features of construction, combination and arrangement of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawings, in which,

Figure 1 is a perspective view illustrating the preferred embodiment of my improved mail box;

Fig. 2 is a longitudinal section thereof;

Fig. 3 is an enlarged detail section of the locking means for the box door;

Fig. 4 is a longitudinal section taken on the line 4—4 of Fig. 3.

Referring in detail to the drawings, 5 designates the supporting post or standard which is of hollow, tubular, metal construction and is provided upon one of its ends with a plurality of radially projecting, anchoring arms or wings 6, whereby said post is securely anchored or retained in the ground.

Upon the post 5, the mail box 7 is secured in any suitable manner, and the bottom wall of this box is provided in its forward edge with a tubular bead 25. 29 designates the box door which is provided upon its vertical and top edges with a continuous flange 30 to overlie the corresponding walls of the box 7 when the door is closed. To the opposite side portions of the flange 30, the arms 31 are securely riveted, said arms extending rearwardly exteriorly of the side walls of the box and being pivotally connected to said walls at their rear ends, as shown at 32. To the inner face of the body wall of the door 29, at its lower end, a metal rib or cleat 33 is secured to engage the under side of the bead 25 on the bottom wall of the box. The upper side of the bead 25 is centrally cut away as shown at 34, and within said bead the tubular rod 35 is mounted to rotate, said rod being also cut away on one side, as at 36, at a corresponding point to the opening 34 in the bead 25. One end of the rod 35 is provided with an angularly disposed arm or handle 37 having a longitudinally extending slot 38 therein.

Upon the lower edge of the door 29, a suitable lock indicated at 39 is mounted, said lock being of any approved construction and including the lock bolt 40. This lock bolt may be actuated by a suitable finger piece 41 after the locking mechanism has been actuated by a key to release said bolt. The bolt 40 when in its retracted position, is disposed through the opening 34 in the bead 25 and extends into the tubular rod 35, through the slot or cut away portion 36 thereof. When the handle 37 on the end of the rod is forced downwardly to a rearwardly extending, horizontal position as seen in Fig. 1, the forward edge of the slot 36 in said rod bears against the locking bolt 40, and as the lower edge the door swings upwardly and outwardly when the door is moved to its open position, it will be readily understood that when the rod 35

is thus disposed in the path of movement of the bolt 40, the door will be securely held in its closed position against such movement. To one side of the box 7, a bracket member 42 is fixed having an upwardly disposed end to project through the slot 38 in the handle 37. This end of the bracket is provided with an opening to receive the hasp of a padlock 43, whereby the rod may be securely locked against operation so that the box cannot be opened by unauthorized parties.

It will be understood that, when the postman desires to open the box, the lock 39 is operated by means of the key in his possession to disengage the bolt 40 from the slot in the rod 35, so that the door may be swung upwardly to its open position. To the top wall of the box 7, a resilient clamping arm 44 is fixed to engage over the upper edge of the door and hold the same in its open position. When the box door is again swung downwardly to its closed position, the bolt 40 will snap into the slot in the rod 35 and thereby lock said door. The patron, in order to open the door and remove the mail, first removes the padlock 43 and then swings the handle 37 upwardly to turn the rod 35 to the position indicated in dotted lines in Fig. 5. The forward edge of the slot 36 in said rod is thus moved away from the lock bolt 40 and out of its path of movement so that the door may be readily swung upwardly to its open position.

From the foregoing description, taken in connection with the accompanying drawings, the construction, manner of operation and several advantages of my invention will be clearly and fully understood. By the provision of the improved locking means for the door above described, the carrier may, by means of a single key, open all the boxes upon his route, the locks 39 being of identically the same construction. The patrons, however, are not provided with keys so that they could not, by any possibility, open the boxes of other patrons. Each patron provides his own lock 43 for the handle 37 and as these locks will be of different types, it will be impossible for one patron to open the box of another. Thus, the carrier is relieved of the necessity of carrying a large number of keys in order to open the several mail boxes. The device as a whole is comparatively simple in its construction, not liable to get out of order, and may be manufactured at comparatively small cost.

While I have shown and described the preferred construction and arrangement of the several features of my improved mail box, it will be understood that the same are susceptible of considerable modification therein, and I, therefore, reserve the privilege of adopting all such legitimate changes as may be fairly embodied within the spirit and scope of the invention as claimed.

Having thus fully described my invention, what I desire to claim and secure by Letters Patent is:—

1. The combination with a box proper open at one end, and a door to close the box, of a lock carried by said door, and a rod rotatably mounted upon the box with which said lock is adapted to co-act and retain the door in its closed position, said rod being operable to dispose the same out of operative engagement with the lock to permit of the opening movement of the door.

2. The combination with a box proper open at one end, and a door to close the box, of a lock carried by said door, a rod rotatably mounted upon the box with which said lock is adapted to co-act and retain the door in its closed position, said rod being operable to dispose the same out of operative engagement with the lock to permit of the opening movement of the door, and means for locking said rod against rotation.

3. The combination with a box proper open at one end, and a door mounted upon the box to close the same, of a lock carried by the door having a shiftable locking bolt, a rod rotatably mounted upon the box and provided with a longitudinal slot which, in one position of the rod, receives said bolt to lock the door in its closed position, said rod being adapted for rotation to a position whereby the locking bolt may move out of the slot in the movement of the door to its open position.

4. In combination with a box proper open at one end, and a door mounted upon the box to close the same, of a lock carried by the door having a shiftable locking bolt, a rod rotatably mounted upon the box and provided with a longitudinal slot which, in one position of the rod, receives said bolt to lock the door in its closed position, said rod being rotatable to a position whereby the locking bolt may move out of the slot in the movement of the door to its open position, said rod being provided with an angularly extending handle on one end, and means for locking said handle to the mail box and preventing the rotation of the rod.

5. The combination with a box open at one of its ends, and a swingingly mounted door to close the open end of said box, of a rod rotatably mounted upon the forward edge of the bottom wall of the box, and means carried by the door to co-act with the rod in one position of the latter and lock the door in its closed position.

6. The combination with a box having an obliquely inclined open end, and a door swingingly mounted upon the box to close the open end thereof, of a slotted rod rotatably mounted in the forward edge of the bottom wall of the box, and means carried by the door to engage in the slot of said rod in one position of the latter and prevent the swinging movement of the door to its open position.

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

JESSE S. McDONALD.

Witnesses:

JNO. T. HARD,

C. C. BROWN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."