

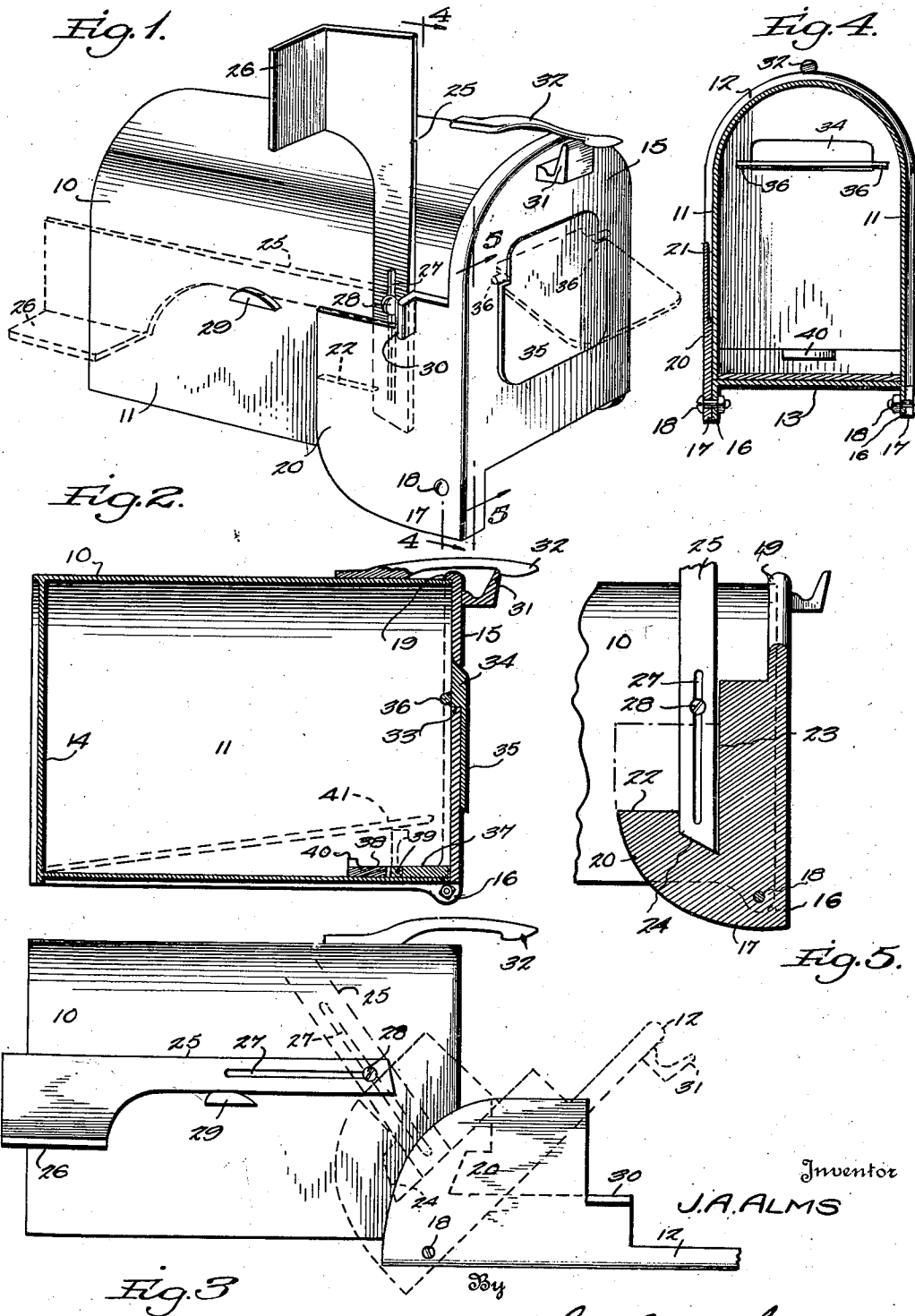
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MAIL BOX

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MAIL BOX.

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This invention relates to mail boxes and more particularly to the type of receiving box used on rural mail delivery routes.

An important object of the invention is to provide a mail box having a suitable signal associated therewith to indicate whether mail is contained in the box.

A further object is to provide a mail box having a signal associated therewith and adapted to be automatically moved to inoperative position when the box is opened.

A further object is to provide a mail box having a signal which may be manually moved to operative position and held in such position by mechanism associated with the door of the box, the door being adapted to automatically return the signal to inoperative position when it is opened.

A further object is to provide a novel form of letter slot and closure therefor in the door of the box.

A further object is to provide means within the box movable to operative position to support the forward edges of letters and the like to permit them to be readily removed.

Other objects and advantages of the invention will become apparent during the course of the following description.

In the drawings I have shown one embodiment of the invention. In this showing:

Figure 1 is a perspective view of the mail box.

Figure 2 is a central vertical longitudinal sectional view,

Figure 3 is a side elevation of the box,

Figure 4 is a section on line 4-4 of Figure 1, and,

Figure 5 is a similar view on line 5-5 of Figure 1.

Referring to the drawings, the numeral 10 designates the box as a whole which may be formed of any suitable material such as sheet metal. The box is provided with side walls 11 and a preferably curved top wall 12 connected therewith. The box is also provided with a preferably flat bottom 13, as shown in Figure 4.

As shown in Figure 2, the rear end of the box is closed by an end wall 14 while the forward end is open and adapted to be normally closed by a door 15. The side walls of the box are provided with depending ears 16 cooperating with ears 17 carried by the door 15 to receive bolts or

the like 18 to pivotally support the door. The door 15 may be die cast or otherwise formed and preferably includes an integral flange 19 which is adapted to receive the forward edges of the top and side walls to exclude water, dust and the like.

The door 15 is provided at one side with a rearwardly extending plate or operating member 20 arranged in proximity and parallel to the adjacent side wall 11. The plate is provided with a recess 21 having a rear bottom shoulder 22, as shown in Figures 1 and 5. The recess 21 is provided with a vertical forward wall 23, and this wall extends downwardly beyond the level of the shoulder 22 to form an extended recess portion 24 for a purpose to be described.

A signal arm 25 having a signal 26 at its upper or outer end is arranged adjacent the box, as shown. The arm 25 is provided with an elongated slot 27, and a screw 28 extends through this slot and into the side wall of the box to support the signal in position. The screw 28 acts as a pivot pin, and it will be obvious that the signal arm is adapted to swing in a vertical plane against the side of the mail box and is adapted to slide longitudinally by virtue of the arrangement of the screw 28 in the slot 27. The signal is shown in operative position in solid lines in Figure 1, and in inoperative position in dotted lines. Obviously the signal is arranged substantially horizontal when in its inoperative position and is adapted to be supported against downward movement by a lug or stop member 29 spot-welded or otherwise secured against the side wall of the box. The plate 20 is provided with an outstanding lug 30 adjacent its upper edge to insure movement of the signal rearwardly to inoperative position, in a manner to be described.

As previously stated, the door is pivotally connected to the box and is adapted to swing downwardly to open position as shown in Figure 3. The door is provided with a lug 31 near its upper edge adapted to be engaged by a suitable latch 32 which may be spot-welded or otherwise secured to the top of the mail box. The door 15 is provided with an opening 33 to permit small articles of mail such as letters to be inserted in the box. This slot or opening is normally closed by a flat cover 34 which substantially fills the opening, and is provided with a depending portion 35 acting as weight means nor-

mally keeping the flap in closed position: A pivot pin 36 is secured against the rear face of the flap 34 by soldering or welding and this pin extends beyond the ends of the opening 33, as clearly shown in Figure 4. The flap 34 is placed in position and the pin 36 is then secured thereagainst, thus permanently securing the flap 34 against removal from the door. It will be apparent that the pin 36 is not mounted in any pivot opening but merely engages the inner face of the door.

When particularly flat letters are arranged in the bottom of a box it is sometimes difficult to remove them. In Figures 2 and 4 of the drawings I have shown means for facilitating the removal of letters from the box. As shown, a relatively thick plate 37 is arranged against the bottom of the box near the forward edge thereof. A plate 38 is provided at its forward edge with a pin 39 whereby the plate is pivotally connected to the plate 37. The plate 38 is provided with a finger piece 40 whereby it may be swung to vertical position, as indicated in dotted lines in Figure 2. It will be apparent that mail inserted in the box when the plate 38 is in raised position will be supported at its rear end upon the bottom of the box and at its forward end upon the upper edge of the plate 38, as shown at 41 in Figure 2.

The operation of the device is as follows:

When there is no mail in the box, the signal is arranged in the dotted line position shown in Figure 1. When a carrier desires to insert small articles such as letters, these may be pushed through the opening 33, the pressure exerted by inserting the letters raising the depending portion 35 off the flap, causing the latter to open. Obviously larger articles may be placed in the box by releasing the latch 32 and opening the door. Mail also may be placed in the box for collection by following the same procedure and when there is mail within the box it is desired to give a signal either to the postman for collection or to the owner of the box. The signal may be placed in operative position merely by raising the free end of the arm 25 to vertical position and permitting it to slide downwardly to the position shown in Figure 5 with the lower end of the arm 25 arranged in the recess portion 24. When the door 15 is opened to remove the mail it will be apparent that the lower end of the arm 25 will be swung forwardly and as the lower end of the arm is released from the recess 21, the signal will assume a horizontal position. When the door is subsequently closed, the lug 30 will engage the forward end of the arm when it is in horizontal position to move it rearwardly, as will be apparent. This action is automatic and accordingly it will be obvious that opening and closing the door for the purpose of

removing mail will automatically return the signal to inoperative position. With the lower end of the signal arm arranged in the recess 24, however, it will be apparent that the door is adapted to maintain the signal in operative position until the door is opened.

It is to be understood that the form of the invention herewith shown and described is to be taken as a preferred example of the same and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

I claim:

1. A device of the character described comprising a box having a side wall and an open forward end, a door hinged at its lower edge to said box and normally closing the open end thereof, a signal arm arranged against the side wall of said box and provided with an elongated slot, a pivot pin arranged in said slot and secured to said side wall, said signal arm being adapted to assume a vertical operative position with the lower end thereof projecting a substantial distance beneath said pivot pin, and an operating member carried by said door and provided with a vertically extending recess adapted to receive the lower end of said signal arm when the latter is in operative position, said recess having a rear wall adapted to engage the lower end of said signal arm to swing the upper end thereof rearwardly away from operative position when said door is opened.

2. A device constructed in accordance with claim 1 provided with means for limiting the downward movement of said signal arm away from operative position.

3. A device constructed in accordance with claim 1 provided with a lug carried by said side wall rearwardly of and substantially in horizontal alinement with said pivot pin, said operating member having a portion adapted to engage the lower end of said signal member to slide it rearwardly when said door is closed.

4. A device of the character described comprising a box having an open end, a door normally closing said open end and pivotally connected to said box, said door being provided with a letter slot, a member normally closing said slot and provided with a depending portion arranged outwardly of said door and adapted to normally hold said member in closing position, and a pin carried by said member, said pin being arranged adjacent the lower portion of said slot and projecting beyond the ends of said member and contacting with the inner face of said door.

In testimony whereof I affix my signature.

JOHN A. ALMS.