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AUTOMATIC RURAL MAIL BOX SIGNAL

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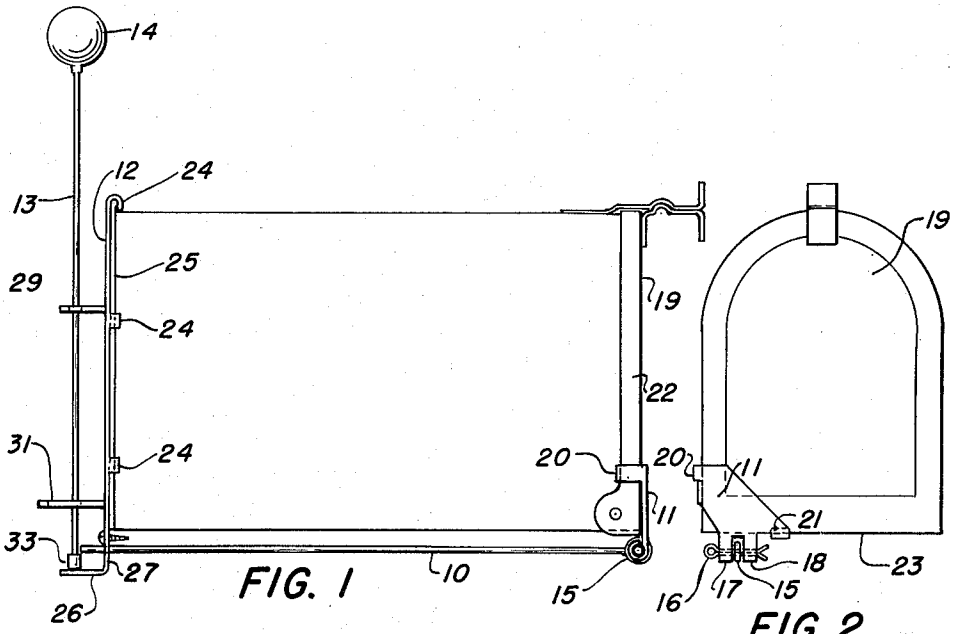


FIG. 1

FIG. 2

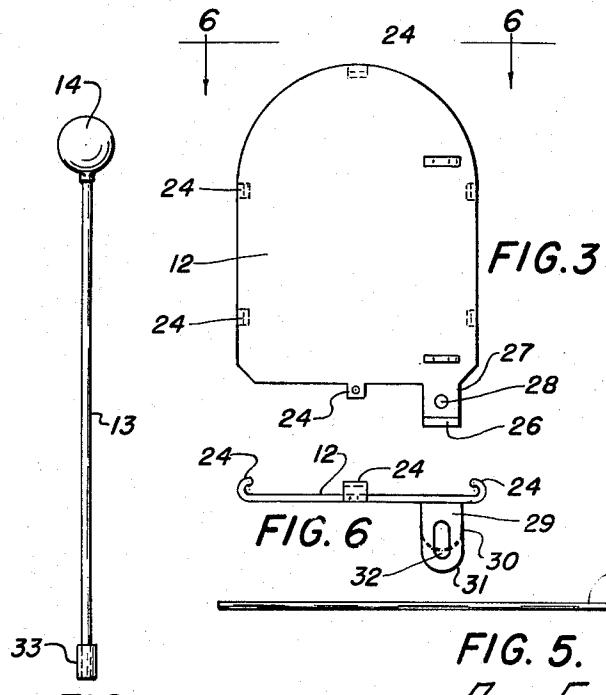


FIG. 3

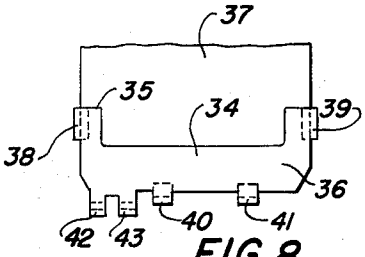


FIG. 8

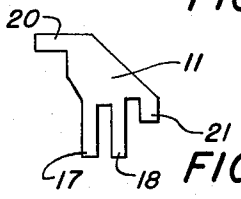


FIG. 4.

FIG. 5.

FIG. 6

FIG. 7

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AUTOMATIC RURAL MAIL BOX SIGNAL

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1 Claim. (Cl. 232—35)

This invention relates to mail boxes, such as used for rural mail delivery, and in particular, a signal mounted on a mail box and automatically actuated as a door of the mail box is opened, so that a person at a remote point may ascertain whether or not mail has been placed in the mail box.

The purpose of this invention is to provide means for actuating a signal on a mail box by the opening movement of a door of the mail box, so that the operation of the signal to indicate whether or not mail has been deposited in the mail box is not dependent upon the memory of a mail carrier.

Various types of signals have been provided for indicating that mail has been placed in rural mail boxes. However, such signals are set or actuated by the mail carrier, and in numerous instances the signals are overlooked. Other attachments have been used which are actuated by doors of the mail boxes, and these signals are not successful because they do not operate in ice and snow, and because they corrode and rust rapidly.

With these thoughts in mind this invention contemplates a rural mail box signal including a ball, preferably of a bright red color, on the upper end of a rod slidably mounted in eyes extended from a back plate attached to the rear end of a mail box, and resting upon a foot extended from the lower end of the back plate, whereby the rod is supported with the ball in an upwardly disposed position, and a bar pivotally connected to a clip extended from the lower edge of the front door of the mail box whereby upon opening the door the bar pushes the lower end of the rod off of the foot permitting the rod and ball to drop to indicate that mail has been placed in the mail box.

The object of this invention is, therefore, to provide a signal for a rural mail box that is actuated by the opening movement of the door of the mail box to indicate that mail has been placed in the box.

Another object of the invention is to provide an automatic signal for a rural mail box that operates as a door of the box is opened in which the signal may be mounted on mail boxes now in use.

A further object of the invention is to provide a signal for a rural mail box that operates to indicate that mail has been placed in the box as a door of the box is opened in which the signal is of a simple and economical construction.

With these and other objects and advantages in view the invention embodies a clip designed to be attached to the lower edge of a door of a mail box, a bar pivotally connected to the clip and extended rearwardly of the mail box, a back plate designed to be attached to the rear end of the mail box and having an opening in a depending foot for receiving the extended end of the bar, the back plate having vertically spaced eyes with elongated slots therein extended therefrom, and a rod with a ball on the upper end extended through the slots of the eyes and resting upon the foot depending from the lower edge of the back plate.

Other features and advantages of the invention will appear from the following description taken in connection with the drawings wherein:

Figure 1 is a side elevational view of a mail box with the improved automatic signal of this invention mounted thereon.

Figure 2 is a view showing the front end of a mail box with the door in the closed position, and with the signal actuating clip on the lower edge of the door.

Figure 3 is an elevational view of the back plate with other parts omitted.

Figure 4 is a view showing a blank from which the clip on the lower edge of the door is formed.

Figure 5 is a view showing a bar designed to be attached to a clip on the door of a mail box, and extended to slide a signal carrying rod from a supporting foot at the rear of the mail box.

Figure 6 is a plan view of the back plate of the signal assembly taken on line 6—6 of Figure 3.

Figure 7 is a view showing a rod with a ball on the upper end which is carried by the back plate to provide a signal.

Figure 8 is a view showing the lower edge of the front door of a mail box illustrating a modification wherein the clip on the lower edge of the door extends across the door.

Referring now to the drawing wherein like reference characters denote corresponding parts, the improved automatic mail box signal of this invention includes a bar 10 positioned below a mail box, a clip 11 for connecting the forward end of the bar to the door of the mail box, a back plate 12 designed to be attached to the rear end of the mail box, a rod 13 carried by the back plate, and a ball 14 positioned on the upper end of the rod.

One end of the bar 10 is provided with an eye 15 by which the bar is pivotally connected by a pin, such as a cotter pin 16, to eyes 17 and 18 depending from the clip 11. The clip 11 is attached to the door 19 by fingers 20 and 21 which are crimped over the side 22 and lower edge 23 of the door, respectively.

The back plate is provided with fingers 24 that are crimped over a bead at the rear of the mail box, as indicated by the numeral 25, and the depending foot 26 is supported from the back plate by a bar 27 in which an opening 28 is provided. The opening 28 is positioned to receive the extended end of the bar 10, as shown in Figure 1.

The back plate is also provided with an upper eye 29 having an opening 30 therein, and a lower eye 31 having an elongated slot 32 therein, as shown in Figure 6. The opening 30 in the eye 29, the slot 32 in the eye 31, and the opening 28 in the bar 27 are positioned in alignment so that the bar 10 engages the lower end of the rod 13 as the bar is actuated by an opening movement of the door. The lower end of the rod 13 is provided with a sleeve 33, the size of which is such that the sleeve will not pass through the slot of the lower eye, so that accidental displacement of the rod with the ball is substantially impossible. The sleeve is secured on the rod by suitable means.

In the modification illustrated in Figure 8 a plate 34 with upwardly extended ends 35 and 36 is secured to the lower edge of a door 37 by fingers 38 and 39 at the sides and 40 and 41 at the lower edge, and the lower edge of the plate is provided with eyes 42 and 43, similar to the eyes 17 and 18 of the clip 11. With this arrangement the eye 15 of the bar 10 is connected by a cotter pin or the like to the eyes 42 and 43. It will be

understood that the bar **10** may be pivotally connected to the door by other suitable means.

In use the rod **13** is positioned with the lower end on the foot **26** and as the door of the mail box is opened the bar **10** is moved rearwardly sliding the lower end of the rod **13** from the foot, whereby the rod drops carrying the ball downwardly to a position on the upper surface of the mail box. A person from a house, or other remote point, looking toward the mail box sees that the ball is down, and assumes that there is mail in the box. After removing the mail from the box the ball is again set in the position shown in Figure 1, and the ball remains in this position until the door of the box is again opened.

It will be understood that other modifications, within the scope of the appended claim, may be made in the design and arrangement of the parts without departing from the spirit and intention of the invention.

What is claimed is:

In a mail box signal, the combination which comprises a back plate having a foot depending from the lower edge, fingers extended from the back plate for attaching the back plate to the rear end of a mail box, vertically spaced upper and lower eyes extended from the back plate and aligned with said foot, a rod having a ball on the upper end and a sleeve on the lower end

extended through said eyes and positioned with the lower end resting on said foot, the lower eye having an elongated slot therein to permit the lower end of the rod to slide from the foot, a clip designed to be attached to the door of the mail box and having eyes depending therefrom, and a bar pivotally mounted in the eyes of the clip and positioned to extend through the foot depending from the back plate to push the lower end of said rod from the foot upon opening of the door of the mail box.

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