Feb. 26, 1957 J. H. CYPHERS 2,782,983

MAILBOX SIGNAL

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Fig. 1

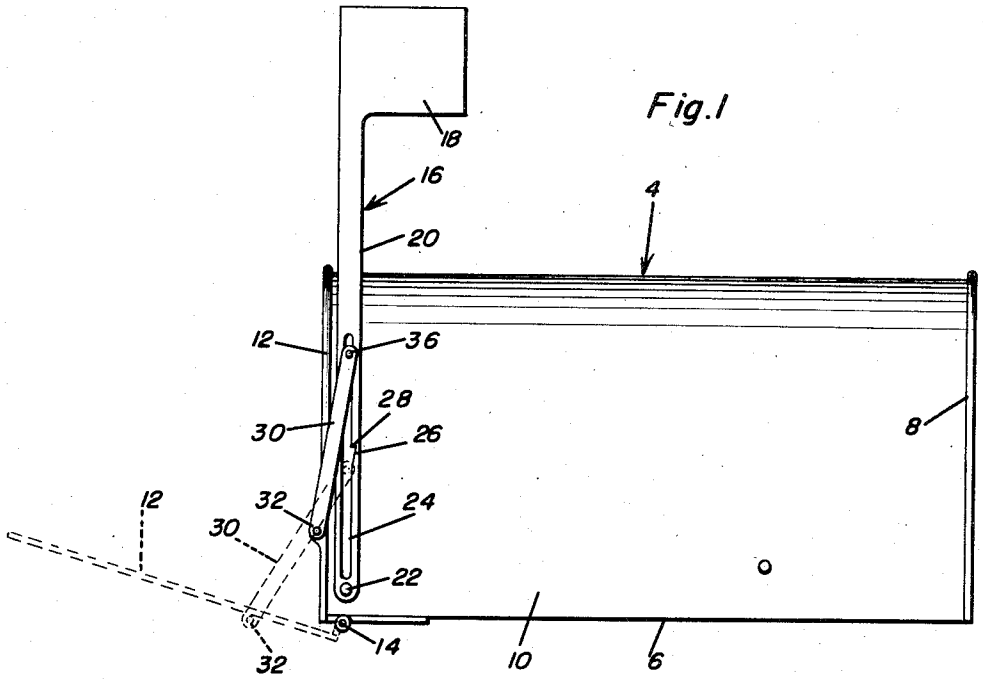


Fig. 2

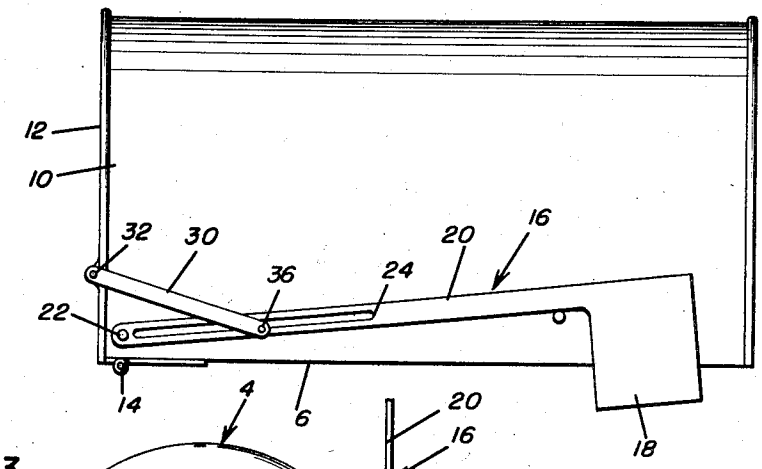
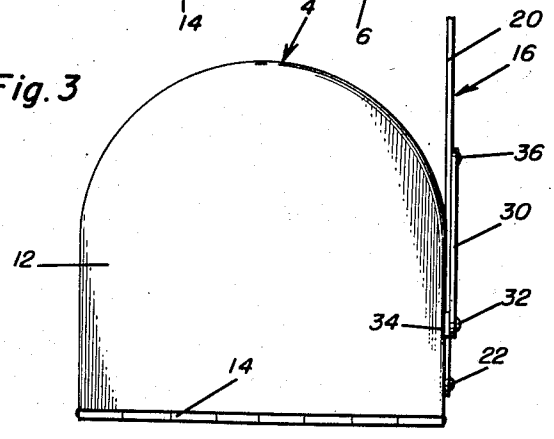


Fig. 3



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MAILBOX SIGNAL

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2 Claims. (Cl. 232—35)

The present invention relates to certain new and useful improvements in a flag-type signal for a conventional-type rural mail box and has reference in particular to a signal construction which, it is believed, meets manufacturing requirements and, what is more important, serves the needs of the owner or owners of the mail box as well as the needs of mail carriers.

Another object in the same general sphere of endeavor is to structurally, functionally, and otherwise improve upon similarly constructed and performing prior art mail box signals, particularly the type wherein there is a mechanical operating connection between the usual upwardly swingable closing door and the customarily pivoted upwardly and downwardly swingable signal flag.

In carrying out the principles of the invention, a signal construction is provided wherein the flag is placed in a vertical or "up" position by the resident owner, there being an operating link connection between one marginal edge of the hinged upwardly swinging door and an intermediate portion of the staff of the flag, said connection permitting the mail carrier to swing the door down to open position and to place mail in the box, after which, when the door is again lifted and pushed to closed position, said link functions to exert pressure against the intermediate portion of the staff, this in a manner to force or drop the flag to assume a "down" position, whereby to simplify the operation for all concerned.

Briefly summarized, the invention has to do with an ordinary or conventional rural mail box having top, bottom, side and end walls, one end wall being closed and the other end wall being hinged to the bottom and constituting an upwardly swingable door which is normally closed. A signal flag is provided and this has a linearly straight shaft which is parallel to one vertical side wall of the box and it has its lower end superimposed against and pivotally connected, by a friction held pivot pin, to said one side wall just above the bottom of the box and adjacent to the door hinge connection. The intermediate portion of the staff is equipped with a shoulder and the flag is adapted to stay in its "up" position when so placed by hand. A simple linearly straight flag dropping link is provided and this is pivoted at one end to one marginal edge of the door. The other end of the link has sliding connection with the staff and is provided with a lateral pin which is releasably engageable with the shoulder in a manner to push the flag from its "up" to its "down" position when said door is swung from an open to a closed position by the mail carrier.

Other objects, features and advantages will become more readily apparent from the following description and the accompanying sheet of illustrative drawings.

In the drawings, wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is a side elevational view of a rural mail box having a signalling flag constructed in accordance with the principles of the present invention and showing the signal "up" and the door closed and also showing, in dotted lines, the door and link when the door is open;

Figure 2 is a side elevation based on Figure 1 and showing the position of the flag and link when the flag is in its "down" position;

Figure 3 is a front end elevation of the structure seen in Figure 1, observing the same in a direction from left to right.

Referring now to the drawings by reference numerals and accompanying lead lines, the mail box, which is conventional, is denoted generally by the numeral **4**. The bottom is denoted at **6** and one closed end at **8** and one vertical side wall at **10**, these being the parts of the fixed portion of the box involved in the instant matter. The door is also conventional and this is denoted by the numeral **12** and it is normally closed and is hingedly connected as at **14** to the forward end of the bottom **6**.

The signal flag is denoted generally by the numeral **16** and it is also of a somewhat ordinary type in that it is of one-piece construction, made from metal, or the like, and includes a flag portion **18** and a right angularly disposed staff **20**. The lower end of the staff is suitably constructed and is pivotally connected as at **22** to the side walls **10** close to the front of the box and above the hinge **14** so that the hinge connection and pivot connection are in proper relationship to facilitate satisfactory cooperation of the parts. The flag swings in the usual arcuate path from the "down" position shown in Figure 2, to the "up" position shown in Figure 1. The friction pivot **22** will be of such tension as to cause the flag to "stay put" when the flag is moved by hand to assume the "up" position illustrated in Figure 1. The lower and intermediate portion of the staff is provided with a lengthwise slot **24**. One marginal edge of the slot, intermediate the respective ends of the slot, is provided with a cut-out or notch **26** and one end of the notch constitutes a thrust shoulder **28**. The aforementioned link is linearly straight, as is the staff **20** but the link is disposed in the plane different from the plane of the staff, as brought out in the drawings, especially in Figure 3. The link is relatively short and rigid and it is denoted by the numeral **30**. One end of the link, which may be conveniently called the lower end, is pivoted as at **32** to a boss **34** (see Figure 3) provided on the lower marginal edge of the door above the hinge **14** and pivot **22**. This mound-like boss positions the pivotal connection **32** properly so that the upper end portion of the link overlaps and has sliding contact with the outward surface of the flag staff. This upper end of the link is provided with a lateral pin **36** and the pin extends into the slot properly and slides in the slot. The length of the link and the position of the pin is such that the pin is adaptable for releasable as well as thrust engagement with the shoulder **28**.

Assuming that the flag is "down" as illustrated in Figure 2, the resident of the house will manually lift the flag to the vertical or "up" position. This will necessitate disengaging the pin **36** from the shoulder and permitting the pin to slide in the upper half portion of the slot as the flag is swung to the stated vertical or "up" position. Assuming that the door is now closed, the pin is in the upper end portion of the slot and permits the door to be swung down to the dotted line position without any coaction between the pin and shoulder. When the door is thus open, the mail carrier may place mail in the box and when he swings the door up again, the link, which is loosely pivoted at **32**, will drop by gravity to the desired shoulder engaging position and will ride up alongside of the right hand edge portion of the slot and will register with the notch and thus find a position in engagement with the shoulder **28**. This means that as soon as the door is swung up part way, the pin engages the shoulder and exerts a thrust movement against the shoulder and forces the flag to the "down" position shown in Figure 2. In other words, insofar as the mail carrier

is concerned all that he needs to do is to open the box, remove the mail, if any, in the box, place mail, if any, in the box and close the door and, in so doing, the flag swings down to the position shown in Figure 2. The attachment does not interfere in any way with the opening or closing of the door nor with hand-raising or lowering of the flag.

The invention is simple, practical, economical, may be readily installed by the manufacturer and handily and successfully used to the mutual advantage of resident owners, mail carriers and others who may be concerned therewith.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed as new is as follows:

1. In combination, a rural mail box open at its mail accommodation end, an upwardly swingable closing door normally closing said end and hingedly connected to the bottom of said box, a signal flag having a linearly straight staff parallel to one vertical side wall of said box and having its lower end superimposed against and pivotally and frictionally connected to said one wall just above said bottom and adjacent to the door hinge connection, the intermediate portion of said staff having a lengthwise slot therein, one longitudinal edge of said slot having a notch therein defining and providing a shoulder, said flag being adapted, by way of said friction pivotal connection, to stay in a vertical "up" position when set by hand to occupy said position, and a linearly straight flag dropping

link pivoted at one end on one marginal edge of said door, the other end of said link overlapping and having sliding contact with an adjacent outer surface of said staff and having a lateral pin, the latter operating slidingly in said slot and being releasably engageable with said shoulder.

2. In combination, a rural mailbox open at its mail accommodation end, an upwardly swingable closing door normally closing said end and hingedly connected to the bottom of said box, a signal flag having a linearly straight staff parallel to one vertical side wall of said box and having its lower end superimposed against and pivotally and frictionally connected to said one wall just above said bottom and adjacent to the door hinge connection, the intermediate portion of said staff having a shoulder, said flag being adapted to stay in a vertical "up" position when set by hand to occupy said position, and a linearly straight flag dropping link pivoted at one end on one marginal edge of said door, the other end of said link having sliding connection with said staff and being provided with a lateral pin which is releasably engageable with said shoulder in a manner to push said flag from its "up" to its "down" position when said door is swung from an open to a closed position by a mail carrier, said staff being provided with a lengthwise slot, said pin fitting into and being slidable in said slot, one edge of the slot having a notch formed therein and said notch serving to define and provide said shoulder.

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