Oct. 7, 1952 J. J. JOYCE 2,613,031

MAIL DELIVERY SIGNAL FOR MAILBOXES

Filed April 4, 1951

FIG. 1.

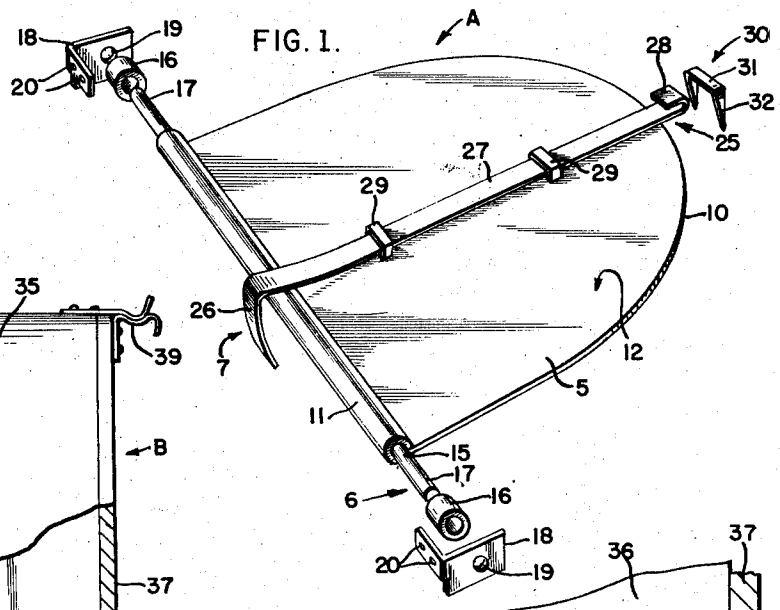


FIG. 2.

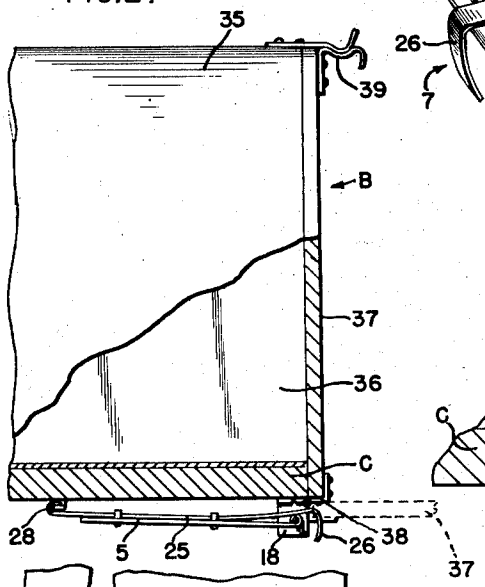


FIG. 4.

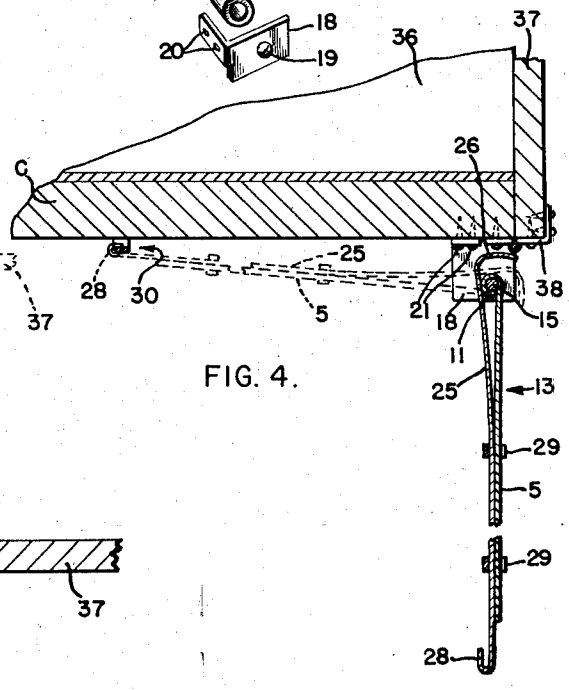
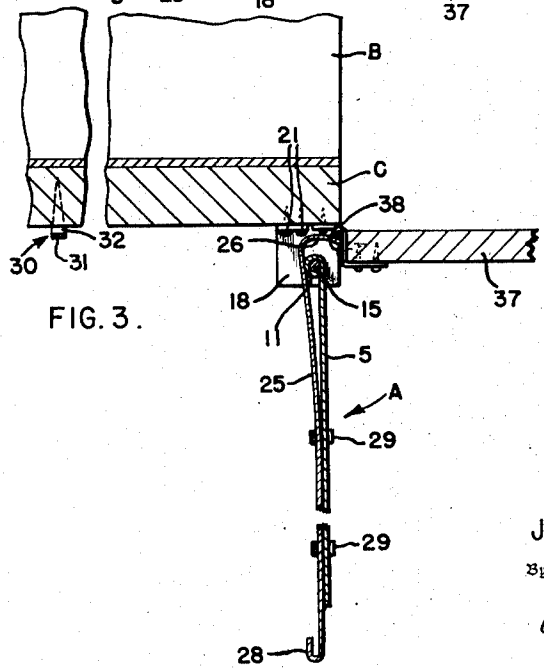


FIG. 3.



Inventor

JAMES J. JOYCE

By Lamaster, Allen & Rowe

Attorneys

Patented Oct. 7, 1952

2,613,031

UNITED STATES PATENT OFFICE

2,613,031

MAIL DELIVERY SIGNAL FOR MAILBOXES

James J. Joyce, Portsmouth, N. H.

Application April 4, 1951, Serial No. 219,209

6 Claims. (Cl. 232—35)

1

This invention relates to mail delivery signals for mailboxes such as rural mailboxes.

An important object of the invention is to provide such a signal which may be readily attached to the bottom walls of conventional rural mailboxes by employing easily-handled tools, as screwdrivers and hammers and which installations do not require alterations of the conventional rural mailboxes.

The new signals may be marketed for attachment to already installed boxes, may be attached to the boxes when the latter are being installed, or may be sold with the boxes. Since the new signal forms a relatively flat package it may be enclosed in an appropriate envelope for sale by itself, or to accompany a mailbox.

Another important object is to provide a mail delivery signal which does not require direct manipulation by the carrier or mailman since it automatically operates to signal upon opening of the closure of the box in order to deposit mail therein.

Other objects and advantages of the invention will be apparent during the course of the following detailed description of the invention, taken in connection with the accompanying drawing, forming a part of this disclosure, and in which drawing:

Fig. 1 is a perspective view of the new signal detached from a mailbox.

Fig. 2 is a fragmentary side elevation of the mail receiving end of a mailbox, including a closure in a closed position, and partly broken away, and with the new signal (in section) installed and in a non-signalling position.

Fig. 3 is a fragmentary vertical section, enlarged over that shown in Fig. 2 with the closure open and the signal (in section) moved out of its position in Fig. 2.

Fig. 4 is a fragmentary vertical section along the lines of Fig. 3 but with the closure again in a closed position and the signal (in section) in a signalling position.

In the drawing, wherein for the purpose of illustration is shown a preferred embodiment of the invention and wherein similar reference characters designate corresponding parts throughout the several views, the letter A designates the new signal, the letter B, a mailbox mounted upon a conventional sub-bottom C.

The new mail delivery signal A comprises a signal element 5, pivot means 6 and latch means 7.

As may be appreciated, the signal element 5 may take various shapes and be constructed of any suitable material not readily affected by the

2

elements. It comprises a flat plate which may have a curved free end edge 10 and a rolled end portion opposite the edge 10 to provide a sleeve 11 for a part of the pivot means 6, although the sleeve has an additional function as will be subsequently explained. It may be of metal, such as tin, galvanized iron, steel, aluminum, and hardened plastic, and coated, if desired, with paint or the like. For convenience, one face 12 of the plate may be termed the inner face, since it faces the sub-bottom C when the signal element 5 is raised, and the opposite face 13 may be termed the outer face. The sleeve 11 is rolled over the inner face 12.

The pivot means 6 preferably comprises a pivot pin or shaft 15 extending through the sleeve 11 and projecting outwardly thereof. Spacers 16 may be mounted upon the protruding end portions 17 of the pin or shaft 15 and a pair of L-shaped brackets 18 are provided, having openings 19 to receive the outer extremities of the end portions 17, and openings 20 for screws or nails 21 to secure the brackets to the under side of the sub-bottom C, in positions so that the pin or shaft 15 cannot drop from the openings 19 in the brackets 18. The brackets 18 are set so that the pivot pin or shaft 15 and the sleeve 11 are inwardly of the vertical planes of the edges of the sub-bottom C so that rain will not be apt to collect in the pivot means and freeze. The pivot means may be of steel brass, aluminum or the like.

The latch means 7 is of novel construction and includes a reciprocating member 25 which is preferably a narrow elongated strip of slightly springy or flexible material, as heavy tin, light steel or iron, and has one of its end portions formed into a curved abutment 26 which also functions as a fingerhold and extends to form with the main portion 27 of the member 25 substantially a letter J. The other end portion of the member 25 is formed into a hook 28 extending in a direction opposite to that in which the abutment 26 extends. The member 25 is slidably retained by the plate of the signal element 5 by suitable spaced-apart bearings 29 for the main portion 27 thereof, extending from the face 12 and secured to the plate in any approved way. In the example shown, their end portions extend through suitable openings in the plate and are turned over upon the adjacent portions of the face 13 so that the greater portion of the member 25 slides over the face 12 at substantially the axial longitudinal center of the plate. It will be noted in Fig. 1, 3 and 4 that

the resilient member 25 is sprung against the sleeve 11 so that the member 25 is slightly bowed. Thus the sleeve 11 functions as a means to frictionally retain the member 25 in a fixed position, against accidental movement with respect to the plate of the element 5. The additional portion of the latch means 7 comprises a keeper 30 which may be a conventional staple of the type having a substantially straight connecting portion 31 for the legs 32. The hook 28 is adapted to hook over the connecting portion when the staple is properly driven into the sub-bottom C in a position as in Figs. 2, 3 and 4. When so hooked, the abutment 26 should be positioned as in Fig. 2.

The mailbox B is of conventional construction including a metallic housing 35 defining a mail receiving compartment 36 closed by a swinging closure 37 having a substantially flat lower edge 38, with the closure hinged, as to the sub-bottom C to swing by gravity to the position shown in Fig. 3. However it may be retained in a closed position as by conventional latch means 39.

The sub-bottom C is also conventional and is usually a suitable length of lumber upon which the housing 35 is mounted and the sub-bottom C, in turn, mounted upon a post (not shown) or the like. The new signal A is carried by this sub-bottom C which, being generally of wood, renders installation of the new signal very easy, since all that is required is to screw or nail the brackets 18 and nail the keeper (staple) 30 thereto.

After the new signal A is installed, the closure 37 is raised to the position shown in Fig. 2 and latched by the latch means 39, whereupon the operator pivots the signal A upwardly to substantially parallel the sub-bottom C and hooks a finger about the abutment and fingerhold 26 drawing it and the rest of the member 25 forwardly until the hook 28 engages the keeper 30 as in Fig. 1. It will be noted that, then, the abutment and fingerhold is within the vertical plane of the closure 37.

When the mailman releases the closure 37 in order to deposit mail matter in the compartment 36, he will, of course, pivot the closure downwardly and the edge 38 thereof will swing in an arc, engage the abutment and move the entire member 25 to the left as in Fig. 1, releasing the hook 28 from the keeper 30 and the signal A will pivot, due to gravity, to the position in Fig. 3. The mailman will then close the mailbox by pivoting the closure 37 to its latched position, but the signal A will remain vertical as in Fig. 3 and afford a visible signal that mail matter has been deposited in the mailbox. It will be noted that, in these operations, the mailman has not needed to manipulate the signal at all, since it pivoted to a signalling position automatically.

The closure 37 may be pivoted downwardly in order to remove the mail matter without interference from the signal A and, after the mail matter has been removed and the closure 37 pivoted to a latched position, the first step of latching the signal A is repeated.

As may be seen from Fig. 3 or 4 for example, the member 25 will not slide longitudinally of the signal element plate because it is sprung against the rolled sleeve 11 of the latter and it cannot separate from the bearings 29 because the curved abutment or fingerhold 26 forms a hook with respect to this sleeve 11.

Various changes may be made to the form of the invention herein shown and described without departing from the spirit of the invention or scope of the claims.

What is claimed is:

1. A mail delivery signal for a mailbox including a signal element provided with a body having an edge provided with a sleeve, an elongated reciprocable member of springy material, slidable over a portion of said element including a portion of the outer face of said sleeve and sprung against said sleeve, said member having an end portion extending beyond said element adjacent said sleeve, with said end portion provided with a fingerhold, the other end portion of said member having a hook, a keeper for said hook, disposed in the path of travel of said hook and carried by said mailbox, a bearing for said member and carried by said element, and means for pivotally mounting said signal upon said mailbox including a shaft extending through said sleeve.

2. A mail delivery signal for mailboxes according to claim 1, characterized in that said fingerhold is a curved extension of said member, and said hook extends in a direction opposite to the direction of extension of said fingerhold.

3. A mail delivery signal for mailboxes according to claim 1, characterized in that said fingerhold is a curved extension of said member, and said sleeve is disposed in the path of travel of said fingerhold toward said sleeve.

4. In combination with a mailbox having a sub-bottom and a downwardly-swinging closure having a lower edge projecting forwardly of said sub-bottom and in substantially the same plane as the bottom face of said sub-bottom when said closure is raised to close said mailbox, a signal for said mailbox, including a signal element provided with a body having an edge provided with a sleeve, the exterior diameter of said sleeve being greater than the thickness of said body, an elongated reciprocable member of springy material, slidable over a portion of said element, including a portion of the outer face of said sleeve and sprung against said sleeve, said member having one end portion extending beyond said element adjacent said sleeve and provided with a combined abutment and fingerhold, said member having a hook at the other end thereof, means reciprocably mounting said member upon said element, a keeper for said hook and carried by said sub-bottom, and means pivotally mounting said element upon said sub-bottom so that when said hook engages said keeper, said combined abutment and fingerhold is disposed in the path of travel of said lower edge when said closure is swung downwardly.

5. In combination with a mailbox having a sub-bottom and a downwardly-swinging closure having a lower edge projecting forwardly of said sub-bottom and in substantially the same plane as the bottom face of said sub-bottom when said closure is raised to close said mailbox, a signal for said mailbox, including a signal element provided with a body having an edge provided with a sleeve, the exterior diameter of said sleeve being greater than the thickness of said body, an elongated reciprocable member of springy material, slidable over a portion of said element, including a portion of the outer face of said sleeve and sprung against said sleeve, said member having one end portion extending beyond said element adjacent said sleeve and provided with a combined abutment and fingerhold, said member having a hook at the other end thereof, means reciprocably mounting said member upon said element, a keeper for said hook and carried by said sub-bottom, said hook being disposed with

reference to said keeper so that the hook engages said keeper upon travel of said combined abutment and fingerhold in a direction away from said sleeve, and means pivotally mounting said element upon said sub-bottom so that when said hook engages said keeper, said combined abutment and fingerhold is disposed in the path of travel of said lower edge when said closure is swung downwardly.

6. In combination with a mailbox having a sub-bottom and a downwardly-swinging closure having a lower edge projecting forwardly of said sub-bottom and in substantially the same plane as the bottom face of said sub-bottom when said closure is raised to close said mailbox, a signal for said mailbox, including a signal element provided with a body having an edge provided with a sleeve, the exterior diameter of said sleeve being greater than the thickness of said body, an elongated reciprocable member of springy material, slidable over a portion of said element, including a portion of the outer face of said sleeve and sprung against said sleeve, said member having one end portion extending beyond said element adjacent said sleeve and provided with a combined abutment and fingerhold extending in a direction substantially normal to the major portion of said member, said member having a hook at the other end thereof, mean reciprocably mounting said member upon said element, a keeper for said hook and carried by said sub-bottom, said hook being disposed with reference to said keeper so that the hook engages said keeper upon travel of said combined abutment and fingerhold away from said sleeve, and means pivotally mounting said element upon said sub-bottom so that when said hook engages said keeper, said combined abutment and fingerhold is disposed in the path of travel of said lower edge when said closure is swung downwardly.

JAMES J. JOYCE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,895,912	Bowers	Jan. 13, 1933