Oct. 8, 1940. J. I. FATUR 2,217,310

MAILBOX SIGNAL

Filed Nov. 13. 1939

FIG. 1.

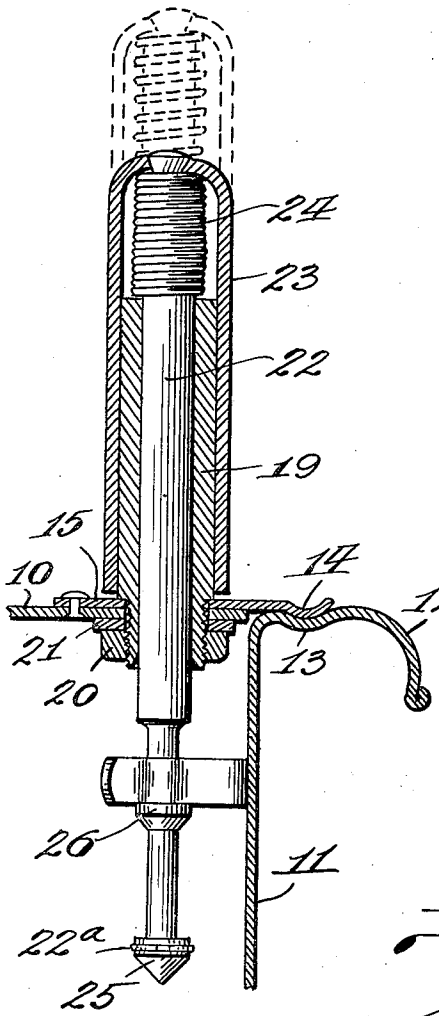


FIG. 2.

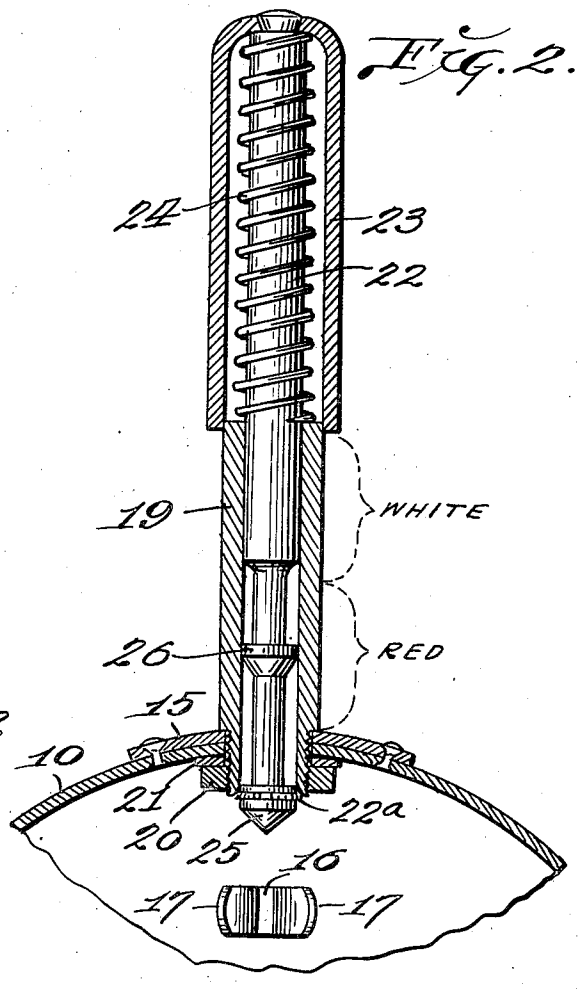
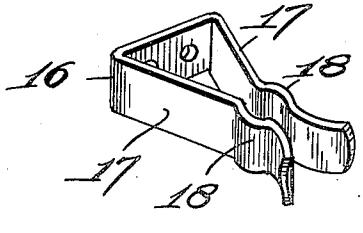


FIG. 3.



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MAILBOX SIGNAL

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3 Claims. (Cl. 232—35)

My invention relates to a mailbox signal and has for its principal object the provision of a relatively simple, inexpensive and efficient attachment that may be conveniently applied to practically all forms of mailboxes now in general use and particularly those boxes employed in the rural free delivery service and which devices will serve to indicate that mail matter has been deposited in the box and said signal being also effective in indicating that the box owner has placed mail matter in the box to be picked up by the carrier.

A further object of my invention is, to provide a mailbox signal of the character referred to which in certain of its functions is controlled by the door of the box which necessarily must be opened and closed as mail matter is deposited therein and withdrawn therefrom.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangement of parts that will be hereinafter more fully described and claimed and illustrated in the accompanying drawing in which:

Fig. 1 is a sectional view taken vertically through the upper front end portion of a conventional form of mailbox and showing my improved signal applied thereto and in non-signalling position.

Fig. 2 is a vertical section showing the signal in position to indicate that the carrier has deposited mail matter in the box.

Fig. 3 is a perspective view of a spring clip utilized for holding the spring pressed plunger of the signal in lowered position.

Referring by numerals to the accompanying drawing which illustrates a preferred embodiment of my invention, 10 designates the wall of a conventional mailbox, which wall is generally formed from sheet metal and provided with a curved or arched top. The front end of this box is closed by a hinged door 11 and projecting outwardly from the upper end of the door is a hook 12 that is adapted to be engaged by the fingers when the door is opened.

Formed in hook 12 is a transverse depression 13 adapted to receive the downwardly bent end 14 of a plate 15 that is secured on top of the mailbox directly above the center of the opening that is closed by the door. Thus when the door 11 is closed, the bent end 14 of plate 15 engages in depression 13 so as to retain the door in closed position.

Secured to the inner face of door 11 a short distance below the upper end thereof is a horizontally disposed clip 16 having a pair of inwardly projecting resilient fingers 17 and portions of said fingers near their free ends are bent outwardly to form seats 18 for the reception of the lower portion of a plunger hereinafter more fully described.

The lower portion of a tube 19, preferably metal, and which may be approximately three-quarters of an inch in diameter and three or four inches in length, is reduced in diameter and the reduced portion which is externally threaded passes through an aperture that is formed through plate 15 through a coinciding aperture in the top of the mail box and this tube is rigidly secured to the box by means of a nut 20 that is seated on the threaded portion of the tube that projects into the box and there being a washer 21 disposed between said nut and the wall of the box.

Arranged to slide freely through tube 19 is a plunger 22, the length of which is approximately twice that of the tube 19 and the upper end of this plunger is rigidly fixed, preferably by riveting or otherwise, to the inwardly turned upper end of the wall of a tube 23 which functions as a sleeve that slides lengthwise of the tube 19.

Mounted on the upper portion of the plunger 22 and interposed between the upper end of tube 19 and the inturned upper end of the wall of sleeve 23 is an expansive coil spring 24.

The upward limit of travel of the plunger 22 and the sleeve carried thereby may be limited by any suitable means, preferably by a split snap ring 22*a* formed of resilient metal and which occupies a groove formed in that portion of the head 25 having the largest diameter. This ring when expanded to its normal degree is adapted to engage the lower end of the tube 19, thus preventing further upward movement of the plunger and the sleeve carried thereby.

The lower portion of plunger 22 is reduced in diameter and formed on the lower end of said reduced portion is a substantially conical head 25. Formed on the reduced lower end portion of plunger 22 intermediate its ends is a flange 26 having a beveled under face.

The lower half of the external surface of tube 19 is preferably colored red and the upper half of said surface is distinctively colored, preferably white, in order to perform the desired signalling functions.

The carrier in order to place mail matter in the box must necessarily open the door 11 which is done by pulling outwardly on hook 12 so as to disengage the same from the projecting por-

tion of plate 15 and in the event that the lower end of plunger 22 was positioned between the fingers 17 of the spring clip 16, said plunger carrying the sleeve 23 will, under the influence of spring 24, be moved upwardly to its limit of movement as the door is opened and the spring clip is pulled away from the plunger. Thus the sleeve 23 at its upper limit of movement uncovers and consequently exposes the distinctively colored surface of the tube 19 so that the owner of the box by noting the displayed colors will understand that mail matter has been delivered to the box.

The box owner after removing the mail matter deposited in the box by the carrier closes the door of the box and then moves sleeve 23 downwardly to its limit of movement and in so doing the lower portion of the plunger 22 is moved downwardly between the resilient fingers of the clip 16 until the flange 26 on the plunger occupies a position beneath the seats 18 and thus, sleeve 23 is retained in its lowermost position so as to entirely cover the colored surface of tube 19 and under such conditions the signal is in non-signalling position.

When the door is subsequently opened by the carrier for the reception of mail matter, the clip 16 will be disengaged from the lower end of the plunger and the latter carrying the sleeve 23 will move upward so as to uncover the colored surface of the tube 19 and thereby render the signal visible.

In the event that the box owner deposits mail matter in the box to be picked up by the carrier, the door of the box is opened, the mail matter deposited in the box, the box closed and sleeve 23 is now engaged and forced part way downward on tube 19 so as to cover the upper portion of said tube which is colored white, thereby exposing only the red colored portion, thus displaying a signal to the carrier that there is mail to be picked up from the box.

When the door is closed as just described and the plunger moved part way downward, the head 25 will pass between the resilient fingers 17 and engage beneath the seats 18, thereby holding the tube in its partially depressed position until the door is opened to withdraw the clip from the plunger whereupon the spring 24 moves said plunger to its upper limit of movement.

Thus it will be seen that I have provided a signal for mailboxes that is relatively simple in construction, inexpensive of manufacture and very effective in performing the functions for which it is intended.

My improved signalling device is especially applicable for use on mailboxes employed in the rural free delivery service or wherever the mailbox is located a considerable distance from the dwelling occupied by the box owner.

It will be understood that minor changes in the size, form and construction of the various parts of my improved mailbox signal, may be made and substituted for those herein shown and described, without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim as my invention:

1. The combination with a mailbox, its door and a clip carried by and projecting from the inner face of said door, of a tube secured to the top of the box adjacent the upper central portion of the door, a plunger arranged for sliding movement through said tube, a sleeve carried by said plunger and adapted when said plunger is in lowermost position to cover said tube and there being spaced shoulders formed on the lower portion of said plunger, which shoulders are adapted to be engaged by the clip on said door.

2. The combination with a mailbox and its door, of a tube mounted on top of the mailbox adjacent the upper central portion of the door, a plunger arranged for sliding movement through said tube, a sleeve secured to the upper portion of said plunger and extending downwardly so as to enclose said tube, means associated with said plunger for yieldingly resisting its downward movement, there being a shoulder formed on the lower portion of said plunger and a clip carried by the door of the box and adapted to engage the shoulder on said plunger when the latter has been moved downwardly through said sleeve.

3. The combination with a mailbox and its door, of a tube secured to the top of the box adjacent the upper central portion of said door, a plunger arranged for sliding movement through said tube, a sleeve secured to the upper end of said plunger and adapted when said plunger is moved downward to cover said tube, means associated with the plunger for yieldingly resisting its downward movement and co-operating means on the lower portion of said plunger and on the door for engaging said plunger and holding the same in different lowered positions.

JAMES I. FATUR.