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MAIL BOX SIGNAL

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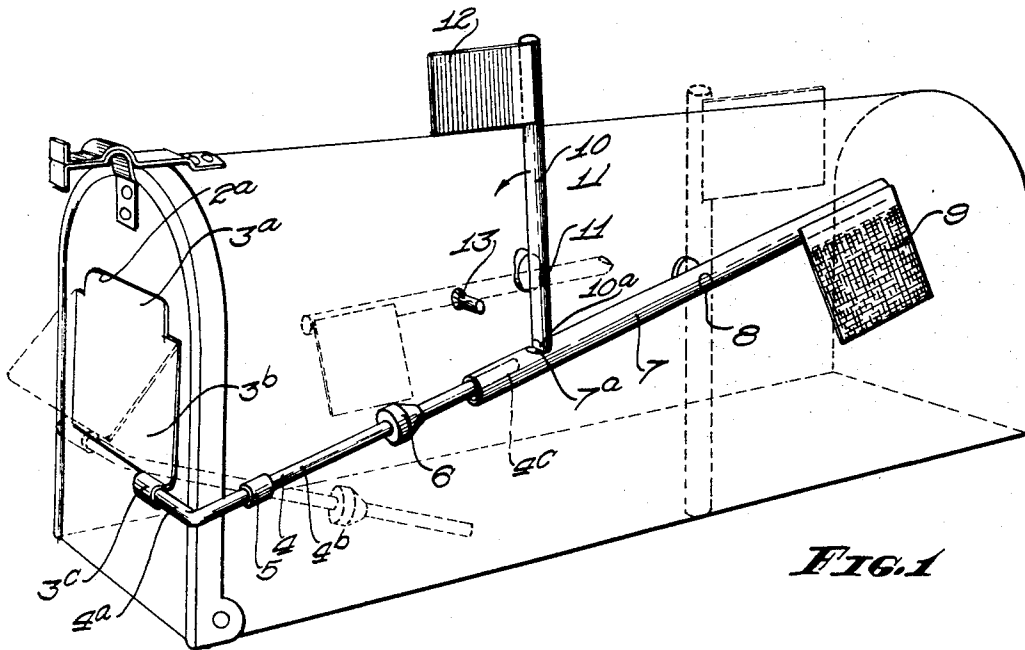


FIG. 1

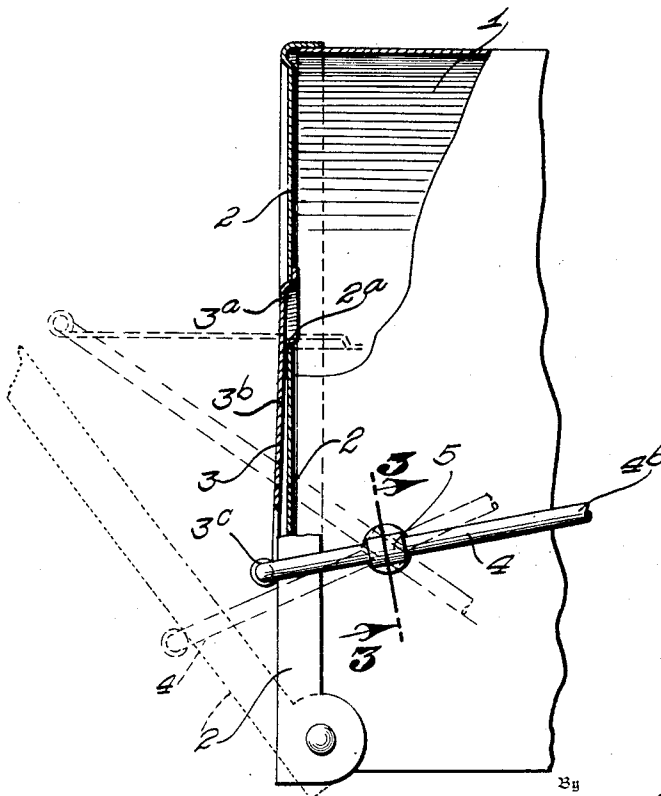


FIG. 2

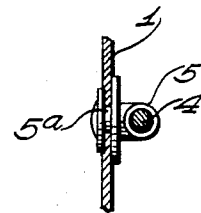


FIG. 3

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MAIL BOX SIGNAL

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4 Claims. (Cl. 232—35)

Our invention relates to mail box signals and the objects of our invention are:

First, to provide a signal of this class which automatically assumes its operating position when mail is placed in the mail box.

Second, to provide a signal of this class which may be used in the dual capacity of indicating to the mailman that there are letters for his collection, and indicating to the owner that such letters have been collected or that new mail has been deposited.

Third, to provide a signal of this class which in no wise increases the work of the mailman, the signal being set by the opening of the mail box.

Fourth, to provide a signal of this class which may be readily added to any conventional mail box, particularly the type used for rural delivery; and

Fifth, to provide on the whole a novelly constructed mail box signal which is extremely simple of construction and manufacture, durable, efficient in its action and which will not readily deteriorate or get out of order.

With these and other objects in view as will appear hereinafter, our invention consists of certain novel features of construction, combination and arrangement of parts and portions as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawing and to the characters of reference thereon which form a part of this application, in which:

Figure 1 is a perspective view of a mail box equipped with our signal, showing said signal in the position assumed when indicating when mail is in the box for collection by the mailman, and showing further by dotted lines the positions assumed by the signal member after the mailman has opened the door of the mail box; Fig. 2 is a fragmentary side elevational view of the forward end of the mail box with parts and portions broken away and in section to facilitate the illustration; and Fig. 3 is a fragmentary sectional view through 3—3 of Fig. 2.

Similar characters of reference refer to similar parts and portions throughout the several views of the drawing.

Mail box 1, main door 2, letter receiving door 3, bolt 4, guide sleeve 5, stop 6, signal arm 7, journal 8, signal flag 9, signal arm 10, journal 11, signal flag 12 and stop pin 13 constitute the principal parts and portions of our mail box signal.

A mail box 1 is provided which is conventional in most respects, it being rounded at its upper

side and closed except for one end. This end is provided with a main gate or door 2 hinged to the lower margins of the mail box. The main door supports a letter receiving door 3. The letter receiving gate or door 3 includes a door portion 3a which is adapted to close a slot 2a provided in the main door, and a counterweight portion 3b in the form of a relatively large plate which depends from the door portion on the outer side of the main door 2. The counterweight portion 3b is provided near one lower corner with a bearing 3c, the axis of which is horizontal.

The bearing 3c is adapted to receive the extremity of a shorter leg 4a forming one portion of an L-shaped bolt 4. The longer leg of the bolt 4, designated 4b, extends along the side of the mail box as shown in Figs. 1 and 2. This portion of the bolt 4 extends through a guide sleeve 5. The guide sleeve 5 is provided with suitable means 5a so as to permit pivotal movement of the leg portion 4b of the bolt as shown by dotted lines in Figs. 1 and 2. In order to limit the movement of the bolt, there is provided a suitable stop 6, which engages the sleeve 5.

The extremity 4c of the leg portion 4b of the bolt is adapted to fit in the end of a tubular signal arm 7 as shown in Fig. 1. The signal arm 7 is pivotally supported by a journal 8 secured to the mail box 1. Said journal 8 is disposed so that the portion of the signal arm in which the extremity 4c of the bolt fits overbalances the other portion of the signal arm so that said signal arm tends to assume the dotted line position thereof shown in Fig. 1. Said other extremity of the signal arm is provided with a signal flag 9, which is preferably colored yellow in accordance with the post office regulations.

The signal arm 7 adjacent the extremity of the bolt 4 is provided with a notch 7a which is adapted to interlock with the lower end 10a of a second signal arm 10. The second signal arm 10 is pivoted near the end 10a upon a journal 11. The other extremity of said signal arm 10 is provided with a signal flag 12. This is preferably colored red. A suitable stop pin 13 protrudes from the side of the mail box 1 so as to limit the movement of the second signal arm 10.

Operation of our mail box signal is as follows:

If the owner has letters which he desires the mailman to collect, he sets the flag as is shown by solid lines in Fig. 1, that is the flag 9 is in its inoperative position and the flag 12 is in its operative position so as to inform the mailman that the mail box contains matter to be collected by him. When the mailman opens the letter re-

ceiving door 3 or the main door 2, the bolt 4 is withdrawn from the signal arm 7, causing the signal flag 9 to assume the dotted line position shown in Fig. 1, and at the same time causing the signal arm 12 to assume its dotted line position also indicated in Fig. 1. When so disposed, the signal 9 indicates that the mailman has passed and collected the mail.

At times when the owner has no mail to be collected, he leaves the signal 12 in its dotted line position, or inoperative position, and sets the signal 9 only. In such case, when the mailman deposits a letter by opening either the door 3 or main door 2, the signal 9 shifts to its dotted line position and indicates such fact.

Though we have shown and described a particular construction, combination and arrangement of parts and portions, we do not wish to be limited to this particular construction, combination and arrangement, but desire to include in the scope of our invention, the combination, construction and arrangement substantially as set forth in the appended claims.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. In a mail box signal, a mail box, a mail receiving gate therefor, a signal arm supported from said mail box and tending to assume a signalling position, trip means associated with said mail receiving gate for holding said signal arm in its non-signalling position, said trip means being operable by movement of said mail receiving gate, a signal means supported from said mail box tending to assume a non-signalling position, and means on said signal arm for holding said signal means in its signalling position.

2. In a mail box signal, a mail box, a mail receiving gate therefor, a signal arm pivotally mounted at the side of said mail box, said signal arm disposed so as to tend to swing to a signalling position, means connected with said mail receiving gate normally holding said signal arm in its

non-signalling position, said means arranged to disengage said signal arm upon opening of said gate, a signal means supported from said mail box tending to assume a non-signalling position, and means on said signal arm for holding said signal means in its signalling position.

3. In a mail box signal, a mail box, a main door therefor, a mail receiving gate mounted upon said door, a trip means connected with said gate and shiftable by movement of either said gate or said door, a signal arm supported from said mail box and normally held in its non-signalling position by said trip means, said trip means arranged to release said signal arm upon opening either said door or gate whereby said signal arm is free to shift to its signalling position, a signal means supported from said mail box tending to assume a non-signalling position, and means on said signal arm for holding said signal means in its signalling position.

4. In a mail box signal, a mail box, a main door therefor pivotally mounted at its lower side, a mail receiving gate pivotally mounted near its upper side on said door, a rod connected with the lower side of said gate and shiftable therewith, a signal arm pivotally mounted on the outside of said mail box arranged to assume a signalling position when released, provided with a recess in one end adapted to receive the extended end of said rod for holding said signal arm out of signalling position, another signal means pivotally mounted above the recessed end of said signal arm on the outside of said mail box so arranged as to assume a non-signalling position and in engagement with the first mentioned signalling arm for holding it in signalling position, whereby when said first mentioned signalling arm is released by the opening of the door it assumes a signalling position and at the same time releases the second mentioned non-signalling arm so that it assumes a signalling position.

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