May 10, 1927. 1,628,034

J. R. DE MIER

ATTACHMENT FOR MAIL BOXES

Filed Feb. 11, 1926

Fig. 1

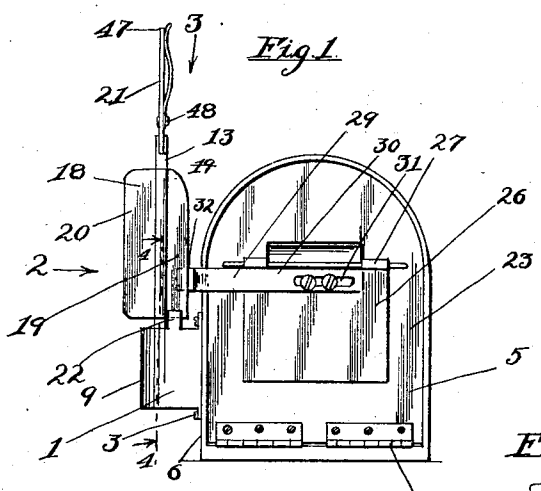


Fig. 2

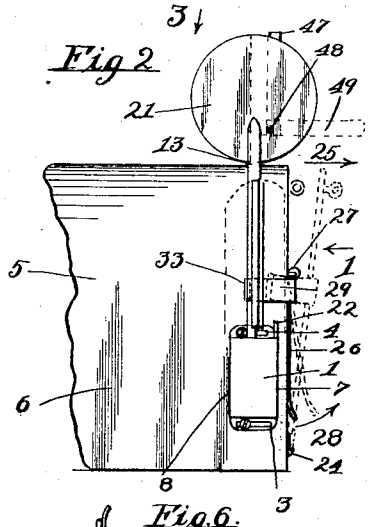


Fig. 4.

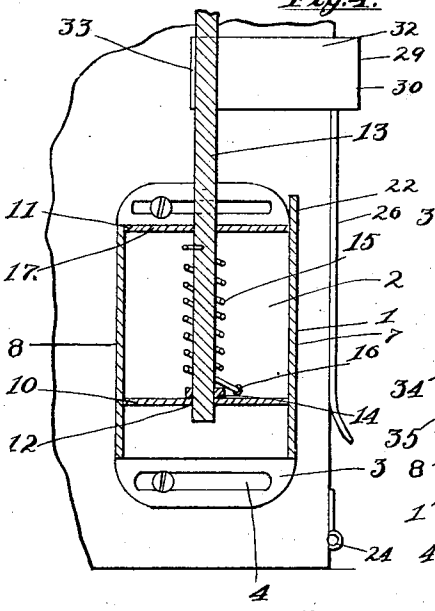


Fig. 5.

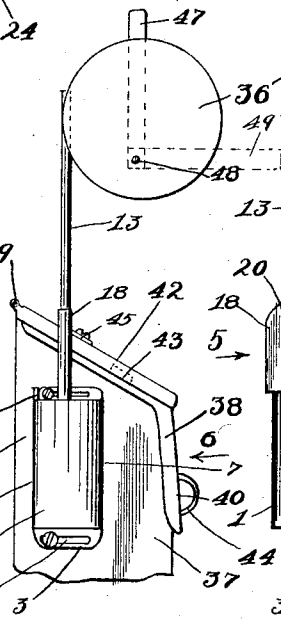


Fig. 6.

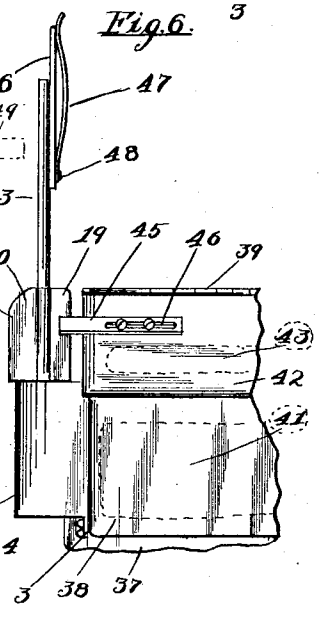
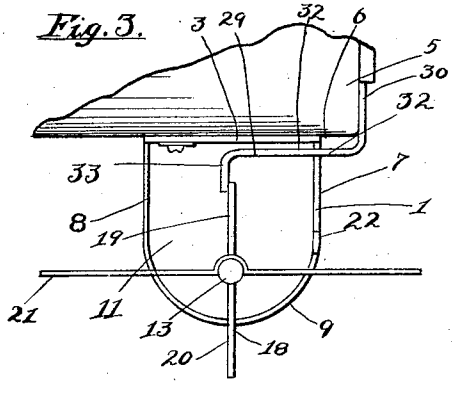


Fig. 3.



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Patented May 10, 1927. 1,628,034

UNITED STATES PATENT OFFICE.

JOHN R. DE MIER, OF LOS ANGELES, CALIFORNIA.

ATTACHMENT FOR MAIL BOXES.

Application filed February 11, 1926. Serial No. 87,567.

My invention is an attachment for mail boxes adapted to give a signal to the box owner of the insertion of mail by the postman, and having in addition a signal to the postman that there is mail in the box for him to collect; this auxiliary signal having means to support a letter.

An object of my invention is a signal for mail boxes having a pivotally mounted standard with a flag thereon at the upper end, the flag being held in one position when the box is closed and having a spring tending to turn the standard to swing the flag when the box is open.

A specific feature of my invention is an arrangement for holding the standard and flag by a trigger arm, this arm being attached to a movable part of the box which the postman is required to move to open the box for the insertion of letters so that the standard may be released, thence turned by the spring to bring the signal flag into position to indicate to the box owner that there is mail in the box.

My invention may be applied to a type of mail box as used for rural mail delivery or a type of mail box suitable for city delivery, in which the box is placed on a door frame or the like.

The characteristic features of the construction comprise a housing forming the supporting structure for the standard, the housing containing a coiled spring adapted to rotate the standard, a fin on the standard adapted to be engaged by the trigger arm fastened to the movable door or the like of the mail box and with a flag on the upper end of the standard to give a signal to the box owner.

The signal to the postman comprises a resilient arm pivotally attached to the flag in such a manner that it may be utilized to hold and retain letters or be swivelled to extend beyond the flag to indicate to the postman that there is mail in the box.

My invention will be more readily understood from the following description and drawings, in which;

Figure 1 is a front elevation as if taken in the direction of the arrow 1 of Fig. 2, of one type of mail box, particularly adapted for rural delivery, with my signal attachment secured thereto.

Fig. 2 is a side elevation taken in the direction of the arrow 2 of Fig. 1.

Fig. 3 is an enlarged detail plan of the attachment taken in the direction of the arrow 3 of Figs. 1 or 2.

Fig. 4 is a longitudinal section on the line 4—4 of Fig. 1, in the direction of the arrows.

Fig. 5 is a side elevation as if taken in the direction of the arrow 5 of Fig. 6, of an alternative construction of my attachment secured to a type of box suitable for city delivery, the box being intended for securing to a door post or the like.

Fig. 6 is a front elevation of the attachment of Fig. 5, as if taken in the direction of the arrow 6.

The signal structure as shown in Figs. 1 to 4 is substantially as follows:

A housing 1 is preferably formed of sheet metal and has a back wall 2 with upper and lower extensions 3, each having a slot 4 therein adapted to be attached to a mail box or the like, one type of box being designated by the numeral 5 having a flat side wall 6.

The housing 1 is preferably formed with flat vertical side walls 7 and 8 and with a curved outer wall 9. The walls of the housing are joined by a lower and upper partition 10 and 11, the partitions having apertures 12 therethrough for the insertion of a standard 13. This is supported on the lower partition by means of a collar 14. A coiled spring 15 is wound around the standard and has one end 16 secured to a fixed part of the housing, the other end 17 being secured to the standard, the spring being normally tensioned to rotate the standard in the desired direction as hereunder set forth.

The standard 13 is provided with a double fin 18 having a narrow side 19 and a wide side 20, the fin being rigidly secured on the standard and a flag 21 is rigidly secured to the upper end of the stem, preferably at right angles to the fin. This flag for the rural mail box type may be a disc inserted centrally on top of the standard. A stop 22 extends upwardly from one of the side walls of the housing and is positioned to engage the lower portion of the wide side of the fin to stop the rotation of the standard and flag as hereunder set forth.

In the type of rural mail box illustrated in Fig. 1, a large door 23 is provided with hinges 24 at the base, the top of the door swinging open in the direction of the arrow 25 as indicated dotted in Fig. 2. A small flap door 26 is hinged on some part of the large door preferably towards the upper part as indicated by the numeral 27. This

door is adapted to swing open at the lower portion as indicated by the arrow 28 of Fig. 2. Postmen may use either door for the insertion of mail, or if newspapers or parcels are to be delivered, preferably opening the large door or if only letters, opening the small door.

The trigger arm 29 has a straight section 30 with a slot 31 therein extending across and secured by bolts to the flap door 26. This trigger arm preferably has a right angular bend as indicated by the numeral 32 of Fig. 3 and an extension 33. This extension is sufficient to extend behind the narrow side 19 of the fin as indicated in Figs. 1 and 3, thus holding the standard and the signal flag in a position with the flag parallel to the side of the box showing distinctly in full elevation as shown in Fig. 2. It will be understood that in this position the spring 15 is tensioned normally tending to rotate the standard and flag.

The manner of operating the signal as set forth for the rural type of mail box is substantially as follows:

If the large door is opened the trigger arm is swung forwardly thereby turning the standard by means of its engagement with the fin until the trigger arm and the fin become disconnected when the spring will rotate the standard and signal arm in the opposite direction until the wide side 20 of the fin engages the stop 22, thus bringing the standard and flag to rest with the flag parallel to the front of the box to indicate to the box owner that mail has been inserted. Should the postman merely insert letters through the small flap door 26, the trigger arm will be moved forwardly in a similar manner sufficient to release same from the fin 19, thus giving the same signal.

In the construction of the signal as shown in Figs. 5 and 6, the housing and standard are of substantially the same character, except that the stop 34 is on the opposite side of the housing adjacent the back wall 35 of the box which is intended to be attached to a door post or the like. The flag 36 is attached to one side of the standard so that free rotation may be had.

In this type of box the box structure is designated by the numeral 37 and has a large swinging opening cover 38 pivoted at the upper rear corner 39 of the box and having a front covering portion 40 adapted to form a closure for a front opening 41 of the box. An additional letter box lid 42 is also secured to the same hinges 39 and is adapted to cover or close a letter slot 43 in the opening cover 38. The purpose of this construction is to allow the insertion of large bundles of mail by opening the large cover or the insertion of letters by merely swinging open the upper cover. This type of box is sometimes locked with a staple 44 having a padlock therethrough securing the opening cover closed In such cases the postman can only insert mail through the slot 43. However it is the general practice for householders to leave both flaps open for the postman to insert mail.

A trigger arm 45, having a slot 46 therein is secured to the upper lid 42. This trigger arm is preferably straight and is adapted to engage the narrow portion 19 of the fin on the front side thereof and hold the standard and signal flag in the position shown in Figs. 5 and 6 parallel to the side of the box. When either lid is opened the trigger arm rotates the standard backwardly until the trigger arm and the fin 19 become disengaged; the coil spring rotating the standard and flag into a position until the wide portion 20 of the fin engages the stop 34 holding the flag in a position at right angles to that of Figs. 5 and 6 to indicate to the householder that mail has been inserted in the box.

The signal to the postman for mail to collect is constructed substantially as follows, having reference particularly to Figs. 1, 2, 5 and 6:

An arm 47 of resilient material is secured at its lower end by the pivot pin 48 to either of the flags 21 or 36 and may extend vertically upwardly behind the flag and in such position may be utilized to support several letters. If there is a large amount of mail for the postman to collect the arm will be pivoted into the horizontal position indicated by the numeral 49 in Fig. 2 and thus extend outwardly a considerable distance beyond the flag, indicating to the postman as he approaches the box that there is mail for him to collect.

It will be noted that the pivot pin 48 is placed adjacent the lower portion of the circular signal flag and in such relation that letters will extend beyond such flag and that the arm itself may be extended in a horizontal position some distance from the flag.

It will thus be seen that my attachment comprises two types of signals, one to indicate to the box owner that mail has been inserted by the postman and the other to indicate to the postman that there is mail to collect.

Although my signal is of a simple character and has been illustrated as attached to two types of boxes, nevertheless it may be secured to a number of other types, being modified to suit these different circumstances.

Such changes or modifications of the general construction or specific details would be within the spirit of my invention as set forth in the description, drawings and claims.

Having described my invention, what I claim is:

1. A mail box signal comprising in combination a vertical housing adapted to be at-

tached to one side of a mail box, a vertical standard journaled in and extending upwardly from the housing, a signal flag on the upper end of the standard, a trigger arm adapted to be attached to a door or lid of a mail box, a spring coiled on the standard, normally tensioned to rotate the standard in one direction on its axis, the trigger arm being adapted to restrain the standard from such rotation and to release the standard on the movement of the trigger arm with the door or lid, whereby the spring may rotate the standard and flag to one signalling position, the standard being provided with a fin, one portion of the fin being adapted to engage a trigger, and a stop on the housing adapted to engage another portion of the fin.

2. A signal attachment for a mail box comprising in combination a housing having vertical walls, one of said walls being adapted to be adjustably attached to a mail box, a plurality of transverse partitions between the walls, a standard journaled in said partitions, a coiled spring in the housing connected to the housing and the standard normally tensioned to rotate the standard in one direction, a flag attached to the upper end of the standard, a double fin attached to the standard and a trigger arm adapted to be adjustably attached to a door or lid of a mail box, the trigger arm being adapted to engage one of the double fins to restrain the standard from rotation and to release the fin on the movement of the trigger arm with the door or lid.

3. A signal attachment for mail boxes as claimed in claim 2, having in addition a stop extending upwardly from one of the side walls of the housing, said stop being positioned to engage a wide side of the double fin and to stop the rotation of the standard and flag.

4. A signal attachment for a mail box as claimed in claim 2, having in addition an arm of resilient material pivotally mounted on the flag, the arm being adapted in one position to hold letters between same and the flag and in another position to extend outwardly beyond the flag.

In testimony whereof I have signed my name to this specification.

JOHN R. DE MIER.