June 25, 1929. F. W. MATHIS 1,718,471

MAIL BOX

Filed April 30, 1926 2 Sheets-Sheet 1

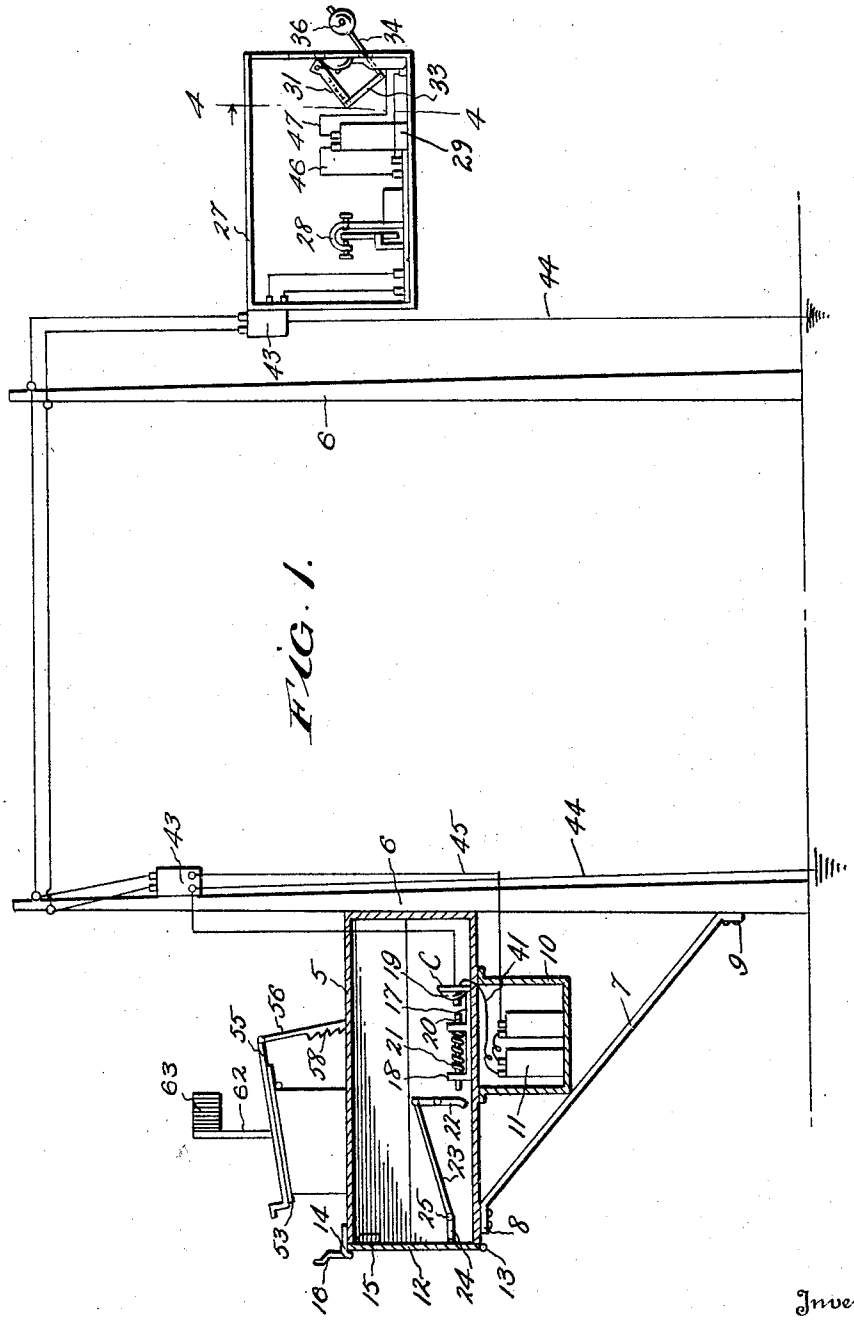


FIG. 1.

Witnesses:

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FIG. 2.

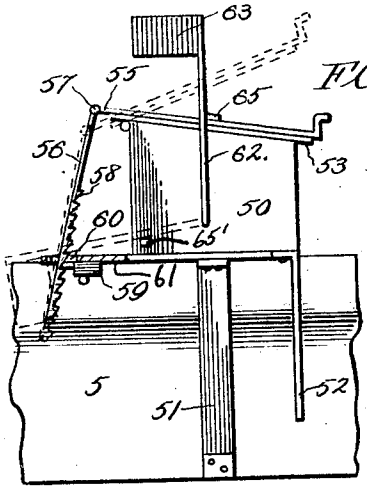


FIG. 3.

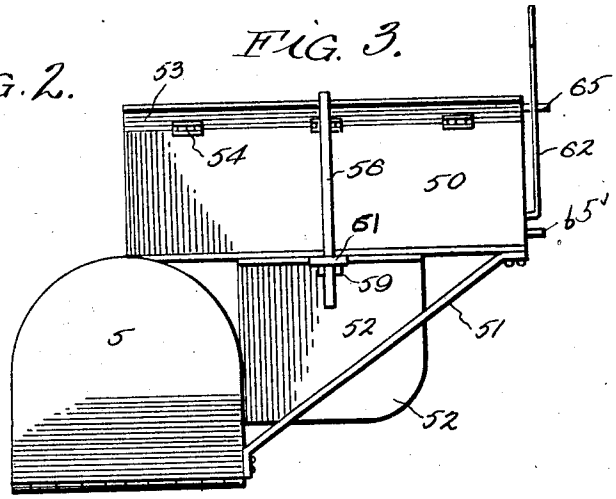


FIG. 4.

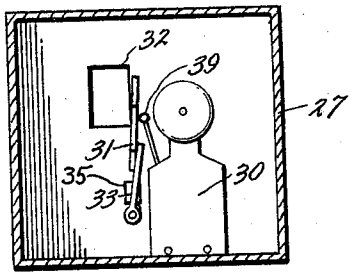
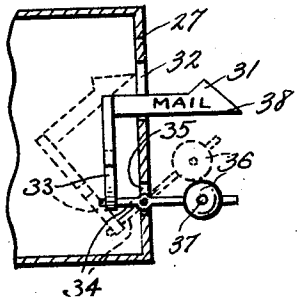


FIG. 5.



Witnesses:

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Patented June 25, 1929. 1,718,471

UNITED STATES PATENT OFFICE.

FREDERICK W. MATHIS, OF EVERGREEN, VIRGINIA.

MAIL BOX.

Application filed April 30, 1926. Serial No. 105,868.

The present invention relates to mail boxes and has for its principal object to provide a device of this nature incorporating signaling means to notify persons when the mail is delivered to the receiving box. Both an audible and visual signal is provided within the dwelling and is electrically connected with a circuit closer within the mail box so that when the door thereof is opened the audible signal will be sounded and the visual signal moved to an operative position. The audible signal will be shut off when the door of the box is again closed but the visual signal will remain operative until reset.

Another very important object of the invention is to provide a device of this nature having a very simple and efficient construction which is reliable, inexpensive to manufacture and install, durable, strong, and well adapted to the purpose for which it is designed.

With the above and numerous other objects in view as will appear as the description progresses, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawing:

Figure 1 is a view, partly in section, showing the complete apparatus,

Figure 2 is a fragmentary elevation of the box,

Figure 3 is a rear elevation thereof,

Figure 4 is a vertical section taken substantially on the line 4—4 of Figure 1 looking in the direction of the arrow, and

Figure 5 is a detail section through the signal housing showing the visual signal in its operative position.

Referring to the drawing in detail it will be seen that 5 represents the box for receiving the mail. This box 5 is preferably fixed to a post 6 at one end and a brace 7 is attached to the outer end thereof at its bottom as at 8 while the other end of this brace is fixed to the post as at 9. A battery box 10 is attached to the bottom of the box 5 and contains dry cells 11. The box 5 at its outer end is provided with a hinged closure 12 being pivoted at its bottom end as at 13 and normally held closed by a clip 14. A latch lock 15 is provided in association with the door of the box 5 rather than the padlock which is commonly used. A handle 16 is at the free upper end of the door so that it may be pulled to an open position after the latch 15 has been released. A circuit closer indicated generally at C is mounted in the box 5 and consists of a base 17 having three upstanding ears 18 one of which at the inner end supports a push button 19 while the other two are pierced to receive a rod 20 having a spring 21 thereon between the ears to normally hold it out of engagement with the button or push button 19. A lever 22 is pivoted intermediate its ends to a side of the box in such a position that by swinging the same it will engage the push rod 20 to force it into engagement with the button of the push button 19 and close a circuit which will be hereinafter described. Links 23 and 24 are pivoted together at 25 the former being connected to the door 12 and the latter to the upper end of the lever 22 so that when the door 12 is opened the lever will be swung to engage the push rod 20 and actuated as stated above. A signal box 27 is preferably located interiorly of the dwelling and has mounted therein a relay 28, one or more dry cells 29, an audible signal 30 in the form of an electric bell, and a visual signal 31 which is constructed so that it may extend through the opening 32 provided in the signal box 27. This visual signal is mounted on a spring strip 33 which is connected to the inner end of a lever 34 which extends through an opening 35 provided in the box 27 below opening 32, being pivoted in this opening and having on its outer portion a weight 36. This weight 36 is slidable on the lever being held in place by a set screw 37 so that it may be adjustable for normally holding the signal 31 extended out of the housing as is shown in Figure 5. To hold the signal in the housing it is pushed therein and then the spring swung to one side toward the bell so that the tip 38 engages the wall of the box at a point laterally beyond the opening 32. When the electric bell is actuated the hammer 39 thereof will strike the panel so as to spring it back in registry with the opening 32 and the weight on the lever will then swing said lever so as to force the signal to its operative or outwardly extending position. The batteries 11, push button 19 and relay 28 are connected by conductors 45. Lightning arresters 43 are arranged in the conductors 45, and are grounded by conductors 44. The relay 28, battery 29 and bell 30 are connected by conductors 46 and 47.

The box 50 is designed to receive the mail to be collected by the carrier and will be referred to hereinafter as the outgoing mail. This box is mounted at one end on the box 5 and a brace 51 attached at its lower end to box 5 and is attached to the other end of box 50 thus supporting this box to one side of the box 5. A shield 52 depends from the front of the box. A hinged cover 53 is provided on the box by means of hinges 54. A rod 55 is fixed on this cover and extends rearwardly thereof. A ratchet rod 56 is hinged to rod 55 at 57 and the ratchet teeth 58 thereof are adapted to engage at latch 59 actuated adjacent an opening 60 in extension 61 projecting rearwardly from box 50. When the cover 53 is opened the teeth 58 of the ratchet bar 56 will be engaged by the latch 59 so as to hold this cover in its open position. It will be seen that in order to have access to the latch 59 to release it it is necessary to come to the rear of the boxes because of shield 52 and thus when the mail carrier selects the mail and finds that he cannot easily close this cover he will not put therein the incoming mail but at a glance will find that a separate box has been provided for that purpose. A shaft 62 is pivoted to one end of the box 50 and supports a signal in the form of a flag 63 which may be placed in the upright position as shown in Figure 2 resting against lug 65 on the cover 53. This signal in its upright position will indicate to the mail carrier that there is outgoing mail in the box but when the cover is opened the lug will cause the signal to swing to the dotted line position in Figure 2 thus to a non-indicating or non-signaling position engaging lug 65' and thus indicate that no mail is in the box. This will also indicate to the persons in the dwelling that the mail has been collected.

It is thought that the construction of this invention will now be clearly understood without any more detailed description thereof.

While the preferred embodiment of my invention has been described in detail, it will be understood that I do not wish to be limited to the particular construction set forth, since various changes in the form, material, proportions and arrangement of parts, and in the details of construction may be resorted to without departing from the spirit and scope of the invention, or destroying any of its advantages.

Having thus described my invention, what I claim as new is:

1. A signal of the character set forth comprising a box provided with an opening, a signalling member, means supporting the signalling member for movement into and out of the box through said opening, said means also supporting the signalling member for movement when in the box to a position beyond the opening and in contact with the inner side of the box, means associated with said first means for holding the signalling member in said box contacting position, and means adapted to be operated to move the signalling member out of said box contacting position and into registration with the opening, and said second means being adapted to move the signalling member through the opening when said member is moved into registration with the opening.

2. A signal of the character set forth, comprising a box provided with an opening, a signalling member, means supporting the signalling member for movement into and out of the box through said opening, said means also supporting the signalling member for movement when in the box to a point laterally beyond the opening and in contact with the inner side of the box, means associated with said first means for holding the signalling member in said box contacting position, and electrically operated means adapted when energized to move the signalling member out of said box contacting position and into registration with the opening, and said second means being adapted to move the signalling member through the opening when said member is moved into registration with the opening.

3. A signal of the character set forth, comprising a box provided in a vertical wall thereof with an opening, an electric bell arranged within the box with its hammer near one side of the opening, a lever passing through said wall below the opening and pivoted between its ends to said wall, a spring secured at one end to and extending upwardly from the inner end of the lever, a signalling member secured at one end to the upper end of the spring and extending therefrom in the direction of said wall, the free end of the signalling member contacting with the inner side of said wall, and a weight secured to the outer end of the lever and adapted to hold the signalling member in said position, the hammer of the bell being adapted when the latter is energized to move the signalling member into registration with the opening, and the weight being adapted to thereafter move the signalling member through the opening.

In testimony whereof I affix my signature

FREDERICK W. MATHIS.