July 1, 1924. 1,499,771

H. W. GUY

AUTOMATIC MAIL BOX SIGNAL

Filed Sept. 6, 1923

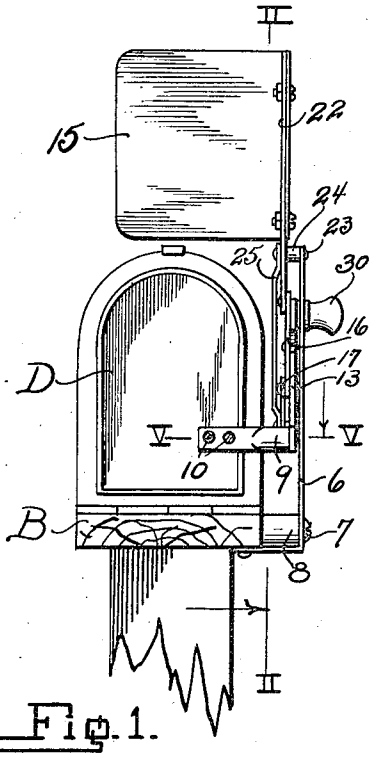


Fig. 1.

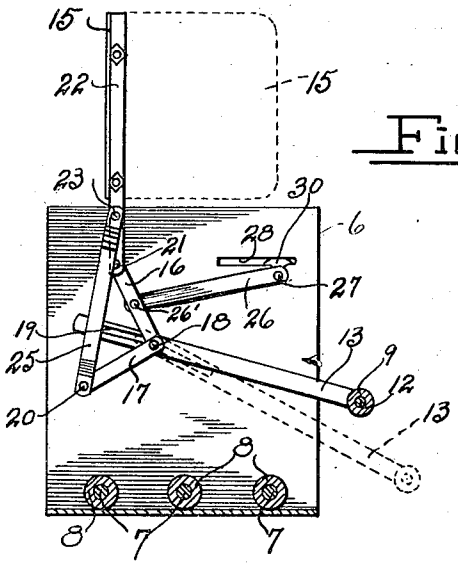


Fig. 2.

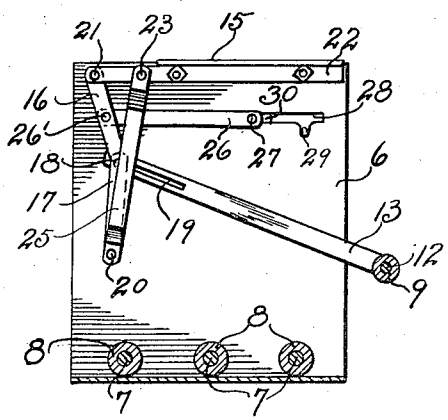


Fig. 3.

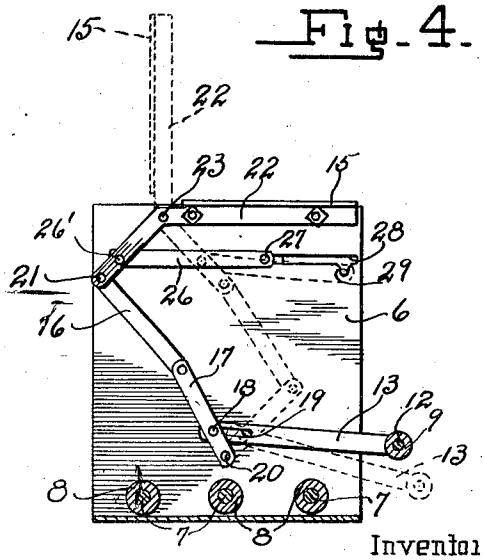


Fig. 4.

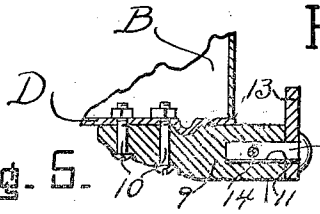


Fig. 5.

Inventor

HENRY W. GUY

By C. Earl Hovey

His Attorney

Patented July 1, 1924. 1,499,771

UNITED STATES PATENT OFFICE.

HENRY W. GUY, OF KANSAS CITY, MISSOURI.

AUTOMATIC MAIL-BOX SIGNAL.

Application filed September 6, 1923. Serial No. 661,203.

To all whom it may concern:

Be it known that I, HENRY W. GUY, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Automatic Mail-Box Signals, of which the following is a complete specification.

This invention relates to automatic signalling devices for mail boxes, and has for its primary object the provision of an attachable indicator which may be used with the ordinary rural mail receptacle.

A further object of the invention is to provide a mail box signal, with a minimum number of parts, that will automatically indicate the placing of mail or other matter in the box, yet allow the door to be returned to a closed position without disturbing the position of the indicator member.

A still further object of this invention is the provision of an automatic mail box signal which is extremely easy to install, may be applied to practically any type of rural mail box, and will be positive in its operation at all times.

The invention further provides an automatic mail box signal which is extremely easy to make, strong and durable in structure, and is not likely to get out of order.

With the foregoing general objects in view, the invention will now be described by reference to the accompanying drawings illustrating one form of construction which I have devised for embodying the invention, after which the various novel features will be particularly set forth and claimed.

In the drawing:

Figure 1 is an end view of a mail box with the automatic signal in place and the indicator in a raised position.

Figure 2 is a section on line II—II of Figure 1 looking in the direction of the arrow.

Figure 3 is also a section on the line II—II of Figure 1 looking in the direction of the arrow, but with the signal in a raised position.

Figure 4 is a corresponding section, showing a modified form of the invention; and

Figure 5 is a section on line V—V of Figure 1 looking in the direction of the arrow.

Referring to the drawings in detail, a support 6 may be formed of any suitable material and made in any form to afford rigid means of holding the operative parts in their relative positions. Support 6 may be fastened to the bottom of the mail box B by screws or analogous means 7 which pass through spacers 8 used to afford ample clearance between the mail box B and support 6 for the hereinafter described movable parts of the invention.

9 is a bracket rigidly attached to door D by bolts or like means 10, while 11 is a recess formed to receive pin 12 which is held in position by transverse pin 14 and, 13 is a connecting arm loosely gripped adjacent one end of arm 13 by said pin 12.

When the mail box door D is closed, with the device in a position such as shown in Figure 3, the indicator or flag 15 is in a down or non-indicating position. Upon opening door D with its attached bracket 9, arm 13 is caused to assume the position shown in dotted lines of Figure 2. This movement operates toggle links 16 and 17 connected by a shouldered rivet 18 which slides in slot 19 of arm 13. The lower end of toggle link 17 is pivotally attached at 20 to support 6, while the upper extremity of toggle link 16 is pivotally connected as at 21 to indicator standard 22 which is pivotally mounted on support 6 at point 23. A collar 24 may be provided to hold standard 22 in proper operative position, while brace 25 secures its rigidity. In taking the position as shown in Figure 2, a re-setting means is carried to the position shown, and functions as a stop and stabilizer for the parts above mentioned. Arm 26 pivotally connected as at 26′ to toggle arm 16 intermediate points 18 and 21 may have a pin 27 passing through a slot 28 in support 6. When indicator 15 attains an upright position, pin 27 rests in notch 29 and prevents further movement until, by means of knob 30, the toggle arms and indicator are normally re-set to the position of starting shown in Figure 3.

The advantage of slot 19 in arm 13 lies in the fact that after door D is opened, and the indicator raised, it may be closed again without allowing indicator 15 to lower. Re-setting is performed when the owner obtains his mail.

The indicator or flag 15 may be secured to standard 22 in either one of two positions to insure its being seen from a distance.

The modified form shown in Figure 4 eliminates brace 25 and supplies an angled standard 22. The principle of operation remains the same and, while I have illustrated

and described what is deemed to be a preferred form and one modification of the invention, I desire to secure the right to make all such formal changes or modifications as may fairly fall within the scope of the appended claims.

Having described the invention, what is claimed is:

1. An automatic mail box signal, comprising in combination with the door of a mail box a slotted support, an indicator, toggle-link actuating means and means for returning said indicator to a set position connecting one of said toggle links and the slot in said support.

2. An automatic mail box signal, comprising in combination with the door of a mail box, a slotted support adjacent said mail box, an indicator pivotally mounted on said slotted support, a plurality of toggle links for actuating said indicator when the door is opened and means for returning said indicator to a set position pivotally connected to one of said toggle links.

3. An automatic mail box signal, comprising in combination with the door of a mail box, a support having integral means for retaining a pivotally mounted indicator in a signalling position, said indicator being carried by said support and having toggle actuating means therefor connecting said door and said indicator and means for releasing and returning said indicator to a set position.

4. An automatic mail box signal, comprising in combination with the door of a mail box, a slotted support in spaced relation and parallel to one side of said mail box having a retaining notch continuing from the slot, an indicator, toggle actuating means whereby said indicator is raised to a signalling position when said door is opened and manually operated means for returning said indicator to a set position disposed through the slot in said support.

5. An automatic mail box signal, comprising in combination with the door of said mail box, a support adjacent said mail box, an indicator, actuating means connecting said door and said indicator comprising a door bracket, toggle links, and a slotted connecting arm whereby said indicator is raised to the upright position by the opening of said door, and caused to remain in said upright position when said door is again closed.

6. An automatic signal for hinged-door mail boxes, comprising in combination, a slotted plate, an indicator pivotally mounted thereon, toggle links pivotally attached to said indicator and said supporting plate and operating levers carried by said toggle links for raising and lowering said indicator.

In witness whereof, I hereunto subscribe my name this 1st day of September, 1923.

HENRY W. GUY.