Nov. 6, 1951 W. E. SEIBEL 2,573,879

DELIVERY BOX SIGNAL

Filed March 14, 1949

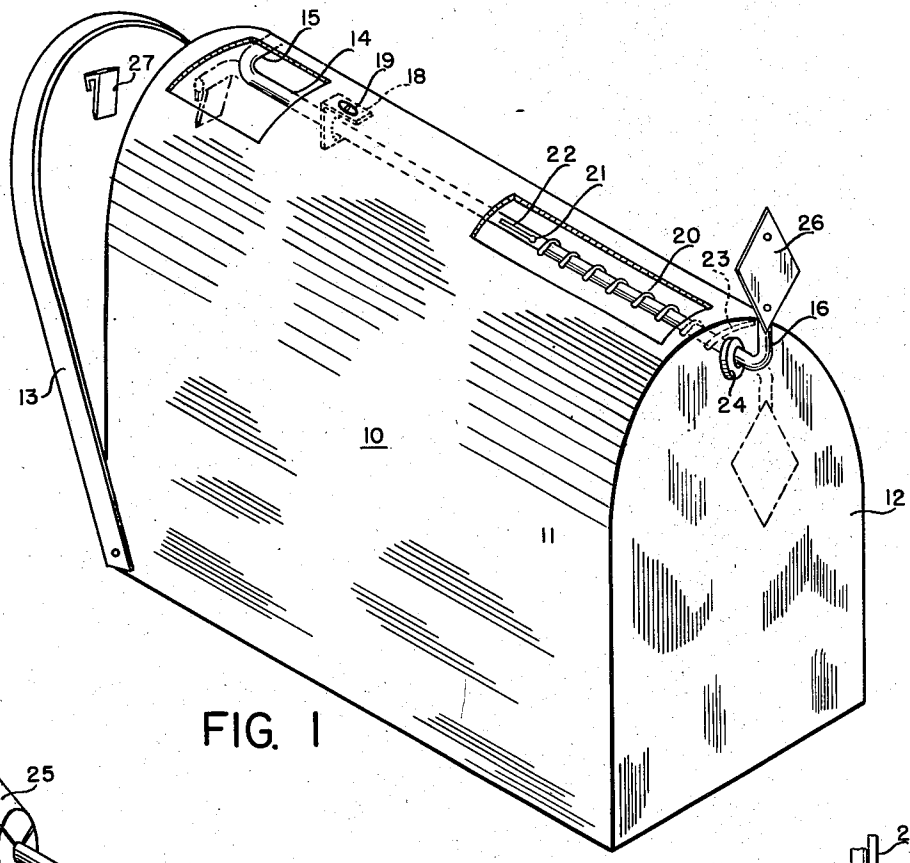


FIG. 1

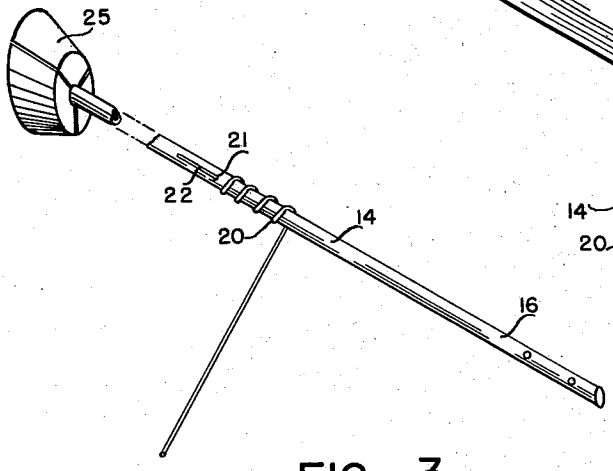


FIG. 3

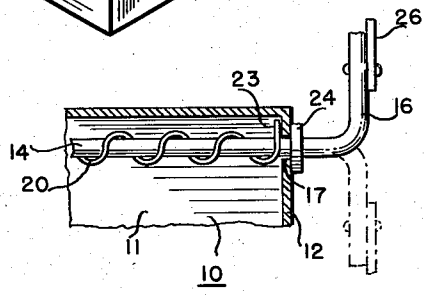


FIG. 2

INVENTOR.
William E. Seibel
BY
Woodling and Kroat
his Attys

WITNESS
Clyde H. Haynes

Patented Nov. 6, 1951 2,573,879

UNITED STATES PATENT OFFICE

2,573,879

DELIVERY BOX SIGNAL

William E. Seibel, Brecksville, Ohio

Application March 14, 1949, Serial No. 81,329

7 Claims. (Cl. 232—35)

1

My invention relates to signal devices for mailboxes and the like and to the method of constructing the signals.

One of the objects of my invention is to provide a simple and efficient signal device for a mailbox, which is operated by the door of the box.

Another object of my invention is to provide a signal device which may be readily installed in any mailbox.

Another object of my invention is to provide a signal device constructed from an elongated rod having the ends thereof disposed laterally of the rod and having a spring fastened thereto and cooperating with the box to position the signal.

Another object of my invention is to provide the method of constructing the elongated rod and the spring.

Other objects and a fuller understanding of the invention may be had by referring to the following description and claims, taken in conjunction with the accompanying drawing, in which:

Figure 1 is a perspective view of a standard mailbox having my signal device mounted therein;

Figure 2 is a fragmentary cross-sectional view illustrating the mounting of the elongated rod in the back wall of the box; and

Figure 3 is a diagrammatic view illustrating the constructing of the spring on the elongated rod.

In Figure 1 of my drawing, I illustrated a standard rural type mailbox 10 having side wall 11 and a back wall or end wall 12. The back or end wall 12 is on one end of the mailbox 10 and a door 13 is hingedly fastened to the other end of the mailbox 10. Although I describe my invention as being applied to mailboxes and illustrate a particular style mailbox, it is understood that the term "mailbox" is used to include any type box designed to receive articles.

My signal device includes an elongated rod 14 having laterally extending latch end portion 15 and a signal supporting end portion 16. In this particular instance, I have found it advisable to extend both the latch end portion 15 and the signal end portion 16 laterally of the elongated rod 14 and also at an angle to each other. The elongated rod 14 extends through an opening 17 in the back wall 12 of the mailbox 10 with the signal end portion 16 disposed on the outside of the box and with the latch end portion 15 disposed on the inside of the box. The latch end portion 15 is next adjacent the door 13. A bearing support member 18 fastened to the side wall 11 by a screw 19 supports the elongated rod 14 near the latch end portion 15 thereof. The elongated rod 14 extends substantially parallel to the side wall 11. A spring 20 has one end 22 thereof extending through a hole 21 in the elongated rod 14 and an opposite end 23 thereof extending outwardly from the elongated rod 14 and engaging the side wall 11 of the box 10. This spring is preferably a coiled spring to provide spring force sufficient to turn the elongated rod 14 and hold it in the position indicated in the solid lines of Figures 1 and 2. The opposite end 23 of the spring 20 also engages the back wall 12 of the box. I have provided a washer or flange means 24 engaging the elongated rod 14 on the outside of the back wall 12 to space the signal end portion 16 from the back wall 12. The spring 20 urges the elongated rod 14 towards the front of the box, thus holding the washer 24 against the back of the box prevent water entering the opening 17.

2

In manufacturing my signal device I have found it economical and efficient to place the elongated rod in a chuck 25, as illustrated in Figure 3. The end of a wire having spring properties is extended through the hole 21 and the elongated rod 14 rotated by the chuck 25 to coil the spring 20 thereon. In this manner the spring is constructed and formed on the elongated rod on which it will remain. After the spring has been formed on the elongated rod, the ends are bent to form the latch end portion 15 and the signal end portion 16. The washer 24 is then slipped over the signal end portion 16 and a signal plate 26 fastened to the signal end portion 16.

My signal device is mounted on the box 10 by inserting the elongated rod 14 through the opening 17 in the back wall 12 and working the spring 20 into the box. The elongated rod 14 is then rotated to tighten the spring 20. After the spring 20 has been tightened, the bearing support member 18 may be fastened to the side wall 11 by means of the screw 19 to support the elongated rod in parallel alignment with the side wall. The latch end portion 15 abuts the side wall 11 to prevent the elongated rod 14 spinning and thus releasing the tension in the spring 20.

I have provided the door 13 on the inside thereof with a catch 27 aligned for engagement by the latch end portion 15. In Figure 1, I illustrated in phantom the position of the elongated rod 14 with the latch end portion 15 engaging the catch 27 when the door is closed.

As soon as the door is opened, the latch end portion 15 becomes disengaged from the catch 27 and the spring 20 turns the elongated rod 14 to raise the signal plate 26 into the position illustrated in solid lines in Figure 1.

The signal device is reset after the door of the mailbox has been closed by simply rotating the signal plate 26 into the position illustrated by the phantom lines of Figure 1. During this rotation, the elongated rod will move endwise towards the back wall 12 of the box to permit the latch end portion 15 to ride over the catch 27 and into latching engagement therewith.

Although the invention has been described in its preferred form with a certain degree of particularity, it is understood that the present disclosure of the preferred form has been made only by way of example and that numerous changes in the details of construction and the combination and arrangement of parts may be resorted to without departing from the spirit and the scope of the invention as hereinafter claimed.

What is claimed is:

1. A delivery box comprising, a housing including a side wall, an end wall and a delivery receiving door, a rod journaled in said end wall and extending therethrough and outside of said housing, a signal carried by said rod externally of said housing, spring means interengaging said side wall and said rod and urging said rod to rotate in said end wall, and releasable means cooperative with said door and said rod and restraining rotation of said rod when the door is closed and releasing and thereby permitting rotation of said rod when the door is opened.

2. A signal device for a mailbox having a side wall with an end wall fastened to one end thereof and a door hinged to the other end thereof, said signal device comprising, a turnable elongated rod extending through the end wall and supported in parallel alignment with said side wall, a signal carried by said elongated rod externally of said mailbox, and spring means connected to said rod and engageable with the said side wall to turn the rod when the door is opened, said elongated rod and said door having cooperating means preventing turning of the elongated rod by the spring means when the door is closed.

3. A signal device for a mailbox having a side wall with an end wall fastened to one end thereof and a door hinged to the other end thereof, said signal device comprising, a turnable elongated rod extending through the end wall and supported in parallel alignment with said side wall, a signal carried by said elongated rod externally of said mailbox, spring means connected to said rod and engageable with the said side wall to turn the rod when the door is opened, said elongated rod having a lateral end portion, and a catch fastened to said door and engageable by the lateral end portion of the rod to prevent the spring turning the rod while the door is closed.

4. A signal for a mail box having an end wall, a side wall, and a front door on the mail box movable to open and closed positions, said signal comprising an arm member having a main portion and first and second end portions, said first and second end portions being disposed at an angle to said main portion, means for journaling said main portion and said first end portion inside said mail box, a spring adapted to rotate said main portion relative to said mail box, and a visual signal flag mounted to said second end portion outside said mail box and rotatable

therewith, said first end portion adapted to be disposed inside the mail box and to be held against rotation by latch means operated by said front door and releasable by the opening of said door.

5. A signal for a mail box having an end wall, a side wall, and a front door on the mail box movable to open and closed positions, said signal comprising a rod having a main portion and first and second end portions, said first and second end portions being short relative to said main portion and each being disposed substantially perpendicular to said main portion, a bearing bracket journaling said main portion near said first end portion and adapted to be attached to the inside of the side wall of said mail box, a spiral torsion spring having first and second ends and wound about said rod main portion, said spring first end being fastened to said rod and said spring second end adapted to abut the side wall of said mail box, said main portion adapted to be journaled in an opening in the end wall of said mail box, and a visual signal flag mounted to said second end portion outside said mail box in a plane parallel to said end wall and rotatable to an upper position above said mail box, said first end portion adapted to be disposed inside of the mail box and to abut said side wall under the torsional urging of said spring, said rod being manually rotatable substantially 180° to a cocked position against the torsional urging of said spring so that said visual signal is hidden behind said mail box with said first end portion being disposed to engage a latch carried by the front door of said mail box in the closed position of said door, said first end portion being disposed to be disengaged by said latch when the front door of the mail box is in the open position to permit said torsional urge of said spring to rotate said visual signal to said upper position whereby it is visible from the front of the mail box.

6. A received mail signal for a mail box having an end wall, a side wall, and a front door hinged at the bottom thereof to the mail box, said received mail signal comprising a rod having a main portion and first and second end portions, said first and second end portions being short relative to said main portion and each being disposed substantially perpendicular to said main portion, a bearing bracket journaling said main portion near said first end portion and adapted to be attached to the inside of the side wall of said mail box, said main portion having a hole, a spiral torsion and compression spring having first and second ends and wound about said rod main portion, said spring first end being fastened in said hole to turn with said rod and said spring second end adapted to abut the side wall and end wall of said mail box, a collar fastened to said rod near said second end portion, said main portion adapted to be journaled in an opening in the end wall of said mail box with said spring axially compressed between said hole and said end wall to urge said collar into engagement with the exterior of said end wall, and a visual signal flag mounted to said second end portion outside said mail box in a plane perpendicular to said main portion and rotatable to an upper position above said mail box, said first end portion adapted to be disposed just inside the front of the mail box and to abut said side wall under the torsional urging of said spring, said rod being manually rotatable substantially 180° to a cocked position against the torsional urging of said spring so that said visual signal is hidden behind said mail box

with said first end portion being disposed to engage a latch carried by the front door of said mail box in the closed position of said door, said first end portion being disposed to be disengaged by said latch when the front door of the mail box is in the open position to permit said torsional urge of said spring to rotate said visual signal to said upper position whereby it is visible from the front of the mail box.

7. A received mail signal for a mail box having a vertical end wall, a side wall, and a vertical front door hinged on a horizontal axis at the bottom thereof to the mail box, said received mail signal comprising a rod having a main portion and first and second end portions, said main portion having a length substantially equal to the length of said mail box from the door to the end wall thereof, said first and second end portions being short relative to said main portion and each being disposed substantially perpendicular to said main portion, said first and second end portions being disposed in planes which contain the axis of the said main portion and which are substantially mutually perpendicular, a bearing bracket journaling said main portion near said first end portion and adapted to be attached to the inside of the side wall of said mail box, said main portion having a hole, a spiral torsion and compression spring having first and second ends and wound about said rod main portion, said spring first end being fastened in said hole to turn with said rod and said spring second end adapted to abut the side wall and end wall of said mail box, a collar fastened to said rod near said second end portion, said rod first end portion and said main portion and said spring adapted to be insertable through a journal opening in the end wall of said mail box with said spring axially compressed between said hole and said end wall to urge said collar into engagement with the exterior of said end wall, and a visual signal flag mounted to said second end portion outside said mail box in a plane perpendicular to said main portion and rotatable to an upper position above said mail box, said first end portion adapted to be disposed just inside the front of the mail box and to abut said side wall under the torsional urging of said spring, said rod being manually rotatable substantially 180° to a cocked position against the torsional urging of said spring so that said visual signal is hidden behind said mail box with said first end portion being disposed to engage a latch carried by the front door of said mail box in the closed position of said door, said first end portion being disposed to be disengaged by said latch when the front door of the mail box is in the open position to permit said torsional urge of said spring to rotate said visual signal to said upper position whereby it is visible from the front of the mail box.

WILLIAM E. SEIBEL.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
692,178	Burnham	Jan. 28, 1902
884,964	Voss	Apr. 14, 1908
1,564,305	Fanders	Dec. 8, 1925
1,628,034	De Mier	May 10, 1927
1,814,941	Lutz	July 14, 1931
2,095,599	Gleason et al.	Oct. 12, 1937
2,137,712	Bratz	Nov. 22, 1938