July 22, 1941. J. E. GILSTRAP 2,249,731

RURAL MAILBOX DOOR LATCH

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Fig. 1.

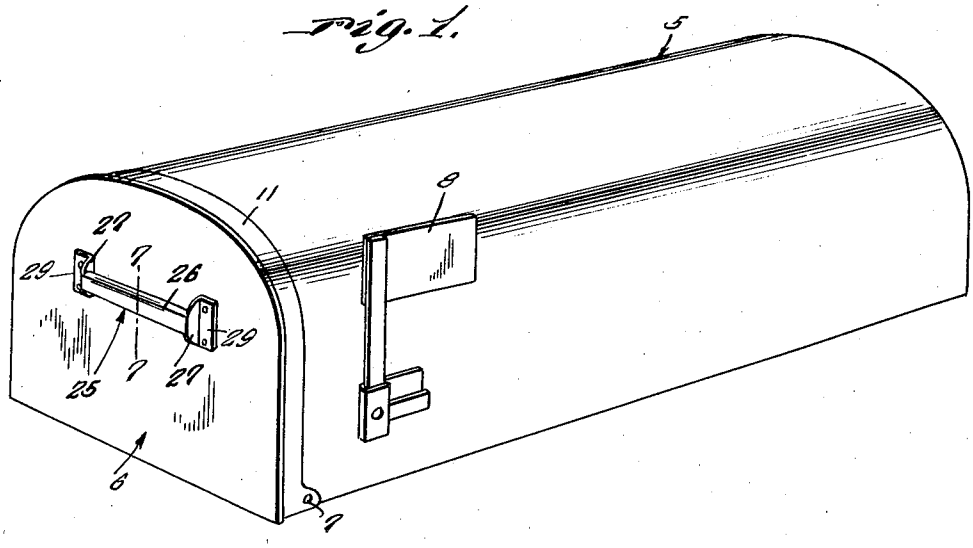


Fig. 6.

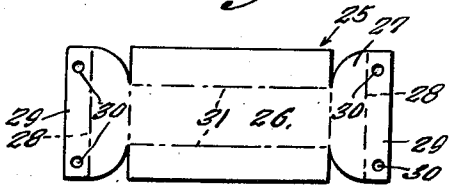
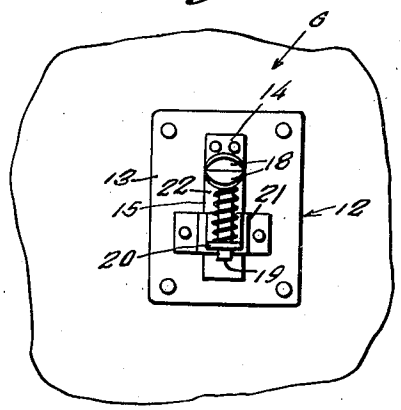


Fig. 4.



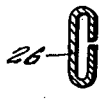
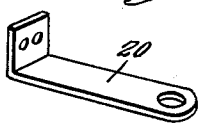


Fig. 7.

Fig. 5.



Inventor

J. E. Gilstrap

By Clarence A. O'Brien and Hyman Berman

Attorneys

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RURAL MAILBOX DOOR LATCH

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Fig. 2.

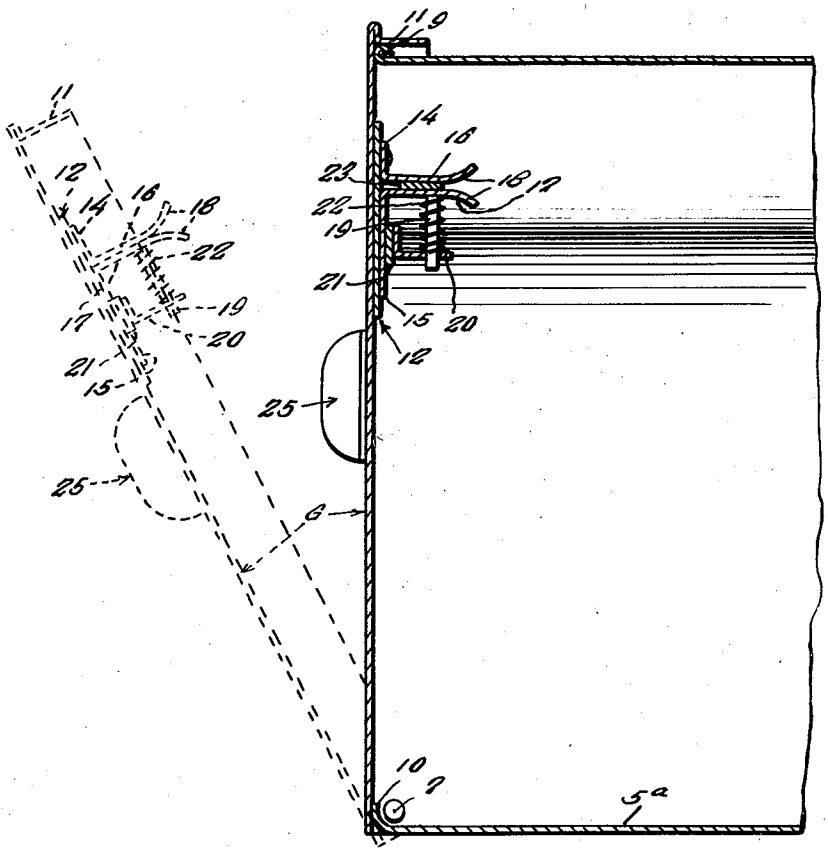
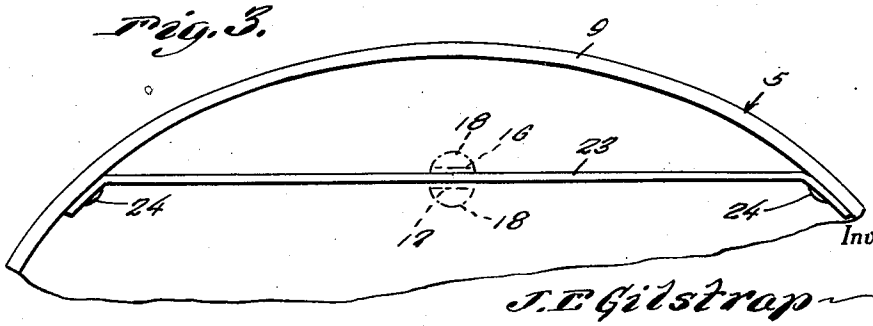


Fig. 3.



Inventor

J. E. Gilstrap

By Clarence A. O'Brien and Hyman Berman

Attorneys

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RURAL MAILBOX DOOR LATCH

James E. Gilstrap, Macon, Mo.

Application September 20, 1939, Serial No. 295,833

1 Claim. (Cl. 292—74)

This invention relates to mailboxes of the type used for rural delivery; and among the objects of the invention are:

(1) To provide a mailbox equipped with positive latch means for releasably, yet securely, holding the door of the box in closed position;

(2) To provide a door latching means for receptacles of this character which in addition to being positive in operation, will require no lubrication to maintain proper working condition;

(3) To provide a rural mailbox equipped with a specially constructed handle therefor to render more convenient the opening of the box; and

(4) To provide a mailbox equipped or constructed as to provide in effect a water-proof connection between the walls of the box and the door thereof when the latter is in closed position.

The invention, together with the above and numerous other objects thereof will be best understood from a study of the following description taken in connection with the accompanying drawings wherein:

Figure 1 is a perspective view of the mailbox with the door in closed position.

Fig. 2 is an enlarged vertical sectional view through the mailbox at the door equipped end thereof, showing the door in full lines in closed position, and in broken lines in open position.

Fig. 3 is an enlarged fragmentary elevational view of the box at the door equipped end thereof with the keeper bar forming part of the door latch means clearly illustrated.

Fig. 4 is a fragmentary elevational view of the door showing the improved latch associated therewith.

Fig. 5 is a perspective view of a guide member forming part of the latch assembly.

Fig. 6 is a plan view of the blank form from which the door handle is formed, and

Fig. 7 is a sectional view taken substantially on line 7—7 of Fig. 1.

Referring more in detail to the drawings, it will be seen that 5 indicates generally the mailbox. The same may be of any suitable shape or contour and is preferably constructed of twenty gauge galvanized sheet metal.

At one end thereof the mailbox 5 is open, and for said open end there is provided a vertically swinging door 6 that is hinged to the box 5 at opposite sides thereof as at 7.

The box 5 is also equipped with the usual flag 8.

In accordance with the present invention, the continuous top and side walls of the box 5 at the open end thereof have the edges rolled back and reinforced by a rod of wire or other suitable material, and as indicated generally at 9. (See Fig. 2.)

At the open end thereof, the bottom 5a of the box has its edge turned upwardly as at 10 and as also best shown in Fig. 2.

The door 6 of the box is provided with a marginal flange or skirt 11 that, when the door is in the closed position shown in Fig. 2, overlies the integral top and side walls of the box 5 at the reinforced edge 9 thereof, the edge 9 fitting snugly within the confines of the flange 11 as shown. Also the upturned end 10 of bottom 5a of the box bears against the lower edge of the closed door 6 as also shown in Fig. 2. Thus it will be seen that the wall edges 9 and 10 of the box 5 and the flange or skirt 11 of the door 6 cooperate to provide a substantially water-proof joint therebetween when the door 6 is in closed condition.

The door 6 has mounted on the inner side thereof my improved latch assembly indicated generally by the reference number 12.

As shown the assembly 12 comprises a mounting plate 13 riveted or otherwise suitably secured on the inner side of the door 6. Riveted or otherwise secured to the mounting plate 13 is the attaching flange 14 of a spring jaw member 16 and a cooperating spring jaw member 17 has a flange 15 extending at right angles therefrom which is slidably supported on the plate 13 by a guiding strap 21. The free ends of the two jaw members are bent away from one another as indicated generally at 18.

The lower jaw member 17 is normally urged upwardly into coacting position with the upper jaw member 16 through the medium of a pin 19 that depends from said bottom jaw member 17 as shown. The pin 19 works through an aperture in a guide arm 20 that is mounted on and extends from the guiding plate 21 that in turn is mounted on the mounting or attaching plate 13. Interposed between the guide arm 20 and the lower jaw 17 is a spring 22 that is disposed about the guide pin 19 and acts on the jaw 17 to yieldably urge the same upwardly into substantially closing contact with the jaw 16 as suggested in broken lines in Fig. 2.

Cooperable with the jaws 16 and 17 for releasably securing the door 6 in closed position is a keeper bar 23 that extends transversely of the box 5 at the open end of the box; the respective

opposite ends of the bar **23** being rivited or otherwise secured to the peripheral wall of the box **5** as at **24**.

It will thus be seen that as the door **6** moves to a fully closed position, the bar **23** is accommodated between the oppositely curved ends **18** of the jaws **16** and **17** causing these jaws to spread apart to receive therebetween the bar **23**. The bar **23** is thus frictionally engaged between the jaws **16** and **17**, and said jaws and keeper bar thus all cooperate to releasably secure the door **6** in the fully closed position shown in Fig. 1 and also shown by full lines in Fig. 2.

To facilitate opening and closing of the door **6** there is provided for the door a handle indicated generally by the reference numeral **25**.

The handle **25** is formed from a single blank of metal, preferably twenty gauge material, bent, shaped, and dimensioned to provide a substantially tubular grip portion **26** having at its respective opposite ends laterally enlarged right angularly disposed flanges **27** that are bent on lines **28** to provide integral attaching flanges **29** that are apertured as at **30** to receive rivets or other fastening elements, through the medium of which the handle is securely mounted on the door **6** at the outer side thereof as shown.

In connection with the above, it will be noted that in forming the tubular grip **26** of the handle the blank is folded on parallel fold lines **31**.

Further, the flanges **27** serve to properly space the grip **26** from the door so as to permit the handle to be properly grasped.

From the above it will be seen that I have provided a rural mail box which will insure protection to the mail from rain, snow, sleet, or ice, and which at the same time embodies no costly structure, nor will require constant care and attention to maintain the proper working conditions thereof.

Having thus described the invention, what is claimed as new is:

A door latch for engaging a keeper bar comprising a plate connected with the inner face of a door, a pair of elongated spring jaw members having right angularly extending base portions extending in opposite directions, means for fastening the base portion of one jaw member to the plate, a guiding strap fastened to the plate and having a channel-shaped part through which the base portion of the other jaw member passes for sliding movement, the free ends of the jaw members curving in opposite directions, a pin extending from an intermediate part of said other jaw member, a bracket connected with the guiding strap and having a hole therein through which the pin passes and a spring encircling the pin and having one end bearing against the jaw member to which the pin is connected and its other end against the bracket.

JAMES E. GILSTRAP.