Dec. 25, 1951 F. STONE 2,579,877

DOOR-ACTUATED DUAL COMPARTMENT MAIL BOX

Filed Aug. 17, 1949 2 SHEETS—SHEET 1

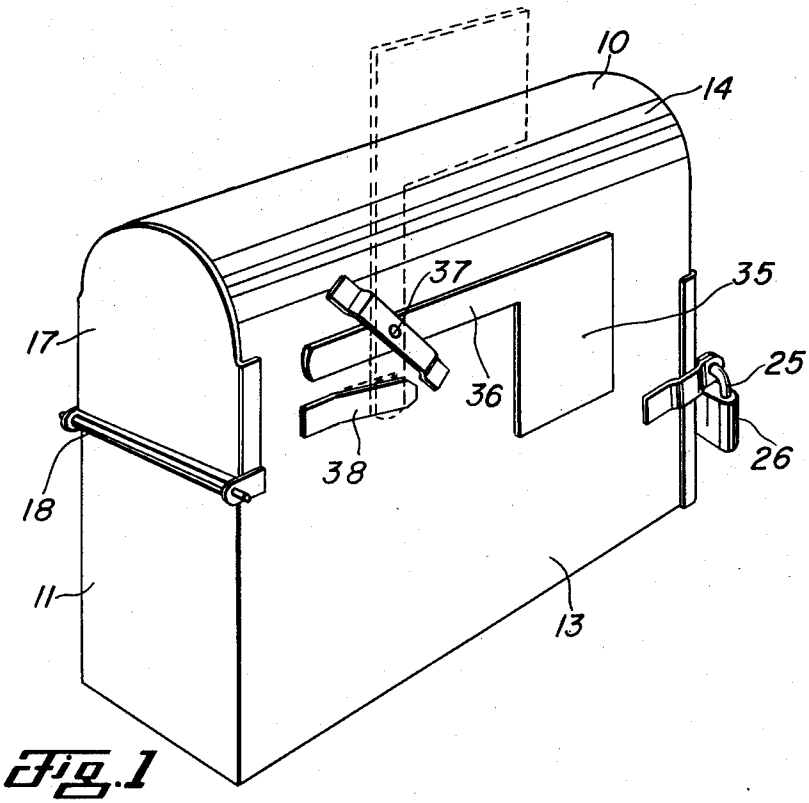


Fig. 1

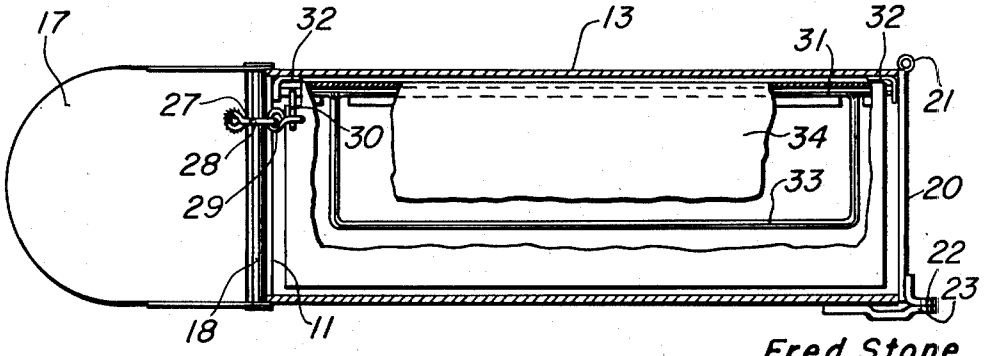


Fig. 4

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DOOR-ACTUATED DUAL COMPARTMENT MAIL BOX

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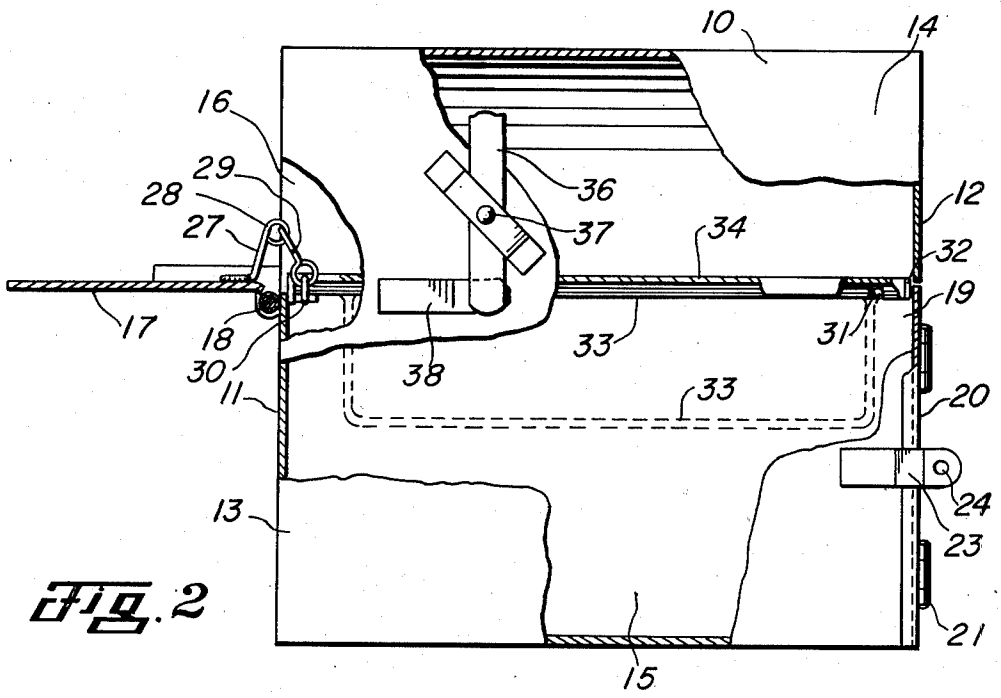


Fig. 2

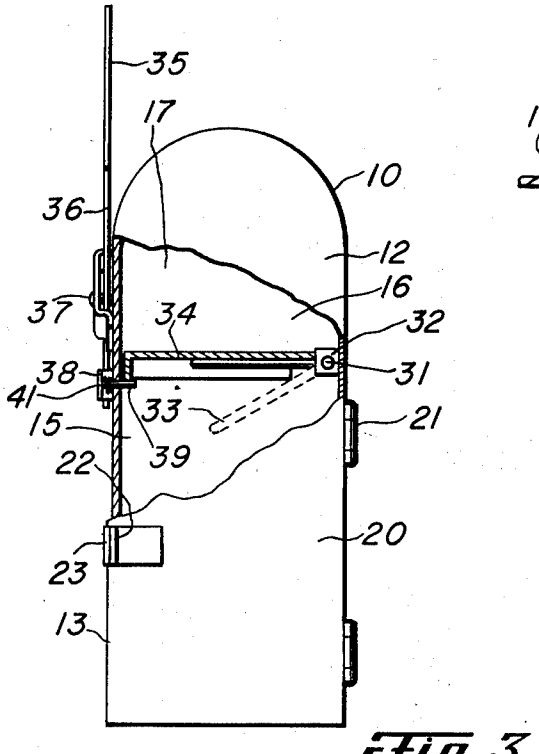


Fig. 3

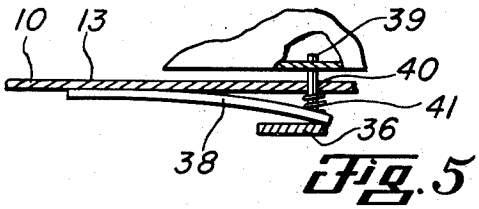


Fig. 5

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UNITED STATES PATENT OFFICE

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DOOR-ACTUATED DUAL COMPARTMENT MAILBOX

Fred Stone, Gladewater, Tex.

Application August 17, 1949, Serial No. 110,740

5 Claims. (Cl. 232—27)

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This invention relates to new and useful improvements in a door-actuated dual compartment mail box.

One object of the invention is to provide an improved mail box divided into an upper receiving chamber and a lower storage receptacle, with a door hinged at one end of the receiving chamber and connected with a hinged platform, arranged to be swung to a horizontal position at the bottom of the receiving chamber, to close the storage receptacle, whereby mail once deposited in the box and dumped into the storage receptacle can not be removed by way of the chamber by any person, thus safeguarding the mail and preventing access thereto by unauthorized persons.

Another object of the invention is to provide an improved mail box having a receiving chamber with a door hinged to one end and a lifter hinged in the box between the chamber and the storage space thereunder, in combination with a hinged platform, independently movable, whereby when the door is opened the lifter will be raised and the platform elevated to close off the storage receptacle, together with a spring latch for latching the platform in a horizontal position so that the chamber may be employed as a space in which to place mail to be picked up by the postman.

A construction designed to carry out the invention will be hereinafter described together with other features of the invention.

The invention will be more readily understood from a reading of the following specification and by reference to the accompanying drawings, wherein an example of the invention is shown, and wherein:

Fig. 1 is a perspective view of a mail box constructed in accordance with the invention showing the signal flag in its raised position in dotted lines and in its lower position in full lines,

Fig. 2 is a view partly in side elevation and partly in section showing the receiving door open and the platform and lifter elevated,

Fig. 3 is an end elevation of the box,

Fig. 4 is a horizontal cross-sectional view, and

Fig. 5 is a sectional detail of the spring latch.

In the drawings the numeral 10 designates a mail box of the general size and shape of the boxes used largely in rural districts and constructed of sheet metal. The box involves a single container which has end walls 11 and 12, side walls 13 and an arched roof or dome 14. The side walls are vertical up to the base of the dome, whereby the box is divided into a storage receptacle 15 below said base and a receiving chamber 16 above said base. The end 11 may be referred to as the receiving end and the end 12, as the delivery end.

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The end wall 11 terminates at the top of the receptacle 15 and bottom of the chamber 16. Above the wall 11, the chamber is closed by a door 17 hinged, transversely along its bottom to the upper edge of said wall 11, as is indicated at 18. The rear end of the chamber is closed by the wall 12. The front end of the receptacle being closed by the wall 11, the wall 12 at the rear end of said receptacle has an opening 19, closed by a door 20, hinged at 21 along one vertical side to the edge of one of the side walls 13.

The door 20 has a medial ear 22 at its swinging edge, offset sufficiently to permit a spring latch 23, secured to one of the side walls, to catch on the edge of said door. The latch has an ear 24, adapted to register with the ear 22, whereby the shackle 25 of a lock 26 may be passed therethrough to lock the door 20.

The door 17 is hinged to swing down to a horizontal position as is shown in Fig. 2 to open the chamber 16 at the receiving end thereof. An arm 27 is fastened to the inner face of the door at one side thereof, adjacent the hinge 18. The arm extends at an angle to the face of the door and has an eye 28 at its outer end. One end of a short link 29 is pivoted in the eye, while the other end of the link is pivoted to the outer edge of an arm 30 extending laterally from an elongate rock shaft 31, having its ends suitably journaled in brackets 32 secured to the inner faces of the end walls 11 and 12. The shaft is disposed along one side of the upper portion of the receptacle 15 and has an elongate loop or lifter 33 extending laterally therefrom in substantially the same plane as the arm 30.

A swinging platform or shelf 34 is hinged to the shaft 31 and is rectangular in shape so as to close the top of the receptacle 15, when swung to the top thereof. The platform is loosely hinged so as to rest on top of the lifter 33 and to be swung up and down by the latter, but permitting independent movement of the lifter when the platform is otherwise supported.

The box has the usual signal flag 35 which includes an arm 36 medially pivoted on the box at 37, whereby the lower end of the arm overhangs one of the side walls. A spring latch finger 38 has one end fastened on the box wall and is bent outwardly so as to engage the inner face of the lower end of the arm 36 when the latter is swung to a vertical position. A pin 39 secured to the

finger enters an aperture 40 in the box wall and a coil spring 41 surrounds this pin between the box wall and the finger. When the flag is down, as is indicated in full lines in Fig. 1, the inner end of the pin will be out of the path of the platform 34. With the door 17 open and the platform elevated, as is shown in Figs. 3 and 4, the pin 39 will be slid under the platform, when the flag is moved to a vertical position; however, the door may be closed and the lifter 33 swung downward.

In using the mail box the flag 35 is down and the doors 17 and 20 are closed, the latter being locked. The postman opens the door 17 and when he swings it downwardly the arm 27 pulls the link 29 upwardly, whereby the lifter 33 and platform 34 are swung to horizontal position; said platform closing the receptacle 15. After depositing mail in the chamber 16, the postman closes the door 17 which swings the platform downwardly and deposits the mail in said receptacle. Should any one thereafter open the door 17, the platform 34 will be elevated and access to the mail prevented.

To remove mail the lock 25 is unfastened so that the door 20 may be opened. When it is desired to leave mail in the chamber 16 for the postman to pick up, the door 17 is opened to elevate the platform 34 to a horizontal position. The flag 35 is then swung upwardly to cause the arm 36 to ride onto the finger 38 and depress the latter which will project the pin 39 under the platform. When the door is closed the lifter will be swung downwardly, but the platform will be supported by the pin. When the flag is swung down the pin will be withdrawn and the platform will be released.

The box is comparatively simple in construction and makes it difficult, if not ordinarily impossible, for an unauthorized person to remove mail. Latching the platform 34 in its elevated positions provides a very effective mailing chamber which is substantially weatherproof.

The foregoing description of the invention is explanatory thereof and various changes in the size, shape and materials, as well as in the details of the illustrated construction may be made, within the scope of the appended claims, without departing from the spirit of the invention.

What I claim and desire to secure by Letters Patent is:

1. A mail box including, a container having upright end and side walls, a platform hinged horizontal along the medial portion of one of the side walls arranged to swing up and down in the container, an upper door in one of the upright walls of the container extending above the platform, a lower door in one of the walls of the container below the hinge of the platform, a lifter hinged in the container along one of the upright side walls thereof under the platform, a connection between the upper door and the lifter arranged to move the lifter upwardly to a horizontal position under the platform when the upper door is swung open, the platform and lifter being hinged to swing in unison or independently of each other, and a latch mounted in one of the upright walls of the container engaging the platform to hold the latter in a horizontal position independently of the lifter.

2. A mail box as set forth in claim 1, wherein the latch is spring pressed and is normally out of the path of the platform, and a flag signal member pivoted on the wall in which the latch is mounted located to engage and move said latch into engagement with the platform when said signal member is swung upwardly.

3. A mail box including, a container having upright side and end walls, a platform hinged within the container along one of the side walls adapted to swing up and down to and from a horizontal position and when swung to a horizontal position dividing the container into an upper receiving chamber above the platform and a lower storage receptacle below the said platform, an upper door in one of the upright walls of the receiving chamber, a lifter hinged along the inside of one of the side walls to underlie and to normally support the platform, the platform and lifter being independently swingable, and a movable connection between the upper door and the lifter disposed to swing the lifter to a horizontal position, whereby the platform is swung to a horizontal position when the door is opened.

4. A mail box as set forth in claim 3, and a latch mounted in one of the upright walls of the container disposed to engage the platform and support it in a horizontal position independently of the lifter.

5. A mail box as set forth in claim 3, with a latch mounted in one of the upright walls of the container disposed to engage the platform and support it in a horizontal position independently of the lifter, and a movable signal member mounted on the same wall with the latch located to be moved into signalling position and into engagement with the latch to move the latter into engagement with the platform.

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