No. 732,904. PATENTED JULY 7, 1903.

J. W. SNEDEKER.

MAIL BOX.

APPLICATION FILED FEB. 17, 1902.

NO MODEL.

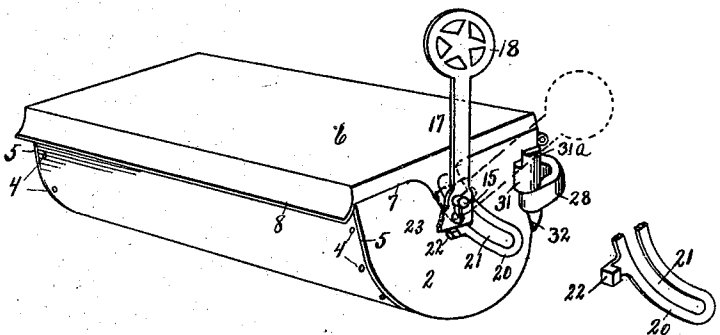


Fig. 1.

Fig. 8.

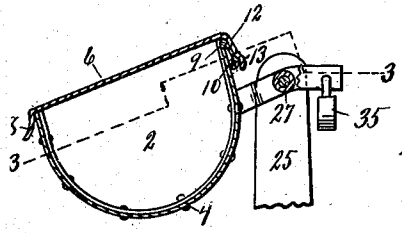


Fig. 2.

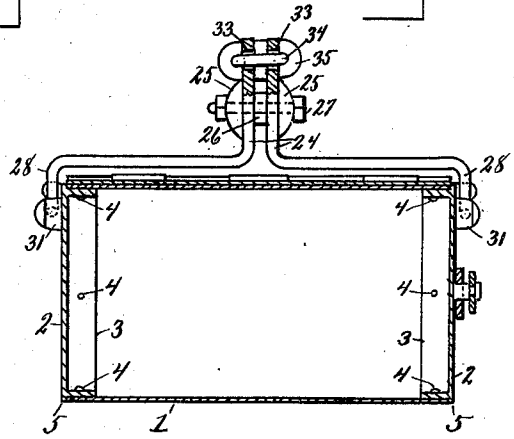


Fig. 3.

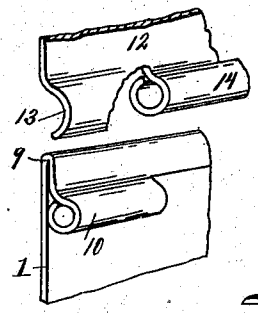


Fig. 4.

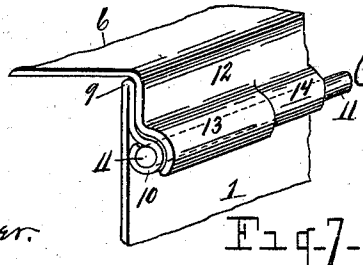


Fig. 7.

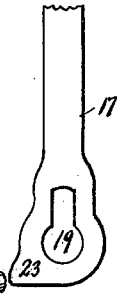


Fig. 5.

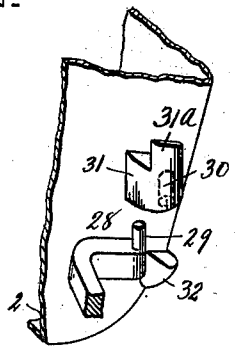


Fig. 6.

WITNESSES.

O. B. Barringer.

C. E. Davis.

INVENTOR.

James W. Snedeker.

By R. B. Wheeler & Co.

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 732,904. Patented July 7, 1903.

UNITED STATES PATENT OFFICE.

JAMES W. SNEDEKER, OF ADRIAN, MICHIGAN.

MAIL-BOX.

SPECIFICATION forming part of Letters Patent No. 732,904, dated July 7, 1903.

Application filed February 17, 1902. Serial No. 94,407. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. SNEDEKER, a citizen of the United States, residing at Adrian, in the county of Lenawee, State of Michigan, have invented certain new and useful Improvements in Mail-Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to mail-boxes especially designed for use in connection with rural-mail-delivery systems; and it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide a mail-box of the character described in which the arrangement is such as to exclude snow and water from the box at all points, to provide an automatically-actuated signal which will drop upon the opening of the box, to provide for securely attaching the box to a suitable support, and to incline the top so as to afford a shed for the water.

The above object is attained by the structure illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a mail-box involving my invention. Fig. 2 is a vertical transverse section through the box. Fig. 3 is a horizontal section therethrough, as on line 3 3 of Fig. 2. Fig. 4 is a fragmentary view of the parts forming the hinge which connects the lid or cover with the box, said parts being separated. Fig. 5 is a detail of the lower end of the signal-arm and the channeled pin, which projects from the end of the box upon which said arm is mounted. Fig. 6 is a detail in perspective, showing a portion of the end of the box and an end of one of the duplicate hangers adapted to support the box upon a suitable post, the pintle of said hanger being detached from its keeper on one end of the box, showing the arrangement for automatically locking the hanger when properly secured in position. Fig. 7 is a fragmentary detail of the hinge members united, as in forming the hinge. Fig. 8 is a detail of the curved slotted member which depends upon the lid of the box and carries a projecting lug adapted to trip the signal-arm as the lid of the box is raised.

Referring to the characters of reference, 1 designates the body of the box, formed, preferably, of sheet metal, and 2 designates the ends thereof, which may be either cast or stamped from sheet metal and which are substantially D-shaped, so that the body of the box when secured thereto is caused to describe in cross-section a rounded bottom portion and straight parallel sides, as shown in Fig. 2. The ends of the box are provided with lateral flanges 3, onto which the end portions of the body extend and to which they are secured by the rivets 4. The ends of the box are also provided with marginal beads or ribs 5, against which the ends of the body portion abut, whereby the joint between the body and the ends is protected, so as to exclude water therefrom.

It will be observed on referring to Fig. 2 that the rear edge of the box stands higher than the front edge, the purpose of which is to give additional slant to the cover, so as to avoid an undue tipping of the box in order to provide sufficient incline for the top to shed the water therefrom.

The lid or cover 6 of the box is made to fit over the top thereof and is provided at its ends with depending flanges 7 and at the front with a downwardly and outwardly rolled flange 8, which serves to protect the front opening of the box from rain and snow and to afford a shed for the water which runs off the top. Said front flange also serves as a means for opening the lid when desiring access to the box.

The top of the body portion of the box at the rear edge is bent downwardly or folded upon itself, as shown at 9, and the depending edge of said folded portion is rolled, so as to form a series of elongated eyes 10, separated by intervening spaces. These eyes are adapted to receive the pintle 11 of the hinge which unites the cover to the box. The rear edge of the cover of the box is bent downwardly, as at 12, and its depending margin is shaped into the alternating curved sections 13 and elongated eyes 14. The curved sections are designed to loosely embrace the eyes 10 of the

body portion, and the eyes 14 are designed to embrace the pintle 11 of the hinge between the eyes 10 of the body, as shown in Fig. 7, whereby a hinge-joint is formed between the body of the box and the cover, which securely unites said parts in a manner to enable the cover to be readily opened and closed and which is so positioned as to absolutely prevent any entrance of snow or rain into the box through the hinge, as said hinge is located so far below the top of the box as to preclude the possibility of the entrance of water or driven snow, and at the same time the joint of the hinge is so covered and protected as to entirely exclude the elements. The curved portions 13 of the lower edge of the cover freely embrace the eyes 10 of the hinge, so that as the cover is raised said curved portions describe the arc of a circle in their movement around said eyes, while the eyes 14 of the cover rotate upon the pintle 11.

Where rural mail-boxes of this character are used, it is essential to have some signal to indicate to the postman that there is mail-matter in the box to be collected or to indicate that the postman has deposited matter in the box for delivery. To provide such a signal, I form upon the end of the box a pin 15, which projects laterally therefrom and is provided in its opposite vertical faces with the opposed channels 16. Upon this pin a signal-arm 17 is mounted, carrying at its upper end a suitable signal 18. In the lower end of the signal-arm is formed a keyhole-opening 19. The sides of the straight portion of said opening are adapted to enter the channels 16 in the opposite sides of said pin, so as to maintain the signal-arm in a vertical position, while the rounded portion of said opening is adapted to turn upon said pin to allow the signal-arm to fall to a horizontal position when raised sufficiently to disengage the sides of the straight portion from said channels. For the purpose of actuating the signal-arm automatically a curved member 20 is employed, which depends from the end of the cover of the box parallel with the box end and is provided with a slot 21, in which the pin 15 is adapted to lie and which is curved concentric with the axis of the hinge of said cover. Projecting from said curved member is a lug 22, which when the cover is closed and the signal-arm is raised to a vertical position, as shown in Fig. 1, will engage under the projecting shoulder 23 on said arm, so that as the cover is raised said lug will raise the signal-arm sufficiently to carry the sides of the keyhole-opening in said arm from the channels in the pin, when said lug by a further movement of the cover will tip the signal-arm to a horizontal position, as shown by dotted lines in Fig. 1, in which position said arm remains until it is again raised by hand and secured in its vertical position.

It will be understood that when the signal-arm is in a vertical position it indicates that there is mail-matter in the box, and when it is in a horizontal position it indicates that the box is empty. When the mail-carrier deposits mail in the box, after closing the cover he raises the signal-arm to a vertical position to indicate that mail has been placed in the box. As the box is opened to remove the mail the signal-arm is automatically dropped to a horizontal position, thereby indicating that the box is empty. By this arrangement the box may be made to serve as a delivery and a collection box, for when mail has been deposited in the box for collection the arm may be raised as a signal to the postman to that effect.

To provide for attaching the box to a suitable post in a manner to prevent its surreptitious removal, I employ hangers or brackets having the rearwardly-extending parallel end portions 24, which are embraced between the sides 25 of the post and are separated by the interposed washer 26. Passing through the posts and the parallel end portions of the brackets is a bolt 27, whereby said parts are firmly bound together. Adjacent to the supporting-post the arms of the brackets bend outwardly in opposite directions and extend parallel to the rear side of the box, their extreme outer ends being bent forwardly, as at 28, so as to embrace the ends of the box, and are provided with upwardly-extending pins 29, which enter the sockets 30, (shown by dotted lines in Fig. 6,) formed in the bottom of the lugs 31, mounted on the ends of the box and suitably positioned to receive the pins of the bracket-arms. Formed below the lugs 31 and out of vertical alinement with the sockets therein are the shoulders 32, which engage the lower edge of the bracket-arms and normally support them so as to maintain the pins 29 within the sockets of the lugs 31. The position of said parts is such that when desiring to detach the box the bolt 27 may be withdrawn, when the bracket-arms may be swung outwardly, so as to cause their end portions 28 to stand across the ends of the box, as shown in Fig. 6, when said arms will be carried free from the shoulders 32 and may be dropped down, so as to disengage their pins 39 from the sockets of the lugs 31. In attaching the bracket-arms to the box their pins are entered in the sockets of the lugs 31 from the position shown in Fig. 6, when as said arms are swung rearwardly for attachment to the post they become automatically locked to the box because of the position of the shoulders 32, which engage the lower edge of said arms as they are swung into position.

The lug 31, projecting from the end of the box carrying the signal-arm, serves as a stop to arrest the arm as it falls to its horizontal postion, and projecting from said lug is a vertical shoulder 31^a, which serves to confine said arm in place.

To prevent the box being removed by other than a person of authority, the rear ends of the parallel portions 24 of said bracket-arms may be apertured at 33 to receive the bolt 34 of the padlock 35, thereby preventing the

removal of the box from the post except by one having a key to the lock.

A locking device for this class of box may be provided in the form of a simple hasp and staple, in connection with which may be used a padlock of any desired pattern.

Having thus fully set forth my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a mail-box the combination of the body portion having its rear edge folded downwardly upon itself with a cover having its rear edge bent downwardly parallel to the folded rear edge of the body, the hinge uniting the body and cover formed of the engaging members of said folded portions carried by said parts respectively, said hinge being positioned below the plane of the top of the box remote from the line of occlusion between the box and cover.

2. In a mail-box the combination of the body portion, the cover, the material forming the body of the box being folded outwardly and downwardly at its rear edge and shaped into elongated eyes separated by interposed spaces, the material of the cover being bent downwardly at the rear and shaped into elongated eyes adapted to occupy the spaces between the eyes formed in the material of the body, and in alinement therewith, a pintle passing through the registering eyes of the body and cover, whereby said parts are hinged together on a plane below the top of the box.

3. In a mail-box the combination of the metallic body portion, the metallic cover, the material of the body portion at its rear upper edge being folded upon itself so as to cause its free edge to depend below the plane of the top, and the depending margin of said folded portion being formed into registering eyes separated by intervening spaces, the material of the cover being bent downwardly at its rear edge and the depending margin of said downwardly-bent portion being formed into elongated eyes which lie between and register with the eyes of the body portion, a pintle passing through said registering eyes, and the material of the depending margin of the cover which registers with the eyes formed in the body portion being curved to embrace said eyes so as to exclude foreign substances from the joint between the hinged members.

4. In a mail-box, the combination of the box and cover, the end of the box having a pin projecting therefrom, a signal-arm mounted upon said pin to swing in the arc of a circle and to move vertically, means for locking said arm in a vertical position upon said pin, a member depending upon the exterior of said cover adapted to directly engage and raise said arm vertically to unlock it as the cover is raised, and carry said arm to a horizontal position.

5. In a mail-box the combination of the box and cover, a pin projecting from the end of the box, a signal-arm having an opening therein which freely receives said pin, said opening being so shaped as to support the arm in a vertical position, a member depending from the cover having a curved slot in which said pin lies, said member also having a projection which engages said arm as the cover is raised to unlock said arm and carry it from a vertical to a horizontal position.

6. The combination with a mail-box of the supporting-brackets adapted for attachment to a post, said brackets having bent end portions which embrace the ends of the box and are provided with upwardly-projecting pins, lugs upon the ends of the box having sockets in their under faces adapted to receive said pins, shoulders formed upon the ends of said box below said lugs and out of alinement with the sockets therein, said shoulders being adapted to support said brackets to maintain their pins in the sockets in said lugs when the rear ends of the brackets are brought together for attachment to a support.

In testimony whereof I sign this specification in the presence of two witnesses.

JAMES W. SNEDEKER.

Witnesses:
F. E. OSGOOD,
GEO. L. BENNETT.