No. 693,917. Patented Feb. 25, 1902.

A. STANSEL.

MAIL BOX.

(Application filed Mar. 27, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

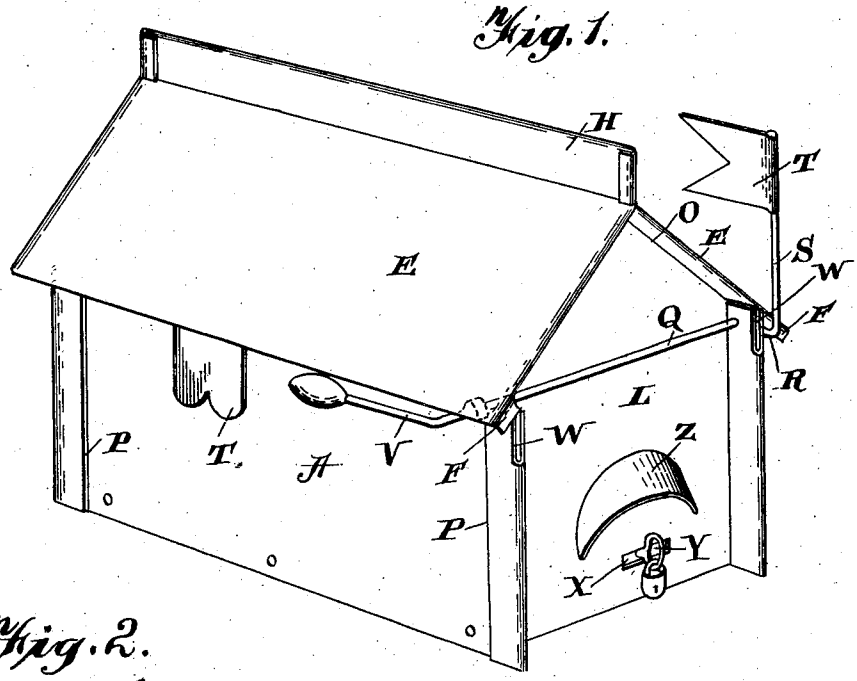


Fig. 2.

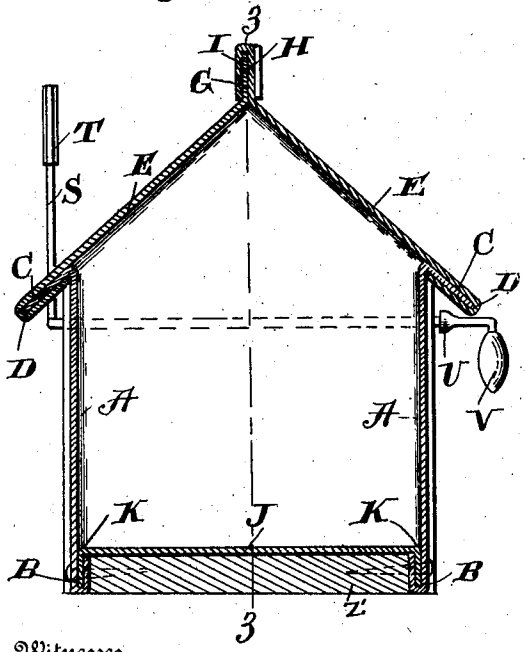
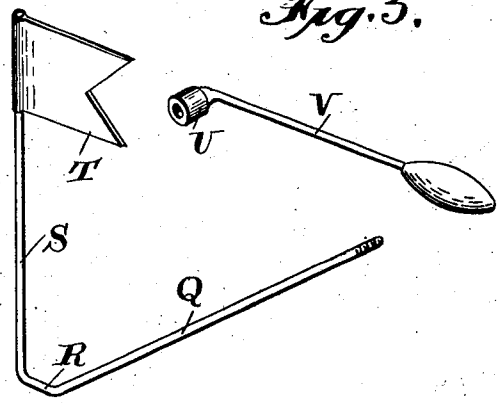


Fig. 5.



Witnesses
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Fig. 3.

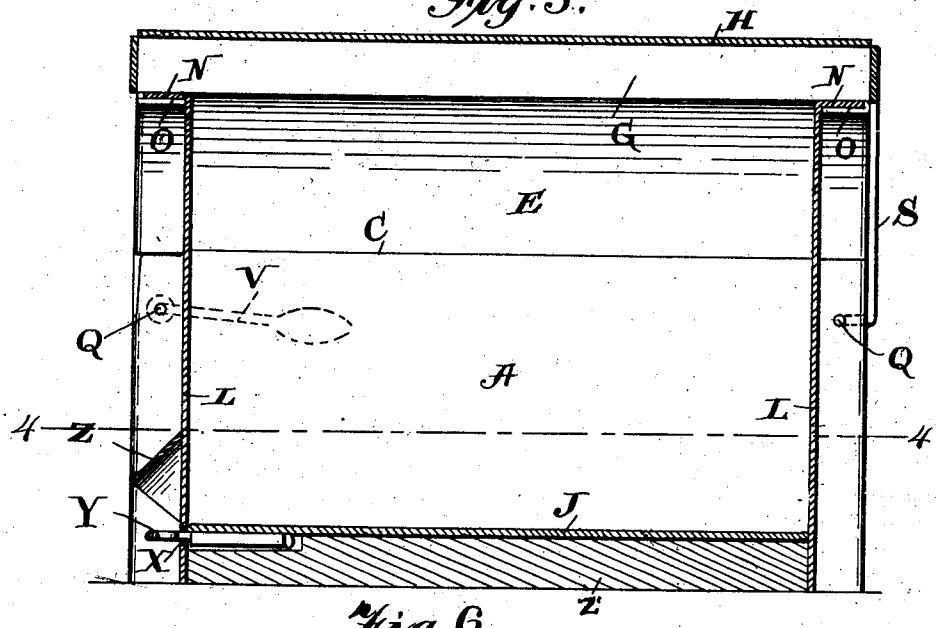


Fig. 6.

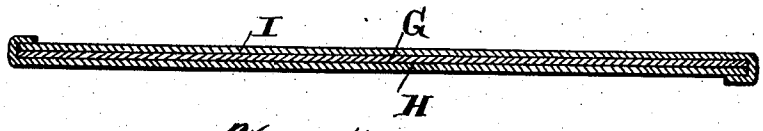
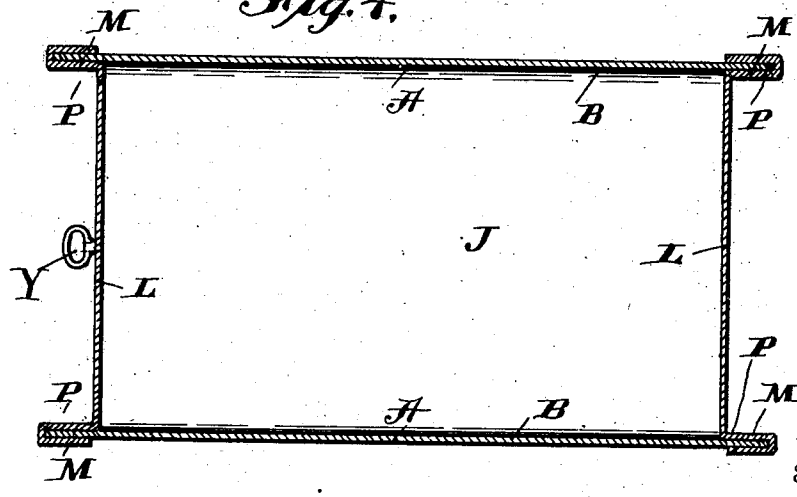


Fig. 4.



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UNITED STATES PATENT OFFICE.

ALONZO STANSEL, OF YORKVILLE, ILLINOIS.

MAIL-BOX.

SPECIFICATION forming part of Letters Patent No. 693,917, dated February 25, 1902.

Application filed March 27, 1901. Serial No. 53,103. (No model.)

To all whom it may concern:

Be it known that I, ALONZO STANSEL, a citizen of the United States, residing at Yorkville, in the county of Kendall and State of Illinois, have invented new and useful Improvements in Mail-Boxes, of which the following is a specification.

This invention relates to improvements in mail-boxes, and particularly to boxes for rural mail-service which are located adjacent to residences and provided with signals to indicate to the carrier that mail has been deposited in the box for collection and to the resident that mail has been placed therein by the carrier.

The primary object of my invention is to provide a simple construction of box of this character in which the mail may be readily deposited and the signals conveniently and easily moved to operative or inoperative position and securely retained in either of said positions from accidental displacement.

The secondary object is to so construct the box that the same may be "knocked down" and arranged in compact form for shipment, so as to avoid liability of its being damaged in transit and to reduce the expense incident to the shipment of a box already assembled and at the same time permit it to be readily assembled by the purchaser without the employment of mechanical skill.

With the above objects in view the invention consists in the novel features of construction hereinafter fully described, particularly pointed out in the claims, and clearly illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of a mail-box constructed in accordance with my invention, one of the signals being shown in operative position; Fig. 2, a transverse sectional view; Fig. 3, a vertical longitudinal sectional view on the line 3 3 of Fig. 2; Fig. 4, a horizontal sectional view on the line 4 4 of Fig. 3; Fig. 5, a perspective view of one of the signal mechanisms detached from the box, and Fig. 6 a horizontal sectional view taken through the ridge of the roof of the box.

The box herein described, and illustrated by the drawings, is constructed of sheet metal, the side walls A A thereof having at their lower edges and upon their inner sides upwardly-facing grooves B B, formed by bending the metal inwardly and upwardly, and at their upper edges outwardly and downwardly extending flanges C C, disposed at the proper angle to fit in grooves D D, formed similarly to grooves B B on the inner sides of side walls E E of a peaked roof or top with which the box is provided, said grooves D D being at the lower edges of said walls E E. To prevent longitudinal movement of the side walls A A of the box-body relatively to the side walls of the roof, said grooves D D are closed at their ends by lips F F, which also form stops for the signal-supporting arms when the signals are moved to operative position.

One of the side walls E E of the roof has at its upper edge a vertical flange G, which fits in a downwardly-facing groove H, formed on the inner side of a vertically-disposed flange I at the upper edge of the other wall E, said groove being formed by bending the metal, as before described, and having its ends closed, so as to prevent relative longitudinal movement of said walls E E. Thus a vertically-disposed longitudinally-extending ridge is formed at the peak of the roof, providing a convenient place for the name of the owner of the box.

A bottom wall J is provided, having at its side edges downwardly-extending flanges K to fit in grooves B B of said side walls A A, said bottom wall sliding in and out of the box. The bottom wall is shorter than the side walls A A, so as to leave a space at each end thereof for the end walls, presently to be described, and the grooves B B are of corresponding length.

L L designate the end walls of the box, each of which is shaped at its upper end to form an end wall of the peaked roof, the upper portion of each end wall being therefore triangular. Said end walls are formed at their side edges with outwardly-extending flanges M and at the edges of their triangular portions with similar flanges N. Flanges N fit in inwardly-facing grooves O, formed, as before set forth, at the end edges of the side walls of the roof, while flanges M have upon their outer sides similarly-formed inwardly-facing grooves P, receiving the end edges of the side walls A A of the box. Thus the box is held securely together when assembled

without the use of the bolts, rivets, or other securing devices.

The flanges M, the outer walls of grooves P, and the side walls A A are perforated to receive rock-shafts Q, which extend transversely of the box at the ends thereof, said shafts being screw-threaded on one of the projecting ends and bent laterally at their opposite ends to form shoulders R, which limit the longitudinal movement of the shafts in one direction, and provided with signal-supporting arms S, extending at right angles to the shafts and carrying signals T. The signals are of different colors, one informing the carrier that the box contains mail to be collected, and the other, the owner of the box, that mail has been placed therein by the carrier.

Upon the screw-threaded ends of the shafts are couplings U, which connect weighted V with the shafts, said arms being disposed at right angles to the shafts and the signal-supporting arms. These couplings serve also as stops to prevent longitudinal movement of the shafts in one direction, the longitudinal movement of the shafts in the reverse direction being prevented by the shoulders R, as before mentioned. The weighted arms are thus detachably connected to the shafts, so that they may be readily detached and the shafts removed when the box is knocked down.

The upward movement of the signal-supporting arms is limited by the stops F F, against which said arms abut when the signals are moved to operative position, the movement of the arms in a reverse direction being limited by the side walls of the roof, which project beyond the side walls of the body of the box and form eaves beneath which the signals are positioned when not in use, while the weighted arms hold said signals in either position from accidental displacement.

To move the signals from operative to inoperative position, and vice versa, it is only necessary to move the weighted arms until the weight is past the center, when the further movement of the signals will be effected by gravity.

One of the end walls constitutes a door, whereby access may be obtained to the interior of the box, said wall swinging on the rock-shaft at that end of the box which acts as a pivot therefor. To permit said end wall to swing inwardly at its upper end, grooves P are formed in their base-walls at the upper ends thereof with slots W.

The swinging wall or door is formed with a slot X to receive a pivoted locking member Y, carried by the bottom wall, which projects therethrough, and is formed with a head adapted to be turned transversely thereof to hold said door in its closed position. Said door is also provided with a handhold Z, by means of which it may be conveniently swung on its pivot to open or close the box.

The boxes when in use will be attached to a base Z', supported by a post or in any preferred manner.

A box constructed as herein described is proof against the entrance of snow and dust, owing to the manner of joining the walls thereof, while the signals and the door thereof may be so easily manipulated as to render it possible for a child to deposit and remove mail. The box may also be readily and quickly knocked down and packed in compact form for shipment and assembled by unskilled persons, and the signals are securely held in either operative or inoperative position against accidental displacement.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination with a box or receptacle, of an oscillating shaft passing transversely through the said box and having its ends projecting beyond the outer side of the box, a signal connected with and extending at right angles to one end of the said shaft, and an operating-arm connected with the opposite end of the said shaft and extending at an angle thereto, and stops for limiting the movement of the said shaft when the signal is in its exposed and unexposed positions, substantially as described.

2. The combination with a box or receptacle, of a rock-shaft supported thereby, a signal carried by said shaft, and a weighted arm extending at right angles to said shaft, the shaft adapted to be oscillated by the weighted arm and the weighted arm carried to opposite sides of the axis of said shaft, substantially as described.

3. The combination with a box or receptacle, of a rock-shaft supported thereby and having a screw-threaded end, a signal-supporting arm carried by said shaft and disposed at right angles thereto, a coupling adapted to be positioned on said screw-threaded end of the shaft, a weighted arm attached to said coupling and adapted to extend at right angles to the shaft and signal-supporting arm, and stops for limiting the rocking movement of the shaft in reverse directions, substantially as described.

4. The combination with a box or receptacle, of a rock-shaft supported thereby and formed at one end with a shoulder and a signal-supporting arm disposed at right angles thereto and having its opposite end screw-threaded, a coupling adapted to be positioned on said screw-threaded end, a weighted arm attached to said coupling and adapted to be disposed at right angles to the shaft and signal-supporting arm, and stops for limiting the rocking movement of the shaft in reverse directions, substantially as described.

5. The combination with a box or receptacle having a top projecting beyond the side and end walls thereof, of a rock-shaft mounted at one end of the box, an arm at one end of the shaft and disposed at right angles thereto and carrying a signal and abutting the projecting end of the top and the projecting side thereof when in operative and inoperative po-

sitions respectively, means for rocking said shaft, and means for holding said arm against said projecting portions of the top of the box, substantially as described.

6. The combination with a box or receptacle having a swinging door, of a rock-shaft upon which said door swings, a signal carried by said rock-shaft, means for rocking said shaft, and means for holding the signal in operative or inoperative position, substantially as described.

7. The combination with a box or receptacle having a swinging door, of a rock-shaft upon which said door swings, a signal carried by said rock-shaft, locking means for holding said door closed, means for rocking said shaft, and means for holding the signal in operative or inoperative position, substantially as shown and described.

8. A box having top, side and bottom walls formed with coengaging grooves and flanges, said top wall having inwardly-facing grooves at its end edges, and end walls each having one end formed with outwardly-extending flanges to take the grooves of the ends of the top wall, and its sides provided with inwardly-extending grooves to receive the end edges of the side walls, substantially as described.

9. A box having a top wall formed at its side and end edges with inwardly-facing grooves, side walls formed at their upper edges with flanges taking the grooves of the side edges of the top wall and at their lower edges with upwardly-facing grooves, a bottom wall having downwardly-extending flanges at its side edges taking the grooves of the side walls, and end walls having inwardly-facing grooves receiving the end edges of the side walls and outwardly-extending flanges taking the grooves at the end edges of the top wall, substantially as described.

10. The combination with a box or receptacle having a roof with projecting eaves, of a rock-shaft passing transversely through the box below the eaves, one end of the rock-shaft carrying a signal-arm projecting at right angles to the shaft, and the opposite end of the shaft provided with a weighted arm extending at right angles to the shaft and in an opposite direction to the said signal-arm, substantially as described.

11. The combination with a box or receptacle having eaves, of a transversely-arranged rock-shaft passing through the box below the eaves, a signal-arm carried by one end of the rock-shaft and projecting in a direction at right angles thereto, the signal-arm adapted to swing under the eaves when in one position and to swing in front of and abut against the end of the eaves when in the other position, substantially as described.

12. The combination with a box or receptacle having depending eaves, a rock-shaft passing transverse the box at a point below the eaves, one end of the rock-shaft having a signal-arm projecting therefrom and at right angles thereto and at a point adapted to swing under the eaves, the opposite end of the rock-shaft having a weighted lever at a point beyond or outside and adapted to swing free of the said eaves, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALONZO STANSEL.

Witnesses:
CLARENCE STANSEL,
MENZO STANSEL.