March 4, 1947. A. E. JOHNSON 2,416,696

MAIL BOX

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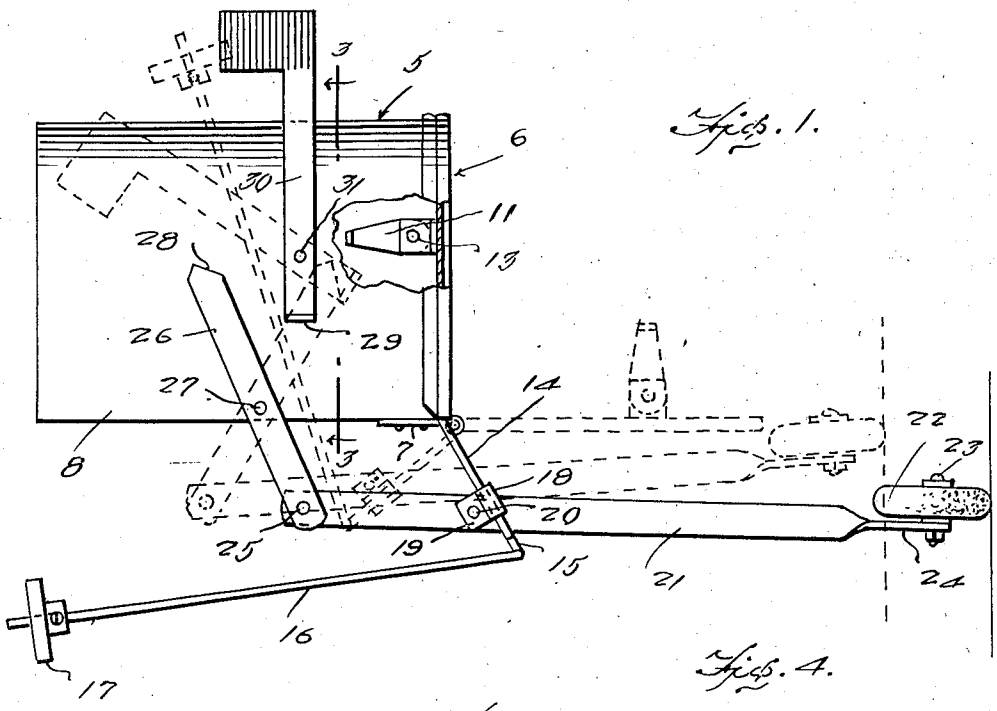


Fig. 1.

Fig. 4.

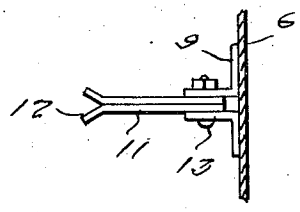


Fig. 2.

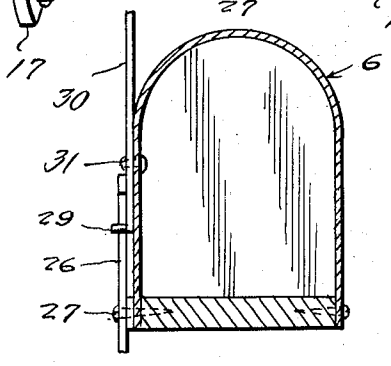


Fig. 3.

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MAILBOX

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3 Claims. (Cl. 232—35)

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My invention relates to an improved mail box wherein mechanism is incorporated to enable the mail carrier to open the box to remove outgoing mail therefrom and simultaneously drop the flag indicating removal of the mail, through a single easily performed actuation of said mechanism in one direction, upon the conclusion of which the door of the mail box returns automatically to closed position.

The primary object of the invention is to provide mechanism for incorporation in a standard mail box of the rural free delivery type or other type, which will enable the above-described functions, said mechanism being rugged and serviceable and being composed of few and simple parts, the mechanism being easily incorporated with existing features of standard mail boxes without extensive mutilation or other alteration thereof.

Other important objects and advantages of my invention will appear in the following description and appended drawings, wherein a preferred embodiment of the invention is shown only for illustration of the invention.

In the drawings:

Figure 1 is a side elevation of said embodiment, partly broken away to reveal internal structure, the mechanism being shown in initial or rest position in full lines, and in operated position in dotted lines.

Figure 2 is a top plan view of Figure 1.

Figure 3 is a transverse section taken on the line 3—3 of Figure 1.

Figure 4 is a sectional detail on an enlarged scale of the spring letter clip.

Referring in detail to the drawings, the numeral 5 generally designates the horizontally elongated casing of a conventional mail box of the type herein contemplated, which is provided at its front end with a door 6 which is hinged at 7 at its lower edge to the front end of the bottom 8 of the casing.

Attached by L-shaped ears 9 to the inner side of the door 6 is a spring letter clip formed of two tapered leaf springs 11 having out-turned ends 12, a bolt 13 traversing the ears and the opposite ends of the leaf springs to mount them and provide adjustable tension for holding letters therebetween, so that upon opening of the door 6 the letters clipped thereby will be held by the clip in a convenient position to be reached and removed by the mail carrier.

In accordance with the present invention, there is suitably secured to the rim of the cover 6 at the lower left hand corner thereof a forwardly and downwardly directed rod arm 14 which terminates at its lower end in a horizontally disposed U-shaped member 15, whose other leg is prolonged, as shown in Figure 2, in a lateral direction to a point at the left hand side of the casing 6, where said leg merges into a rearwardly directed substantially horizontal arm 16 which extends alongside of the casing and has an adjustably positioned weight 17 at its rear end, so arranged that upon release of the mechanism of which the arm 16 and weight 17 form parts, the mail box cover will be restored to closed position by the falling of the arm 16 and weight 17 from the elevated position shown in dotted lines in Figure 1 of the drawings.

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A sleeve 18 clamped intermediate the ends of the rod arm 14 includes an ear 19 pivoted at 20 to a normally horizontal flat bar 21 which has a rubber-tired or similarly suitable wheel 22 rotatably mounted at 23 on a horizontal part 24 of the said bar, which wheel the mail carrier engages and pushes rearwardly to open the cover or door of the mail box.

The rear end of the flat bar 21 is pivoted at 25 at a suitable distance rearwardly of the pivot 20, to the lower end of a lever 26, which is pivoted intermediate its ends at 27 to the lower part of the side of the casing 6. The upper extremity of the lever 26 has an acutely angulated cam portion 28 which is arranged to operatively engage with a lateral portion 29 on the lower end of the flag 30 below its pivotal connection 31 on the side of the casing 6, when the bar 21 is pushed rearwardly and the lever 26 swings forwardly, whereby the flag is pushed down from its standing position, all as indicated in dotted lines in Figure 1. The pivotal connection 31 of the flag provides sufficient friction to maintain the flag in either raised or lowered position. When rearward pressure on the wheel 22 is released by the mail carrier, after removing the outgoing mail from the clip 11 and any in the casing 6, the parts return themselves from the dotted line to the full line positions shown in Figure 1.

I claim:

1. The combination with a mail box or the like having a casing and a door hinged at its lower edge to the front opening of the casing and a flag pivoted on one side of the casing and normally positioned in a raised position, a weighted rod secured to said door and extending rearwardly alongside of the casing for gravitationally returning the door to closed from open position, a flag-lowering lever pivoted intermediate its

ends on the side of the casing, a horizontal bar pivoted intermediate its ends on a portion of said weighted rod and pivoted at its rearward end to the lower end of said lever, the pivotal points being arranged so that when said horizontal rod is pushed rearwardly from its rest position with the door closed, said weighted rod will be elevated to open the door and said lever will be swung on its pivot to engage the flag and pivot the flag from its raised to a depressed position.

2. In combination, a mail box having a door pivoted at its lower edge to close a forward opening of said mail box, a flag pivoted on said box, a lever pivoted intermediate its ends to the box, a horizontal bar pivoted at its rear end to the lower end of said lever and extending forwardly with respect to the box, a rod arm fixed to the lower part of the door, said rod arm having a depending portion terminating in a rearwardly extending portion having a weight at its rear end, means pivoting said depending portion of the rod arm to said horizontal bar, and handle means on the forward end of said horizontal bar for pushing the same in a rearward direction so as to elevate said rod arm and open the door while swinging said lever in engagement with said flag to depress the same, said weight being sufficient to return said lever, said rod arm and said horizontal bar to their initial positions of rest and close the door when rearward pressure is removed from said handle means.

3. In a mail box provided with an open front end and having a door for said opening, pivoted at its lower edge in said opening, and a flag pivoted on the side of the mail box, a depending weighted rod fixed to the lower part of the door and normally keeping the door closed, a generally horizontal bar pivoted intermediate its ends on said rod, a lever pivoted intermediate its ends on the box below and in the plane of the flag and pivotally connected at its lower end to the rear end of said horizontal bar, and handle means for pushing the horizontal bar rearwardly so as to elevate the weighted rod and open the door and engage the upper end of the said lever with the flag so as to depress the flag, the pivotal points of said lever, said weighted rod, and said horizontal bar being arranged to permit the weight of said rod to close the door and return the lever, the rod, and the horizontal bar to their initial positions of rest when rearward pressure on said handle means is removed.

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