

1,237,199.

Patented Aug. 14, 1917.

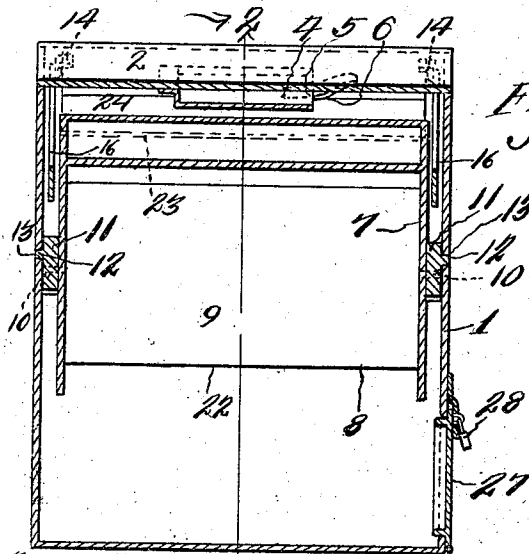


Fig. 1.

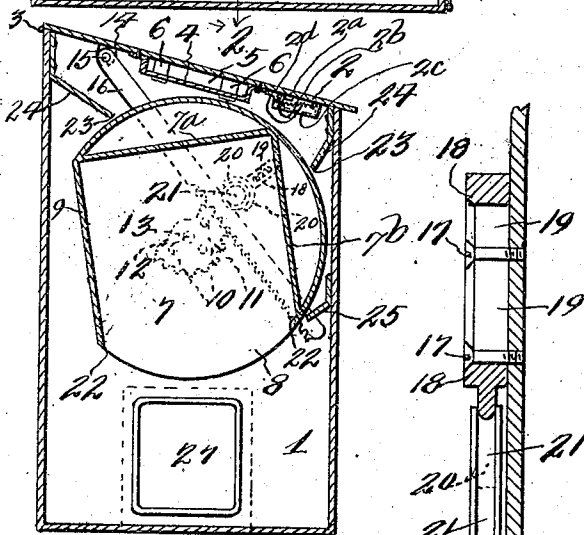


Fig. 2.

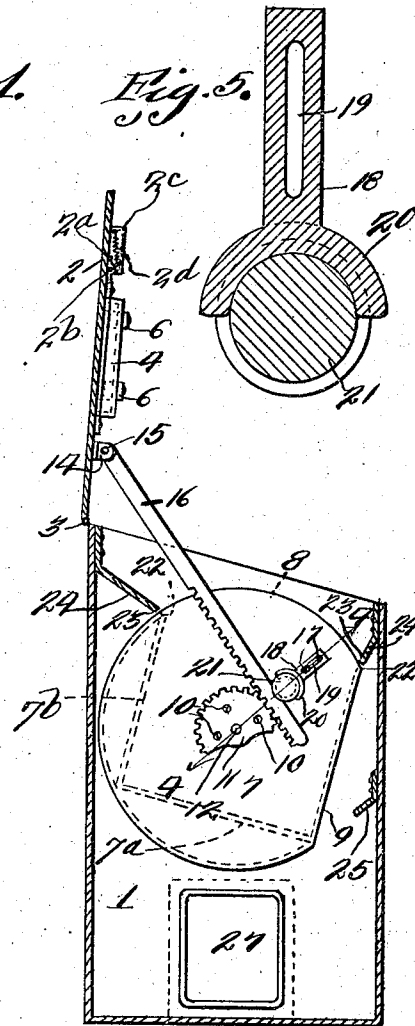


Fig. 3.

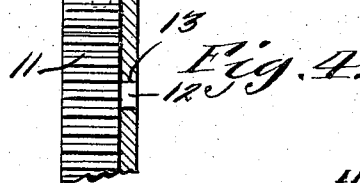


Fig. 4.

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# UNITED STATES PATENT OFFICE.

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MAIL-BOX.

1,237,199.

Specification of Letters Patent.

Patented Aug. 14, 1917.

Application filed September 20, 1916. Serial No. 121,229.

*To all whom it may concern:*

Be it known that I, HENRY D. GRAVES, a citizen of the United States, residing at Grant Park, in the county of Kankakee, State of Illinois, have invented a new and useful Mail-Box; and I do hereby 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.

This invention relates to an improved mail box, and one of the objects of the invention is to provide a device of this nature, in which practical detail features of construction are involved.

Another object of the invention is to improve and simplify and render more practical the construction of mail box set forth, shown and claimed in the patent Henry D. D. Graves, issued Sept. 28, 1915, Patent No. 1,155,146.

One of the features of the invention is to provide a rack and gear connection between a mail box closure and a revolubly mounted auxiliary mail receptacle, in combination with retaining means for holding the rack and gear connection in cooperation, whereby the closure or lid, when raised, will rotate the auxiliary mail receptacle so that its opening may register with an opening of the first mail box, for the reception of mail matter.

In practical fields the details of construction may necessitate alterations, falling within the scope of what is claimed.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawings:

Figure 1 is a vertical sectional view through the improved mail box constructed in accordance with the invention.

Fig. 2 is a sectional view on line 2—2 of Fig. 1.

Fig. 3 is a sectional view, showing the revolubly mounted auxiliary mail box in end elevation.

Fig. 4 is an enlarged detail sectional view on line 4—4 of Fig. 3.

Fig. 5 is a detail sectional view of the rack retaining roller and its holder, and showing the wheels 11 and 21 in elevation.

Referring more especially to the drawings, 1 designates the main or dominant mail box, which may be any suitable shape or configuration, and which is provided with a

closure or lid 2, hinged at 3 to the box. This closure or lid upon its under or inner surface is provided with a receptacle 4 for mail matter, coin, or the like. This receptacle 4 has one end 5 open, through which the mail matter for the postman may pass, there being spring arms 6 secured to the receptacle 4 and extending over the opening 5, to retain the mail matter in the receptacle. Arranged in the dominant mail box is a partial cylindrical auxiliary mail box 7 having an opening 8 and a flat surface 9 at the termination of the cylindrical wall of the box 7. Secured axially to the opposite ends of the casing 7 by means of the screws 10 are segmental gears 11 having axially arranged pinions 12, which are mounted in bearings 13 of the opposite ends of the dominant mail box 1. To the opposite ends of the lid or closure and upon its under surface are ears 14, and to which at 15 the racks 16 are pivoted. These racks 16 are inclined forwardly and downwardly from the cover or closure, and are in mesh with the segmental gears 11. Secured to the opposite ends of the dominant mail box and upon the inner faces of said ends, by means of screws 17 are plates 18, which are provided with slots 19. The screws 17 pass through the slots 19, so that by loosening and tightening the screws, the plates 18 may be adjusted slightly. These plates are provided with semi-circular forks 20, which arch over the rollers 21, which are grooved, and are designed to engage the racks 16 to hold their teeth in mesh with the teeth of the segmental gears. The semi-circular forks or fingers 20 engage the grooves of the rollers or wheels 21 as shown. The plates 18 with their fingers constitute retaining members for the rollers or wheels 21, whereas the plates and their fingers or forks combined with the rollers or wheels constitute containing means, to hold the racks in engagement with the segmental gears. It will be observed, that when raising the closure or lid, the racks will operate the segmental gears, and owing to the gears being carried by the opposite ends of the auxiliary mail box, the said box will be partially rotated, until the opposite edge 22 of the opening 8 will register with the edges 23 of the plates 24, which are secured to the inner faces of the front and rear walls of the dominant mail box. These plates 24, and also the plate 25 constitute means, to prevent an instrument of any kind from be-

ing inserted, between the walls of the dominant and auxiliary mail boxes, for fraudulently removing the mail matter from the bottom of the dominant mail box. It is to be noted that when the closure or lid 2 is thrown to the position in Fig. 2, the auxiliary mail box will be returned, with its opening 8 facing downwardly, and as the auxiliary box is being returned, the flat face 9 acts as a chute, so as to cause the mail to fall directly toward the bottom of the dominant box. The flat portion or face 9 also acts as a chute when inserting the mail matter, that is, when the opening 8 is registering with said plates 24. One end of the dominant mail box at its lower portion is provided with a hinged closure 27, which may be opened for the extraction of the mail matter in the bottom of the dominant box. However, this closure 27 may be held locked by the suitable padlock 28. On the interior of the auxiliary mail box 7 an angular frame or angular sides 7<sup>a</sup> and 7<sup>b</sup> are provided, which combined with the flat surface or side 9 form the auxiliary mail box or receptacle rectangular on its interior, which renders it easier and more convenient when removing the mail, when such is required, or allows the mail to more easily deposit into the lower part of the main casing or mail box 1. For instance, such construction prevents the mail from binding against the cylindrical side of the auxiliary mail receptacle. The under face of the closure or lid 2 is provided with a pair of ears 2<sup>a</sup>, between which upon

a pivot pin 2<sup>b</sup> a coin box 2<sup>c</sup> is pivoted, which coin box is designed to close against the under face of the lid, there being a suitable coil spring 2<sup>d</sup>, acting to hold the coin box against the under face of the lid, as shown clearly in Figs. 2 and 3 of the drawings.

The invention having been set forth, what is claimed as new and useful is:

A mail box comprising a dominant mail receptacle, a partly revoluble auxiliary mail receptacle mounted in the upper end of the dominant receptacle and having segmental gears upon its opposite ends, said auxiliary mail receptacle having a rectangular interior contour, the dominant receptacle having a hinged closure provided with racks pivotally connected to the under or inner face of the closure and meshing with the gears, and means upon the inner faces of the ends of the dominant receptacle to retain said racks in mesh with the gears, said means comprising slotted plates adjustably secured upon the inner faces of the ends of the dominant receptacle, each plate having semi-circular arched parts, and grooved rollers engaging between the racks and said arched parts to retain the racks in mesh with the gears.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY D. GRAVES.

Witnesses:

MARY MOECKER,

CHARLES RAYHORN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."