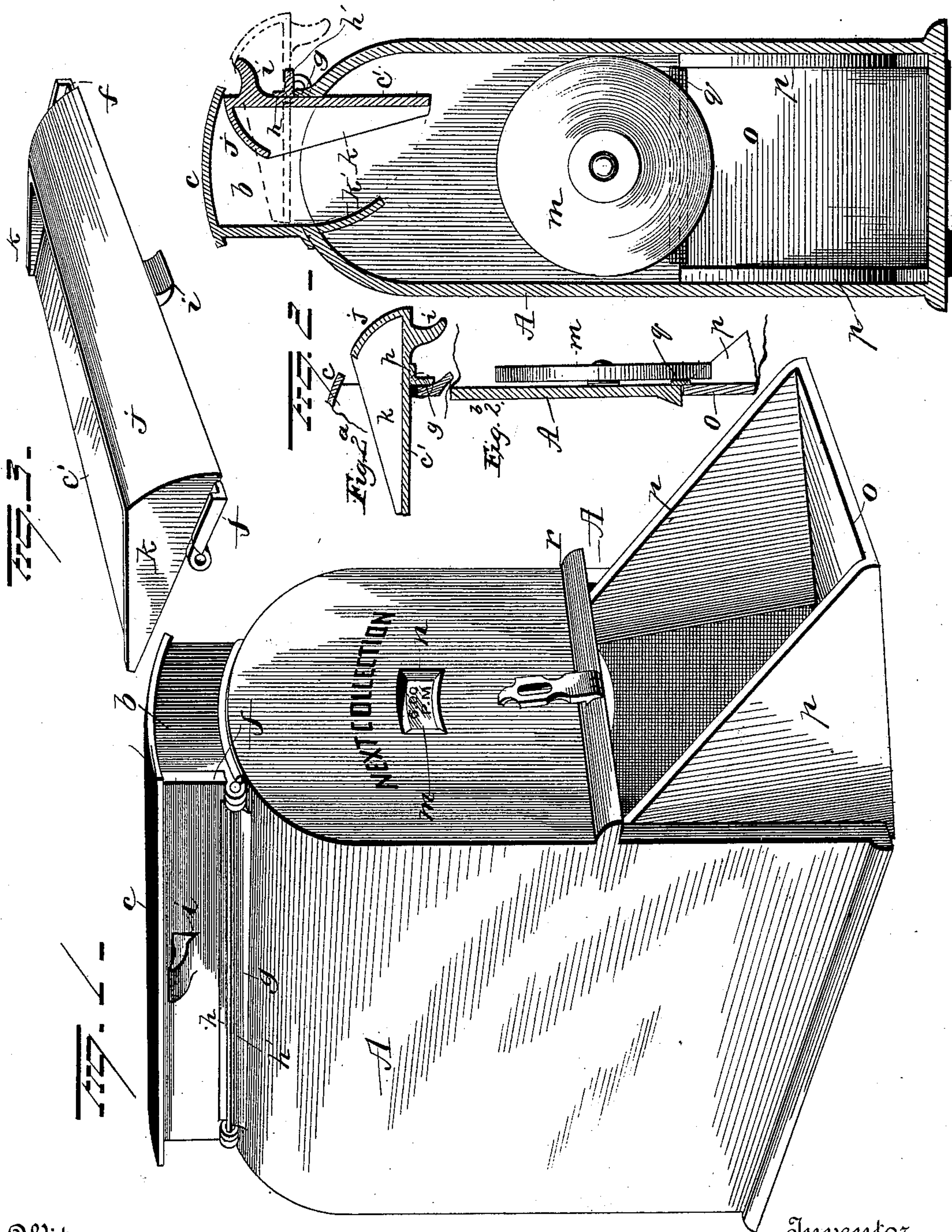


(No Model.)

W. D. DOREMUS.  
LETTER BOX.

No. 404,828.

Patented June 11, 1889.



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLARD D. DOREMUS, OF WASHINGTON, DISTRICT OF COLUMBIA.

## LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 404,828, dated June 11, 1889.

Application filed January 31, 1889. Serial No. 298,178. (No model.)

*To all whom it may concern:*

Be it known that I, WILLARD D. DOREMUS, of Washington, in the District of Columbia, have invented certain new and useful Improvements in Letter-Boxes; 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.

My invention relates to an improvement in letter-boxes.

The object of the invention is to provide against unwarranted and unauthorized tampering with the mails while awaiting collection, and, further, to provide against any exposure of the contents to rain, fire, or other calamity.

With these ends in view my invention consists in certain novel features of construction and combinations of parts, as will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of my improved letter-box with the lower door open. Fig. 2 is a transverse sectional view through the box. Figs. 2<sup>a</sup> and 2<sup>b</sup> are detached views, and Fig. 3 is a detached view of the pivoted letter-tray.

A represents the body of the box. It is of usual construction and form, and on its top is rounded in the usual fashion. The walls at the top are restricted into a narrow upper chamber *b*, and over this the roof *c* is secured. One side of this upper chamber *b* is removed, thus furnishing an opening for the reception of letters and parcels of ordinary size. The connected mechanism for opening and closing this side of the chamber constitutes an essential feature of my present invention, and hence a detailed description of this part will follow.

A flat or straight lid or plate *c'*, preferably of metal, is pivoted to the roof of the box to one side of its center, so that the plate is divided into a narrow and a wide portion. The narrow portion *e* constitutes the lid of the box, and is adapted to normally close the opening in the chamber *b*, owing to the greater weight of the wider portion of the plate *c'*, which acts as a counterpoise to always keep the lid in a vertical position. At its

ends the lid is provided with flanges *f*, which lap over the edges of the end walls of the chamber *b*, thus making the fit of the lid close at its ends. To still further insure against the admission of water, a flange *g* is secured to the roof of the box and projects upwardly and terminates in a line with the axis of the lid *c'*. Being thus arranged, even when the lid is rocked, the flange *g* and lid always retain the same positions relatively. An angle-plate *h* is secured to the lid over and adjacent to the flange *g* in such position that one flange *h'* projects outward and normally serves as a weather-strip to shed rain; but, on the other hand, when the lid is open, it acts as a stop to limit the opening of the lid by abutting against the flange *g*. The roof of the chamber *b* projects over the lid when the latter is closed, and thus water is kept out at this point. The lid is operated by a handle *i*, projecting from its face.

The lid-plate *c'* is provided on its inner side, flush with the upper edge, with a flange *j*, curved concentric with the axis of the plate. From the ends of this curved plate segments *k* extend along the ends of the plate *c'*, tapering to a point at their ends. Thus the inner side of the plate forms a kind of tray for receiving the letters and parcels which are inserted through the openings in the chamber *b*. The bottom of this tray just reaches across the chamber when the lid *c'* is opened, it having sufficient clearance so that the tipping of the plate is unobstructed, and yet so that there is not sufficient space left between it and the wall of the box to permit anything to pass.

Inside of the box a curved plate *k'* is located. This plate projects downwardly concentric with the axis of the plate *c'*, and its position is such that when the lid is open the curved flange *j* on its back or upper end and this plate *k'* are diametrically opposite each other. The box and its attached parts are preferably made of metal.

The advantages of the construction are numerous. In the first place, the box is made fire and water proof. Again, it will be observed that whatever the position assumed by the tray it will be absolutely impossible to insert anything in the box by which to extract the contents of the box, for as soon as



the lid is partially opened, and before the curved flange *j* is drawn out its full width, the inner edge of the tray has passed up by the lower edge of the curved plate *k'*, so that the very moment the lid is open wide enough to receive anything, however thin, the bottom of the tray, together with the plate *k'*, forms a partition which prevents anything from passing beneath as long as the lid is open. In other words, anything placed in the opening must first stop in the tray, and here it remains until the lid is closed, which it automatically does the minute it is released, when the article drops off into the receptacle below.

There yet remains another important feature of my invention, and that consists in the indicator-dial *m* and the connected parts. This dial is supported on a central pivot in one end of the box, so that it projects a little over the lower opening of the box, where it may be turned by the mail-collector while the lower door is open. This dial is provided with numerals and characters to indicate different hours of the day, and these characters are all arranged on the dial at the same distance from its center in order to be seen from the outside through the small opening *n*. This opening or window *n* is preferably covered with glass, and above it may be found the expression "Next Collection," or words of similar import, to indicate the time of next collection, which of course may vary at different seasons; hence, rather than having a regular bulletin, it has been found more practical for the collector to indicate this according to orders. For example, supposing he is removing the contents of the box at twelve o'clock and the next collection is to take place at two p. m., he simply turns the dial to indicate that time, so that any one depositing articles may always know accurately when the next collection is to take place by looking through the opening or window *n*. The lower door *o* is of the usual construction—*i. e.*, it is hinged at its lower edge to the box and provided with the wings *p*, which serve to prevent the letters from dropping out when the door is opened, and also to prevent the door from being opened too far. When this door is closed, it may be held by a hasp and padlock, and to provide against any one forcing a knife or other instrument in over the door to turn the dial a flange *q* is secured inside the box between the dial and the box to cover the crack formed between the meeting edges of the box and door. Importance is attached to the fact that this dial is wholly within the box, where it is protected and entirely covered, except the portion opposite the opening, and even this is protected by the glass; so not only is the dial kept entirely from exposure to the weather, but also it is proof against being interfered with by any one except proper authorities. A strip *r* over the door *o* prevents rain from running down into the latter.

In conclusion, I may say that not only does my invention possess all the advantages and superiorities mentioned, but many others, also, are apparent to one skilled in testing letter-boxes, and while the description has been confined to the device shown it is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the particular construction herein set forth; but,

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

1. In a letter-box, the combination, with the body having an opening in one side thereof, of a plate pivoted to the body adjacent to one edge of the opening and adapted to close the same, said plate having a curved flange on one edge, and a curved guard-plate projecting into the body of the box diametrically opposite the curved flange on the pivoted plate, substantially as set forth.

2. In a letter-box, the combination, with the body and a restricted chamber on top of the latter, said chamber having an open side, of a plate pivoted in the body at the lower edge of the opening, a curved flange on one edge of the pivoted plate concentric with the axis of the latter, tapering segments at the end of the pivoted plate, and a curved plate projecting from the body diametrically opposite the curved plate on the pivoted plate, and concentric also with the axis of the latter, substantially as set forth.

3. In a letter-box, the combination, with the body having an opening in its side, of a lid pivoted in the body, said lid having flanges at its ends adapted to lap over the adjacent edges of the body, substantially as set forth.

4. In a letter-box, the combination, with the body of the box and a restricted chamber at the top having an opening in its side, of a lid having a counterpoise at one edge, flanges at the ends to lap over the edges of the body, and an angle-plate projecting laterally from the lid and adapted to act as a stop to abut against the body, and thereby prevent the lid from being opened too far, substantially as set forth.

5. In a letter-box, the combination, with the body of the box and a restricted chamber at the top having an opening in its side, of a lid pivoted in the body at the lower edge of the opening and provided at its upper end with an inwardly-projecting flange, an angle-plate projecting out at right angles from the outer face of said lid, and adapted to abut against the adjacent surface of the body of the box and serve as a stop to prevent the lid from being opened too far, substantially as set forth.

6. In a letter-box, the combination, with the body having an opening therein and the lower door, of a dial supported on a pivot within the body, with its edge projecting over the



lower opening, said dial having characters to  
be exhibited through the opening, and a flange  
located between the dial and the body and  
projecting over the crack formed between the  
5 meeting edges of the body and door, substan-  
tially as set forth.

In testimony whereof I have signed this

specification in the presence of two subscrib-  
ing witnesses.

WILLARD D. DOREMUS.

Witnesses:

GEO. F. DOWNING,  
CHAS. S. DRURY.