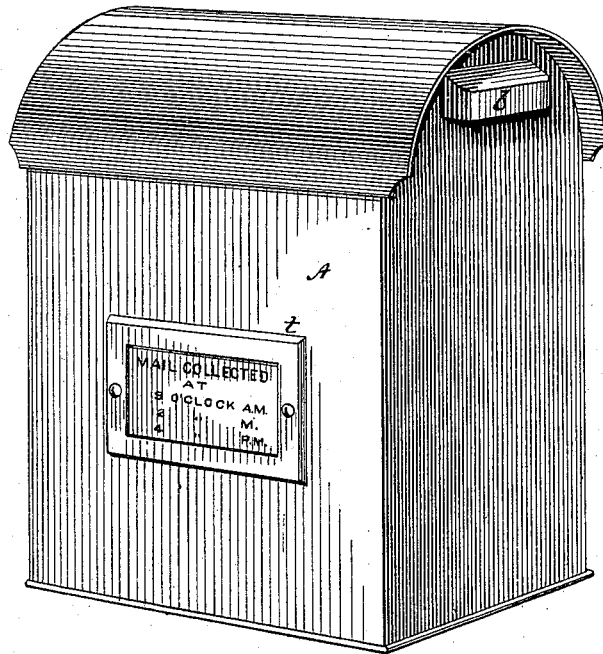


R. HALE.  
Letter-Box.

No. 197,849.

Patented Dec. 4, 1877.

*Fig. 1.*



WITNESSES:

*C. Clarence Poole*  
*Geo. W. Evans*

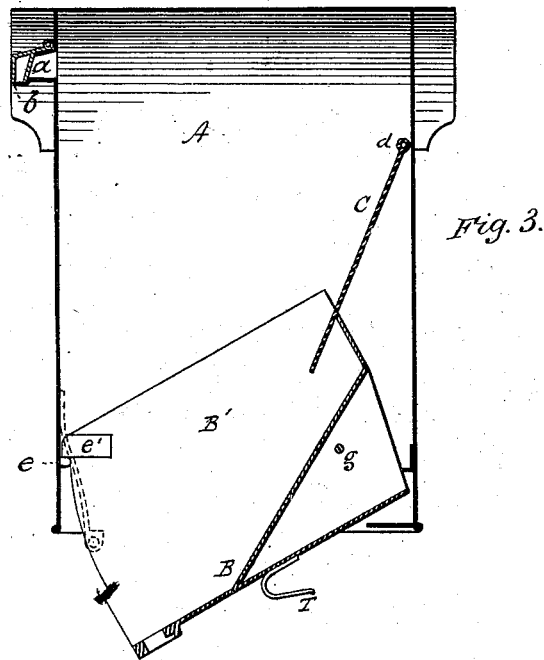
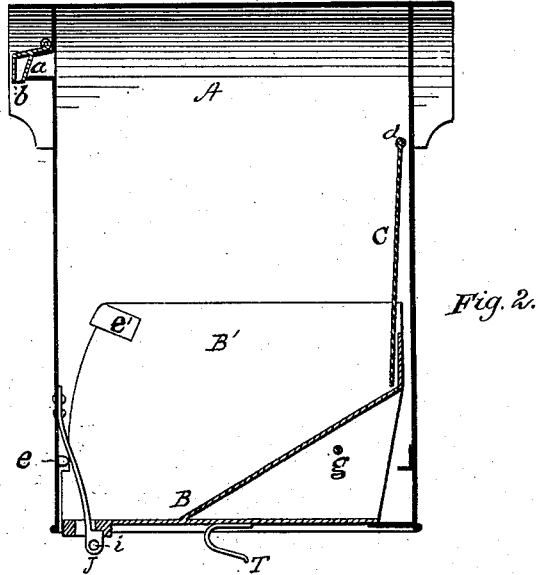
INVENTOR:

*Robert Hale*  
*per atty*  
*A. H. Evans & Co.*

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INVENTOR:  
Robert Hale  
per Atty.  
J. H. Evans & Co.

# UNITED STATES PATENT OFFICE.

ROBERT HALE, OF MINNEAPOLIS, MINNESOTA.

## IMPROVEMENT IN LETTER-BOXES.

Specification forming part of Letters Patent No. **197,849**, dated December 4, 1877; application filed October 26, 1877.

### *To all whom it may concern:*

Be it known that I, ROBERT HALE, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and useful Improvement in Letter-Boxes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a letter-box with my improvements attached. Fig. 2 is a longitudinal sectional view of the same with the bottom of the box closed. Fig. 3 is same view of the box with the bottom open.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to improve postal letter-boxes by providing them with movable bottoms so constructed that when depressed or opened for the purpose of removing the contents of the boxes these bottoms will form inclined chutes or guides, to which the carriers' bags can be conveniently applied for receiving the packages, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will explain its construction and operation.

In the accompanying drawings, A represents the body of a postal-box, which may be made of any suitable shape, and provided with any of the well-known contrivances for preventing the abstraction of packages from it through the receiving-hole. *a* is an oblong rectangular tube, surrounding the receiving-hole through the end of the box, and *b* is a box-cover, which is hinged in a suitable manner to the tube *a*, and intended for protecting the contents of the box from the entrance of water and snow.

Instead of having the receiving-hole through the end of the box, it may be made through the top, if desired.

The body of the box is constructed with a movable, but permanently-attached, bottom, for the purpose of allowing the removal of the contents of the box by simply depressing the front end of this bottom.

The bottom plate B is bent at an obtuse angle, as shown in Figs. 2 and 3, and secured between two side plates or guards, B' B', the

front edges of which are curved, as shown, so as to allow the said plate and its wings to vibrate freely about pivots *g*. The pivots *g* are rivets, which are applied at the back of the inclined bottom plate B through the rear extensions of the side plates B', so that when the front side of the bottom is released from a catch, J, this side will drop by its own gravity to the position indicated in Fig. 3.

It will be seen that the bottom plate B, with its side wings B', form an inclined chute or guide, which will, when in the position indicated in Fig. 3, direct the contents of the box downward and forward, and deliver them from the front of the box into a receptacle held there to receive them, and prevent any of the mail matter getting wet, as it does by any other box when collected in rainy weather.

It will be seen that the plate B moves bodily forward in the act of opening the bottom of the box, and consequently leaves a space between it and the back of the box when its front end is depressed, as shown in Fig. 3. To cover the space thus left, I employ a hinged curtain or auxiliary chute, C, the free end of which lies upon the surface of the bottom plate B, and forms in conjunction therewith an inclined plane extending from the hinged connection *d* to the discharge-opening. If desirable, the curtain C may be made somewhat longer than is shown in the drawings, so that in the act of depressing the bottom plate B the free end of this curtain will operate as a clearer upon the contents of the box should they become lodged therein.

In Figs. 2 and 3 I have represented a stop, *e*, applied to one side of the box A, near its bottom, and a lug, *e'*, formed on the wing B', at its front upper corner, so that when the bottom is released from the catch J, and its front part drops, the stop *e* will arrest this bottom, as shown in Fig. 3. As a substitute and equivalent for the stop-pin and lug, a shoulder may be formed across near the bottom of the rear plate of the box, against which the bottom plate of the drop-bottom, when depressed, will be brought squarely, and held firmly at the desired angle of inclination.

J is a finger-catch, which is formed on the lower end of a spring that is secured to the inner side of the front plate of the box. A

hole, *i*, through this spring will receive the shackle of a lock for locking the box.

To the bottom side of the bottom plate a hook, *T*, is applied, which is turned backward, and so arranged as to receive and hold one of the flaps or sides of a carrier's bag, and thus assist in holding such bag open beneath the discharge-opening of the box.

In practice I shall apply to the front of the box an ornamental frame, *t*, adapted for receiving a card having printed on it the hours for collecting the postal matter, and any other information which it may be desired to give. Such frames will be made so that the cards can be readily removed when desired to substitute others in their stead.

It will be seen from the above description that I have provided a postal-box with a swinging-chute bottom, which is so constructed that when released from its front catch *J* it will open and cause the discharge of the contents

of the box forward and downward; also, that I have provided such a bottom with a device which will positively hold one side of a carrier's bag in proper position for receiving the postal matter as it escapes from the box.

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

1. A bottom plate, *B*, arranged at an obtuse angle, and provided with side plates *B'*, having stop *E'*, in combination with a box having lug *E*, and adapted for receiving postal matter, substantially as described.

2. The combination of swinging curtain *C*, a hinged inclined bottom, and a postal-box, substantially as described.

ROBERT HALE.

Witnesses:

GEO. H. RUST,  
C. M. GARFIELD.