

(No Model.)

3 Sheets—Sheet 1.

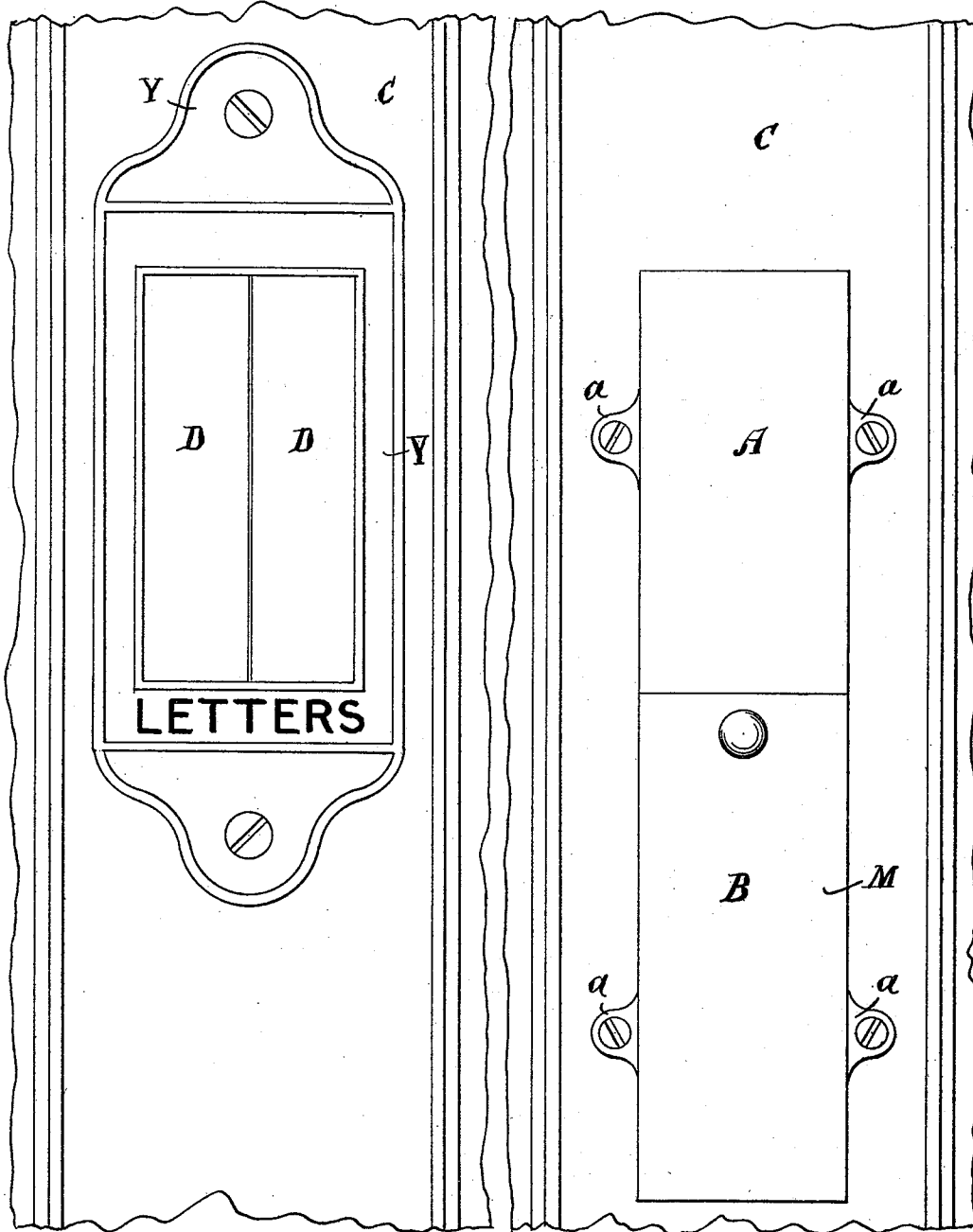
H. W. LIBBEY.
HOUSE DOOR LETTER BOX.

No. 459,386.

Patented Sept. 8, 1891.

Fig. 1.

Fig. 2.



Witnesses.

Winifred G. Herwin.
John J. Moore.

Inventor.

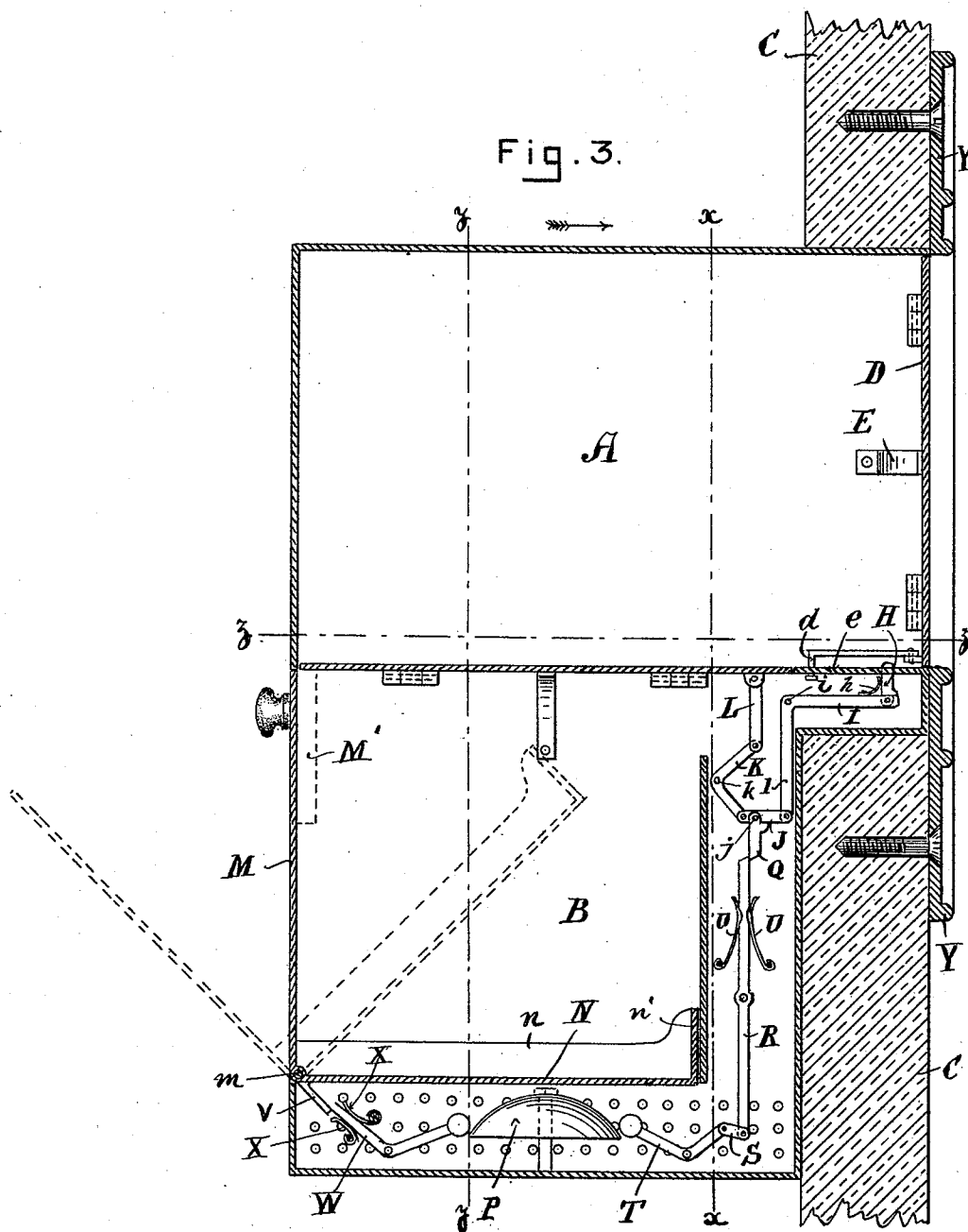
Hosea W. Libbey
by Edwin Blanka
attorney

H. W. LIBBEY.
HOUSE DOOR LETTER BOX.

No. 459,386.

Patented Sept. 8, 1891.

Fig. 3.



Witnesses.

Winifred G. Kewin.
John J. Moore.

Inventor.

Hosea W. Libbey.
by Edwin Blanka.
attorney.

H. W. LIBBEY.
HOUSE DOOR LETTER BOX.

No. 459,386.

Patented Sept. 8, 1891.

Fig. 4.

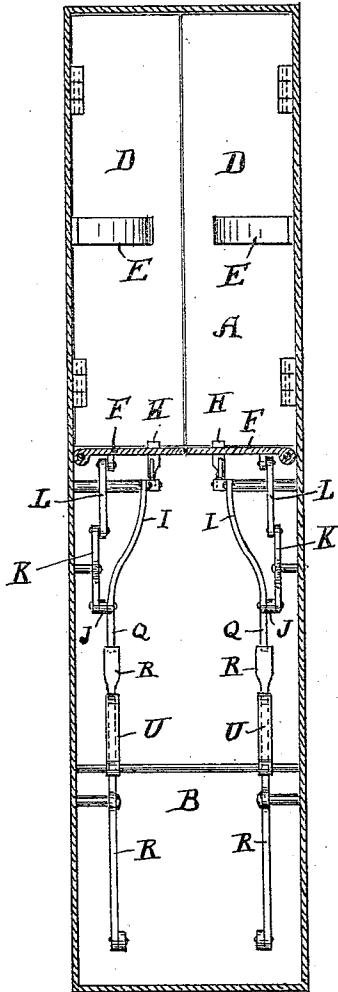


Fig. 5.

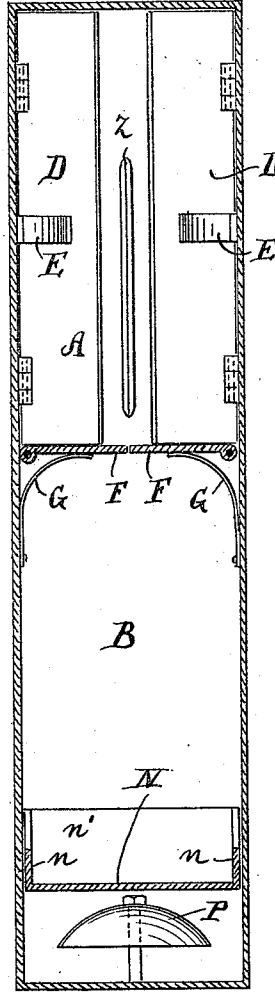


Fig. 6.

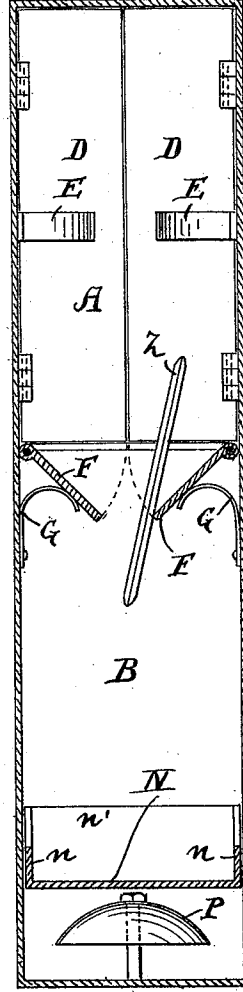


Fig. 7.

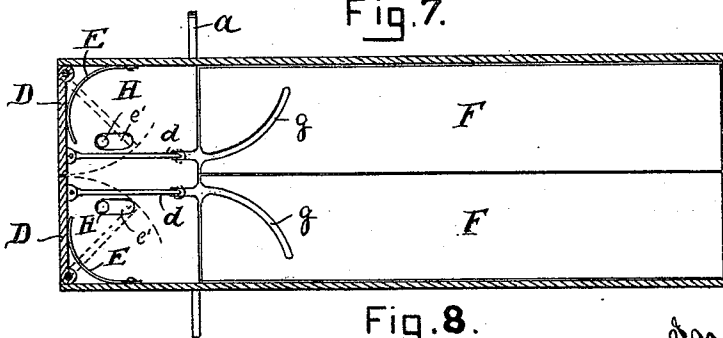
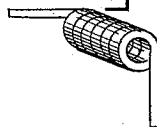


Fig. 8.



Witnesses.

Winifred G. Herwin.
John J. Moore.

Inventor.

Hosea W. Libbey
by Edwin Blanks
Attorney.

UNITED STATES PATENT OFFICE.

HOSEA W. LIBBEY, OF BOSTON, MASSACHUSETTS.

HOUSE-DOOR LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 459,386, dated September 8, 1891.

Application filed July 16, 1890. Serial No. 358,952. (No model.)

To all whom it may concern:

Be it known that I, HOSEA W. LIBBEY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Letter-Boxes, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to produce a letter-box particularly adapted for a private house, and which cannot be tampered with from the outside nor by any one in the house without giving an alarm.

The invention consists in forming the box in two compartments, an upper and a lower one, the upper one being provided with doors through which the postman deposits the mail upon flaps that cover the lower compartment, which flaps are caused to open and let the mail pass into the lower compartment, when the doors of the upper compartment close, as hereinafter fully described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a view of a letter-box embodying my invention as it appears on the outside of the door. Fig. 2 is a similar view of the rear of the box. Fig. 3 is a longitudinal section through the box. Fig. 4 is a vertical section taken on line *xx* of Fig. 3, looking in the direction of the arrow. Fig. 5 is a vertical section taken on line *yy* of Fig. 3, also looking in the direction of the arrow, showing the doors of the upper compartment open and receiving a letter. Fig. 6 is a similar section showing the letter passing from the upper to the lower compartment. Fig. 7 is a horizontal section taken on the line *zz* of Fig. 3. Fig. 8 is a detail view.

The box is of a rectangular form and consists of two compartments divided by flaps.

A represents the upper and B the lower compartment. The upper one projects forward of the lower one just the thickness of the door C, to which it is attached.

The front of the upper compartment is closed by two doors D, hinged to the sides and kept in the closed position by springs E. At the rear of these doors is a platform or shelf *e* just the width of the thickness of the street-door C, and at the rear of this plat-

form *e* are two flaps F, hinged to the sides of the box and each closed by a spring G. In the forward end of these flaps is cut a curved slot *g*, which is enlarged at the ends of the plates, as shown in Fig. 7, and to the rear of the doors D are pivoted short rods *d*, having at their outer ends studs that work in the slots *g*. The studs are provided with heads that work on the under side of the flaps to prevent the flaps from being pressed down, except when the doors D are closed, when the heads on the ends of the rods *d* will be drawn forward into slots in the platform *e* and clear of the flaps F, so that the latter are free. These flaps F are opened as the doors D are closed by the doors coming into contact with a press-bar H, that stands at a short distance above the platform *e*, the lower end of which is hinged to the outer end of a bell-crank lever I in such manner that they are free to move back, when the doors D, on being opened come into contact with them and they are raised to their normal position by small springs *h* as soon as the doors have passed over. Small slots *e'* are formed in the platform *e* to allow for the backward movement of said presser-bars fulcrumed at *i*, the other end of which is connected to a cross-bar J, fulcrumed at its center *j*, the other end of which is connected to another bell-crank lever K, fulcrumed at *k*. To the other end of this bell-crank lever is secured one end of a connecting-bar L, the other end of which is connected to a lug on the under side of the flap F, so that when the piece H is pressed down the bell-crank I raises the end of the cross-bar J, to which it is attached, the other end of which draws down the end of the bell-crank K, and with it the bar L and flap F, and allows the letter Z to fall from the upper compartment A into the compartment B.

The rear end of the lower compartment is closed by a door M, formed in one with the bottom N and hinged at *m*. The bottom is provided with sides *n* and end *n'*, and is of such a length that when the door M is fully opened the bottom N will stand perpendicular, throwing the letters upon the inner side of the door, from which they can be removed, and as soon as the door is released it is closed by a grasshopper-spring, such as shown in

Fig. 8, and similar springs may be employed instead of flat springs for closing the door D and flaps F.

When the doors D close, an alarm is sounded 5 by the gong P in the following manner: To the cross-bar J is hinged a short piece Q. This piece is free to swing in one direction only. The end of this piece Q comes in contact with the upper end of the lever R, when 10 the presser-bar H is forced down and causes the upper end of the lever R to be pushed over and the lower end thrown in the opposite direction. This lower end, is by a connecting-bar S, attached to a bell-crank T, the 15 outer end of which is provided with a hammer that strikes the gong P, thus giving an alarm that letters have been placed in the box. Springs U force the lever R to its normal position. An alarm is also sounded when 20 the door M is opened or closed by means of a tail-piece V, coming into contact with the bell-crank lever W, that carries a hammer which strikes the gong P. Springs $x x$ keep the lever W in its normal position. The box is 25 secured to the inside of the door by screws passing through lugs a .

Y is a face-plate secured to the front of the door by means of screws, as shown.

If desired, the door M might be provided 30 with a lock M', as shown in dotted lines in Fig. 3.

The operation is as follows: To insert a letter, the doors D are pressed back and the letter Z placed in the upper compartment A. It then 35 rests upon the flaps F. As soon as released the doors D are closed by the springs E, and in passing out the presser-bars H force them down, which lowers the flaps F, allowing the letter Z to fall into the lower compartment 40 B, at the same time causing the gong P to be sounded, as before described. To remove the letters from the compartment B, the door M is drawn down, and the bottom N, being in one therewith, rises and throws the letters onto 45 the door M, from which they are removed at the same time that the door M is operated. The tail-piece V operates the lever W and sounds an alarm upon the gong P. The por-

tion of the box below the false bottom N is perforated to allow the sound from the gong 50 to pass out. It will be seen that by this construction the letters are first placed in an upper compartment, the top of which is closed by flaps that open as the doors D close and which cannot be tampered with from the out- 55 side because they are supported from said doors, except when the doors are closed, and no person can open the box from the inside without giving an alarm, as before described. If desired, the levers might be attached to a 60 gong in any part of the house as well as or instead of the gong in the box.

What I claim as my invention is—

1. A letter-box consisting of two compartments A B, separated by spring-flaps F, spring- 65 doors D closing the entrance to the upper compartment, and a series of levers connected to a presser-bar H, whereby the flaps F are opened as the doors D close and at the same time sound an alarm upon the gong P, sub- 70 stantially as set forth.

2. In combination with a letter-box divided into two compartments separated by spring-flaps F, the upper compartment being closed by spring-doors D, the bars d , having buttons 75 or studs at their outer ends, and slots g , formed in the flaps F, in which slots the buttons slide, whereby the flaps can open only when the doors are nearly closed, substantially as shown and described. 80

3. In combination with a letter-box of the character described, a spring-door M and false bottom N, formed in one, whereby the letters deposited on the bottom N will be 85 thrown upon the door M when opened, and a tail-piece connected thereto for operating a hammer and sounding the gong P to give an alarm, substantially as shown and set forth.

In testimony whereof I have signed my name to this specification, in the presence of two 90 subscribing witnesses, on this 3d day of July, A. D. 1890.

HOSEA W. LIBBEY.

Witnesses:

CHAS. STEERE,
EDWIN PLANTA.