

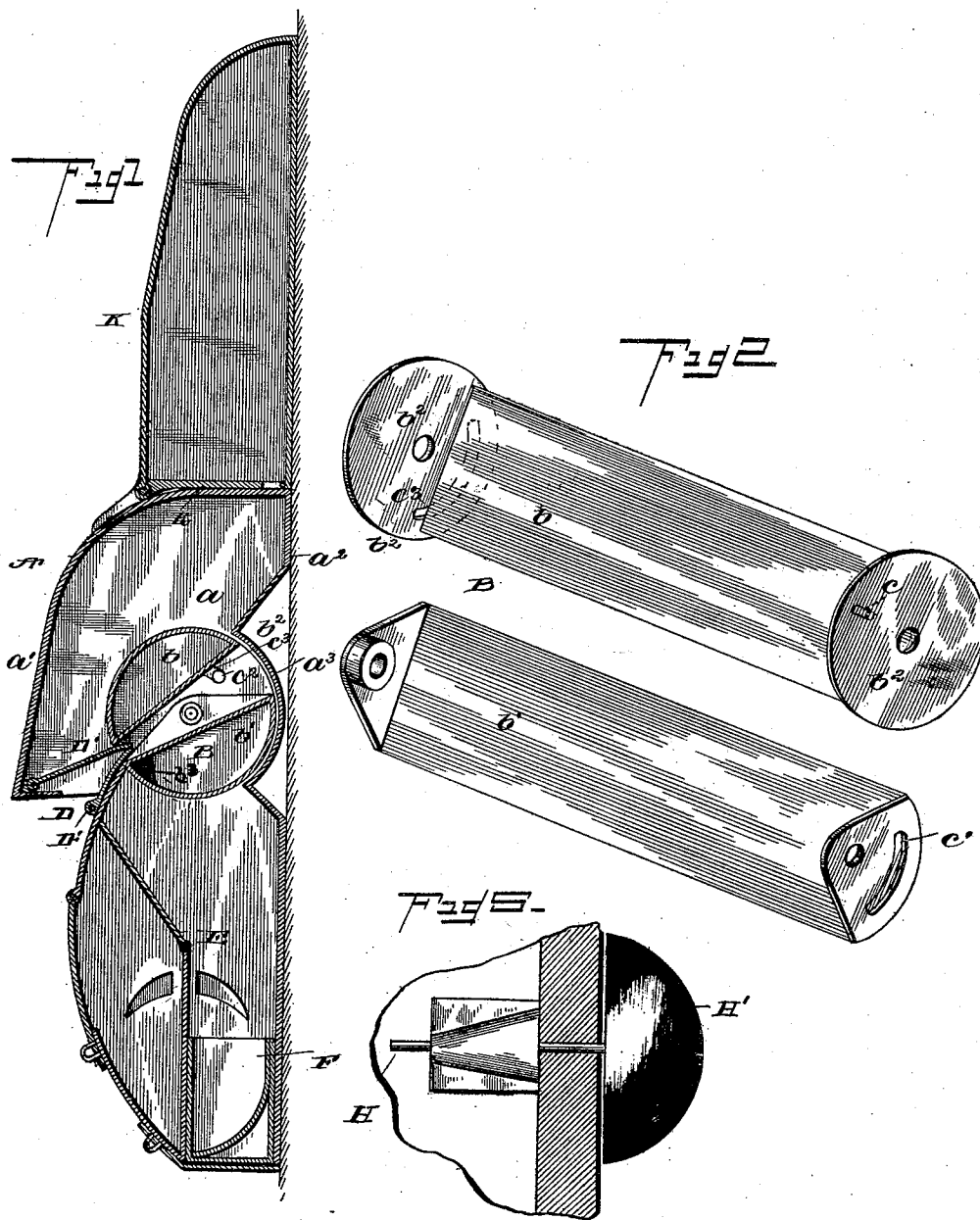
(No Model.)

2 Sheets—Sheet 1.

W. C. THORNTON.
HOUSE DOOR LETTER BOX.

No. 475,095.

Patented May 17, 1892.



Witnesses

John Donnie
John J. Lister

Inventor

William C. Thornton,
By his Attorney,

J. R. Littell

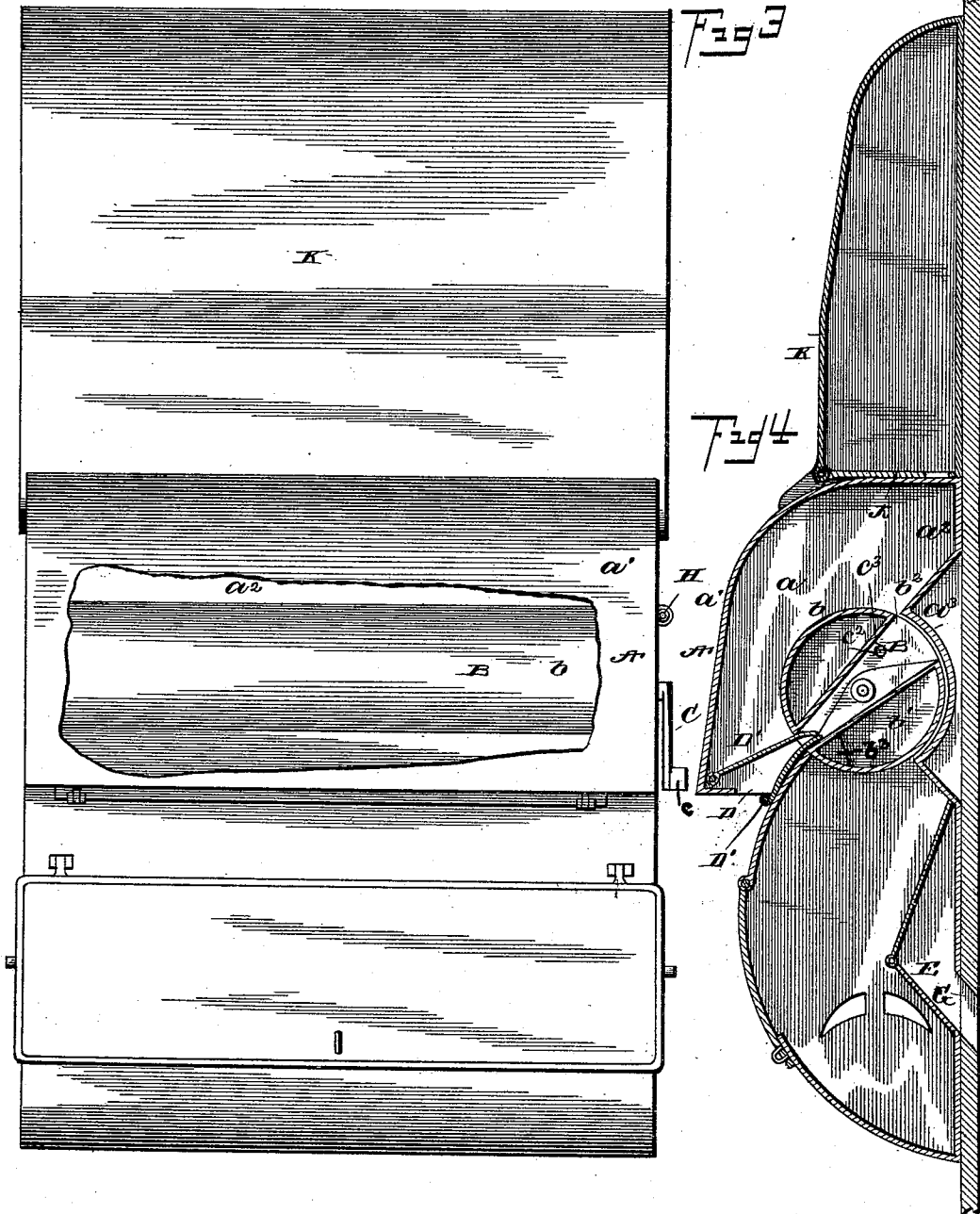
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John D. Murie
Wm. J. Lettice,

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J. R. Little,

UNITED STATES PATENT OFFICE.

WILLIAM CLARK THORNTON, OF JEFFERSON CITY, MISSOURI.

HOUSE-DOOR LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 475,095, dated May 17, 1892.

Application filed June 10, 1891. Serial No. 395,774. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CLARK THORNTON, residing at Jefferson City, in the county of Cole and State of Missouri, have invented certain new and useful Improvements in Letter-Boxes, of which the following is a specification.

This invention relates particularly to an improved delivery-box which is attached to the door or gate of a building and in which mail-matter is deposited by the carrier.

The object of my invention is to provide a device of this character that shall be thoroughly safe and reliable, weather-proof; one that is cheap and simple in construction and efficient and easy of operation.

A further object of my invention is to render the various parts as nearly automatic as possible and also to provide an alarm mechanism in connection with the box, whereby the inmates of the house may be notified of each delivery.

With these various objects in view my invention consists in the peculiar construction of the several elements and their novel arrangement or combination, all of which will be fully disclosed in this specification, and designated in the appended claims.

In the drawings forming a part of this specification, Figure 1 is a transverse vertical section. Fig. 2 is a detail view of the delivery device. Fig. 3 is a front view of the box, parts being broken away. Fig. 4 shows a somewhat different construction. Fig. 5 is a detail side elevation illustrating one form of alarm and its relation to the plunger.

My improved delivery-box A is formed of the end pieces *a*, the forward side *a'*, and the rear side *a''*, the rear side being connected with the door or gate of the residence, and the forward side also constitutes the top and bottom of the box. About midway the height of the rear side is produced a curved portion *a'''*, and between the end pieces of the box and opposite the said curved portion *a'''* is arranged the delivery device B, said device consisting of two semi-cylindrical sections *b* and *b'*, arranged with their flat faces adjacent to each other, the upper section *b* having head-pieces *b''*, between which the lower section *b'* is arranged, the said head-pieces

turning freely upon the journals of the lower section *b'*, and the sections are so arranged in relation to each other that the upper section has a limited amount of play upon the journals of the lower section, the purpose of which will appear farther on. The journal at one end of the lower section is provided with a crank C without the box, and as said journal is rigid with the lower section by turning the crank the said section will be moved according to the direction of the crank. An inwardly-projecting stop-pin *c* is arranged upon the head-piece *b''* adjacent to the crank C, and the end of the lower section is slotted, as at *c'*, to receive said pin, whereby the downward movement of the lower section is limited and the upper section allowed to have a limited play upon said lower section. A second stop-pin *c''* is passed through the end of the box adjacent to the opposite end of the delivery device, and the head-piece is slotted, as at *c'''*, to receive said stop-pin, said pin projecting through the head-piece, whereby the upward or rear movement of the upper section *b* is limited and also the downward movement of the lower section, the lower section being limited first, whereby the upper section has a limited play upon said lower section. The sections *b* and *b'*, it will be seen, are arranged a certain distance apart, so as to produce a slot or opening between them, into which the letters are forced, and by arranging the top section to have a definite amount of play upon the lower section this opening is alternately opened and closed at its opposite ends as the sections are revolved back and forth, whereby a letter is received by the delivering device and then deposited.

An opening D is produced in the forward side *a'* of the box and opposite the delivery device, whereby letters are inserted between the sections or in the slot or opening, and to guide the same safely into said slot or opening I employ two plates *D'* *D''*, pivoted upon opposite sides of the opening D and extending inwardly, as shown, the inner ends of said plates resting within the slot or opening between the sections when the said sections are at the forward or lowermost positions and rest against the lower sections when the said

sections are raised ready to enter the slot or opening the moment they are lowered. These plates therefore guide the letters that are pressed between them into the forward end of the slot or opening in the delivery device, and by turning the crank rearward the sections are moved upward and rearward, and when the upper section has reached its rear limit the lower section has yet a limited play, whereby the rear end of the slot or opening is opened and the letter deposited.

A rearwardly and downwardly inclined plate E guides the letters to the rear of the box, and a supplemental box or drawer F may be arranged within the box, as shown in Fig. 1, or a slot G may be produced in the rear side of the box, as shown in Fig. 4, which slot registers with a slot in the door or gate, whereby the letters will be deposited in a box or upon the floor, as the occupant may prefer.

Should a drawer be used, the rear side should be curved, as shown, whereby the letters deposited within the same will be arranged in regular order and will not clog and interfere with the delivery device. The box or drawer F may be secured and removed in any suitable manner. It will be understood, however, that the construction of the delivery and collection receptacle or box forms no part of the present invention, such subject-matter forming part of my application filed of even date herewith and serially numbered 395,775.

An electric push-button or mechanical bell-plunger H is arranged adjacent to the crank C and in the path of the same, said button or plunger extending through the door and connected with a gong H' or any other suitable alarm mechanism arranged either at the door or in any particular apartment. A letter is thus inserted in the opening in the box and pressed between the plates into the slot of the delivery device. The crank is then turned rearward, depositing the letter, and by coming in contact with the button or plunger in its backward turn the alarm is sounded and the occupant notified of a delivery.

If desired, a box K for newspapers may be hinged at the top of the box A, said box K having a lid k adjacent to the said box A, whereby papers may be inserted, and when it is so desired to insert papers the box K is turned down upon the forward side of the box A and the lid k, which then forms the top of the box, raised. The normal position of the box is against the door above the box A, the lid k then forming the bottom of the box. The lower section b' is weighted, as shown at b³, and the crank-arm, as at c, to aid the sections in their automatic movements. It is also obvious that the two semi-cylindrical sections constituting a cylindrical delivery de-

vice could be used upon the ordinary street letter-boxes.

Having thus described my invention, what I claim is—

1. The combination, with a letter-box, of the semi-cylindrical sections journaled therein, having a slot or opening between them to receive the letter and each having a limited movement upon the other, whereby the letters are deposited, substantially as shown and described.

2. The combination of the letter-box and the semi-cylindrical sections journaled therein, their flat faces adjacent and apart, said sections being arranged to move in unison with each other and also upon each other, substantially as and for the purpose described.

3. The combination, with the letter-box, of the lower sections journaled therein, the upper sections journaled upon the journals of lower section, the slotted head-pieces, and the stop-pins, all arranged and adapted to operate substantially as shown and described.

4. The combination, with the letter-box, of the semi-cylindrical sections journaled therein, the device for revolving the sections, and an alarm-plunger arranged in the path of said revolving device and communicating with an alarm, substantially as and for the purpose described.

5. The combination, with the letter-box, of the semi-cylindrical sections journaled therein, the revolving device, the slotted head-pieces and stop-pins, and the alarm-plunger communicating with an alarm, substantially as shown and described.

6. The combination, with a letter-box having an opening, of the semi-cylindrical sections journaled in the box opposite to said opening, and the guiding-plates arranged upon opposite sides of the opening to guide the letters between the sections, substantially as shown and described.

7. The combination, with a letter-box having an opening, of the semi-cylindrical sections journaled therein, the revolving device, guiding-plates, and an alarm-plunger communicating with an alarm, all arranged substantially as set forth.

8. The combination, with a letter-box, of a paper-box hinged to the top of the same, said paper-box being adapted to be turned down upon the letter-box to receive the papers, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM CLARK THORNTON.

Witnesses:

DANL. GUNDELFINGER,
B. S. MORROW.