

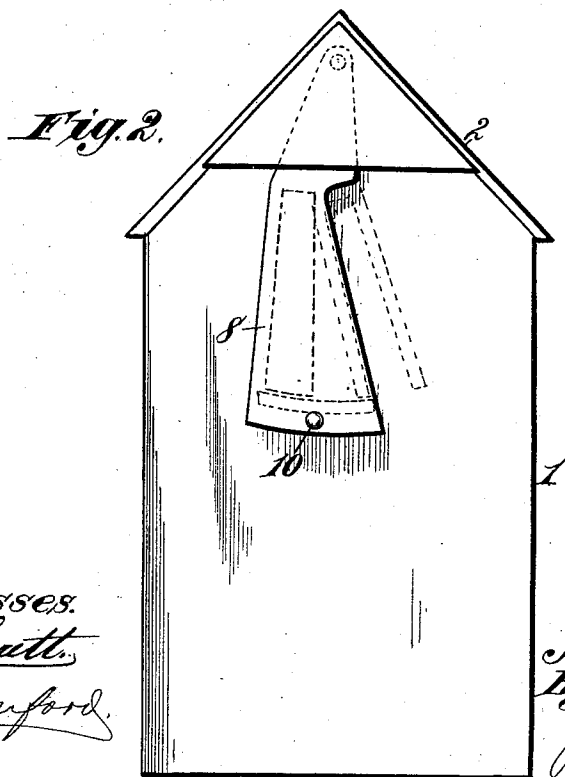
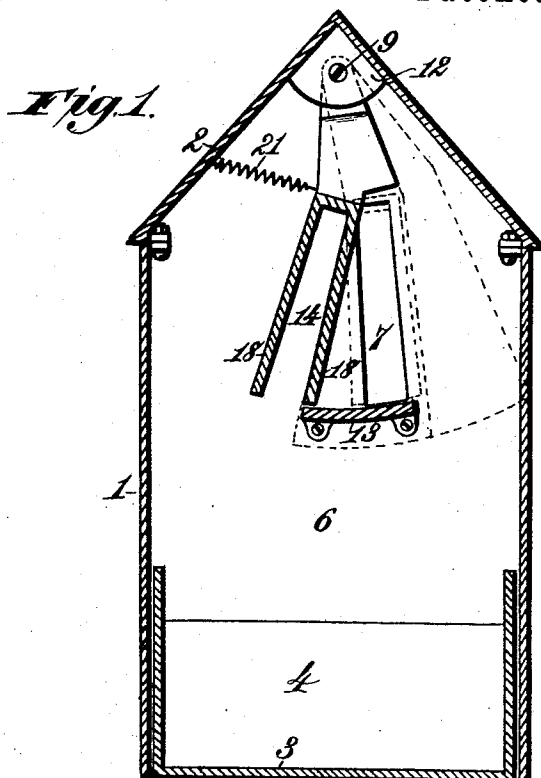
(No Model.)

3 Sheets—Sheet 1.

J. B. STONER.
LETTER BOX.

No. 472,560.

Patented Apr. 12, 1892.



Witnesses.
Robert Smith.
J. A. Rutherford.

Inventor.
John B. Stoner.
By *James L. Norris.*
Atty.

(No Model.)

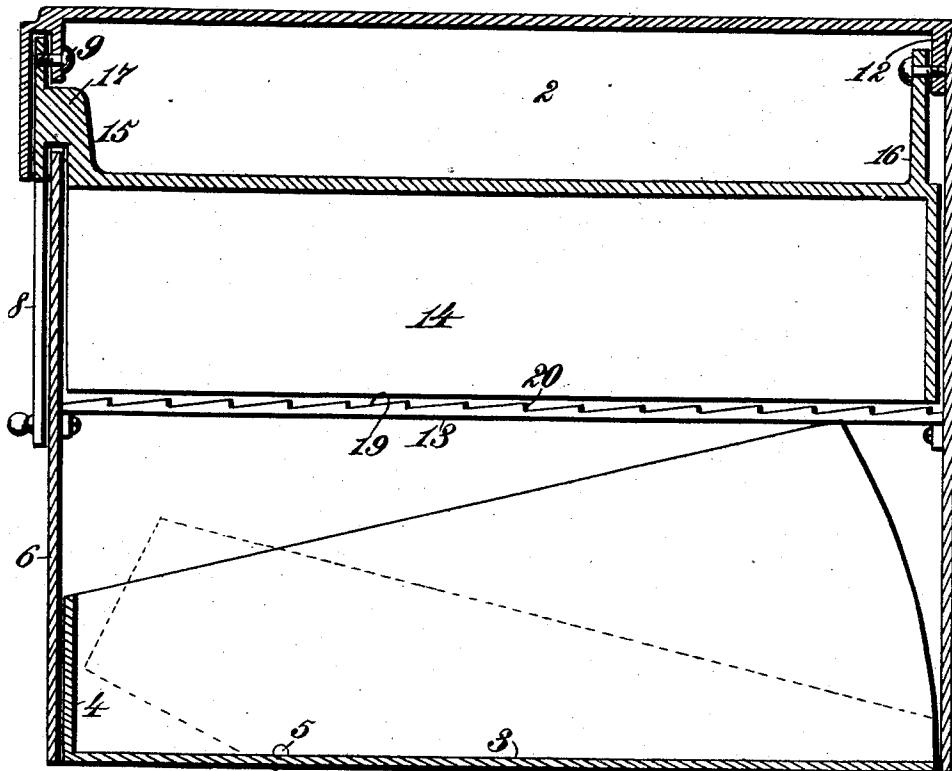
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Fig. 3.



Witnesses.
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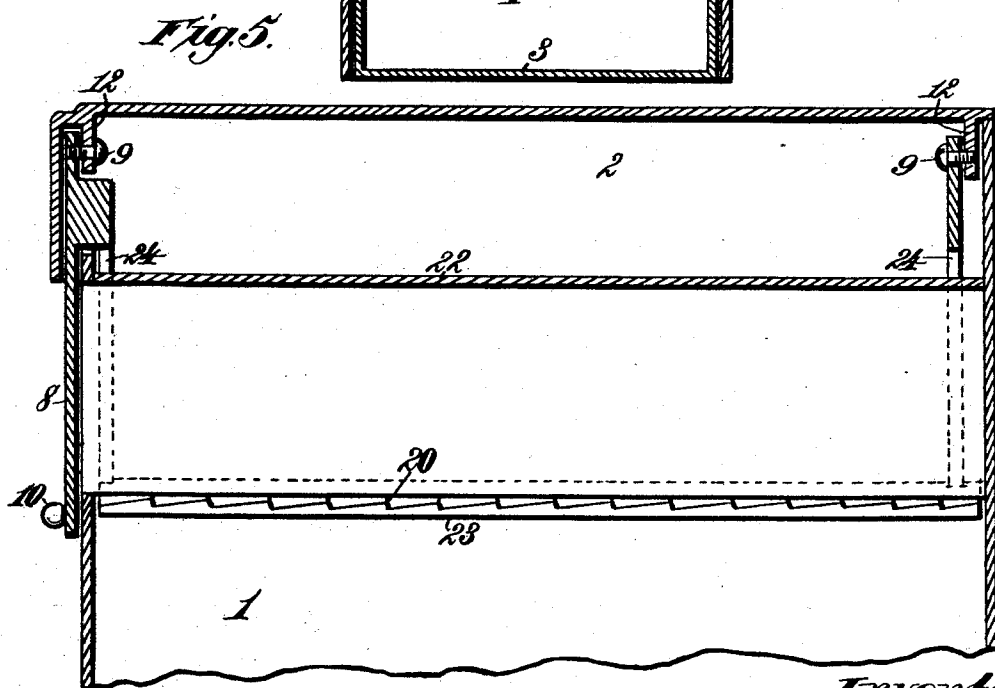
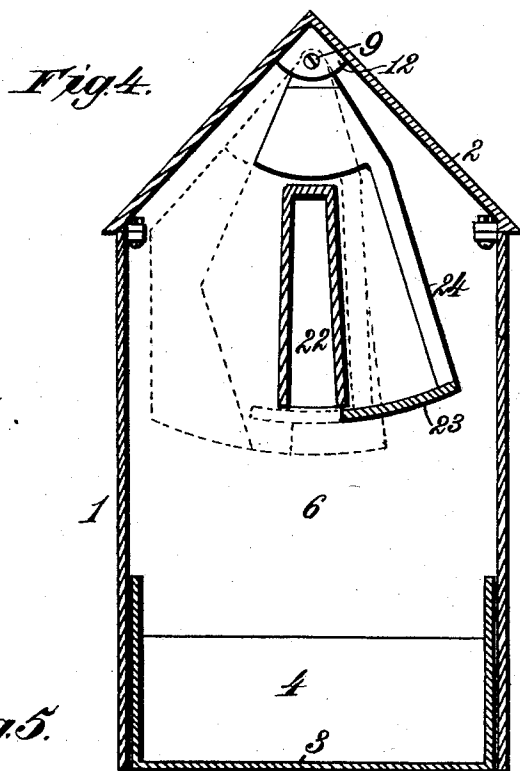
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UNITED STATES PATENT OFFICE.

JOHN B. STONER, OF NEW YORK, N. Y., ASSIGNOR TO CHARLES B. HILLHOUSE,
OF SAME PLACE.

LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 472,560, dated April 12, 1892.

Application filed June 25, 1891. Serial No. 397,450. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. STONER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Letter-Boxes, of which the following is a specification.

This invention has for its object to provide a new and improved letter-box which is practicably burglar-proof as regards abstracting letters or packages through the letter-receiving slot, and is so constructed and organized as to avoid the entrance of water, snow, dust, or dirt, whereby the mail-matter is protected from damage, while permitting the convenient deposit and collection of the mail.

To accomplish this object my invention involves the features of construction and the combination or arrangement of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a transverse sectional view of a letter-box embodying my invention. Fig. 2 is an end elevation of the same. Fig. 3 is a longitudinal sectional view of the same. Fig. 4 is a transverse sectional view showing a modified construction, and Fig. 5 is a longitudinal sectional view of the same.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein—

The numeral 1 indicates a letter-box having a roof portion 2 and a tilting bottom wall 3, having an end wall 4, and mounted on a pivot 5 in such a manner that the bottom can be tilted for the purpose of discharging the mail-matter.

In practice a spring-lock is employed in connection with the pivoted or tilting bottom 3, and the pivot-pin 5 of the latter is so arranged that when the bottom is released by unlocking the spring-lock the bottom wall automatically tilts to the position indicated by dotted lines for the purpose of enabling the collector to collect the deposited mail with great facility. I do not deem it essential to illustrate the spring-lock, because it constitutes no part of my present invention and may be of any well-known type.

The vertical end wall 6 of the letter-box is provided in juxtaposition to the top portion or roof with a vertically-arranged letter-receiving slot 7 of suitable height and width to receive the letters or packages usually deposited in a letter-box.

The letter-receiving slot is covered and uncovered by means of a cover-plate 8, pivoted at its upper extremity through the medium of a horizontal pivot-pin or pintle 9, which may or may not extend continuously along the inside of the box in juxtaposition to the roof. This cover-plate is provided at its lower extremity with a suitable knob, handle, or finger-piece 10 for the purpose of oscillating or swinging it in the arc of a circle in a plane parallel with the slotted vertical end wall of the box, so that by swinging the cover-plate in one direction the letter-receiving slot will be exposed or uncovered for the purpose of introducing the mail-matter which is to be deposited for collection. In the example here illustrated the pivot-pin or pintle 8 is supported at one end by an end wall of the box and at the opposite end by a lug 12, suspended from the roof 2 in proximity to the slotted end wall 6.

A letter-supporting shelf 13 extends from one end wall of the box to the other and is preferably arranged in an inclined plane, as represented in Fig. 1. This letter-supporting shelf is placed approximately flush with the lowermost edge of the letter-receiving slot 7 in such manner that a letter or package introduced through the slot will rest upon the shelf.

A letter-chute 14 is suspended from the horizontal pivot-pin or pintle 9 and is adapted to oscillate or swing in the arc of a circle, corresponding to the oscillating or swinging movements of the cover-plate 8. As shown in Fig. 3 of the drawings, the letter-chute 14 is suspended from the pivot-pin or pintle 9 through the medium of an arm 15 at one end of the chute and an arm 16 at the opposite end of the chute, which latter arm is preferably formed as a part of the crank-shaped arm 17, rigidly attached to or formed with the oscillating or swinging cover-plate 8, all in such manner that when the cover-plate is oscillated or swung by manipulating its finger-

piece or handle 10 the letter-chute is correspondingly oscillated or swung in the arc of a circle above the letter-supporting shelf 13. In practice I prefer to construct the letter-chute of a pair of plates 18, separated a distance from each other, coextensive with the width of the letter-receiving slot 7, so that when the chute is swung by operating the external cover-plate to place such chute in coincidence with the letter-receiving slot a letter or package can be inserted through the slot into the chute and be supported by the letter-supporting shelf 13. In practice I also prefer to cast the plates 18, the crank-arms 17, the arm 16, and the cover-plate 8 as a single casting; but I do not wish to be understood as confining myself to this particular method of constructing these parts. A single casting is, however, advisable, because it avoids the presence of rivets or similar devices, which could be easily removed by a burglar.

To deposit mail-matter, the finger-piece or handle 10 is manipulated for swinging the cover-plate 8 into a position which will expose the letter-receiving slot 7, and obviously this movement of the cover-plate will correspondingly move the letter-chute 14, whereby the latter is placed in coincidence with the letter-receiving slot. The letter or other mail-matter is then inserted through the letter-receiving slot into the chute, so that the letter rests upon the letter-supporting shelf 13. The cover-plate is now released and the letter-chute instantly gravitates to a perpendicular position, thereby swinging the cover-plate 8 to its normal position for covering or concealing the letter-receiving slot, and at the same time the letter-chute slides the letter or other mail-matter from the shelf and deposits it in the letter-box.

If the letter-supporting shelf were constructed with a plain or smooth surface throughout its extent, it would offer some resistance to the sliding movement of the mail-matter, and therefore to avoid this objection and reduce frictional contact between the mail-matter and the supporting-shelf I provide the latter with a ratchet-faced surface 19, so that the edge of a letter will rest upon the points 20 of the ratchet-like teeth, and thereby reduce the superficial contact between the letter and the shelf to a considerable extent. The ratchet-faced surface 20 of the shelf 13 is so arranged relatively to the letter-receiving slot that when a letter or package is inserted it will freely ride over the ratchet-like teeth, and consequently its insertion into the chute will not be in any way obstructed by the ratchet-like teeth.

The letter-supporting shelf and slot are so arranged relatively to the chute that the latter must be swung out of the center of gravity to place it in coincidence with the slot, and therefore the chute will gravitate to its normal position the instant the cover-plate is released; but to positively restore the chute

to its normal perpendicular position I may employ a retractile spring 21, as in Fig. 1. This spring, however, is not indispensable, for obviously the same result would be attained by properly weighting the chute.

In the modified construction exhibited by Figs. 4 and 5 the chute 22 is stationary and the letter-supporting shelf 23 is adapted to oscillate or swing in the arc of a circle to and from a position directly under the open lower end of the chute. The letter-supporting shelf 23 is provided with a ratchet-faced surface 20, the same as described with reference to the letter-supporting shelf 13, and such shelf 23 is suspended from the pivot-pin or pintle 9 through the medium of links or arms 24, to the lower extremities of which the shelf is rigidly attached. The link or arm 24 at one end of the letter-box is connected with the external cover-plate 8, so that by oscillating or swinging the cover-plate the letter-supporting shelf 23 will be correspondingly oscillated or swung in the arc of a circle. In the modified construction the cover-plate is preferably of such weight that when released it will instantly swing by gravity to its normal perpendicular position, and thereby automatically swing the letter-supporting shelf 23 away from the open lower end of the chute for the purpose of depositing the letter or other mail-matter into the letter-box.

In each of the constructions described and shown a letter-box is provided having a slotted end wall and a pendulous cover-plate pivoted at its upper end and swinging in the arc of a circle in a plane parallel with the slotted end of the box, combined with an interior letter-chute and a letter-supporting shelf, one of which is moved by the cover-plate for the purpose of preventing burglars abstracting mail-matter from the box through the letter-slot.

My improved construction provides a letter-box which is practicably burglar-proof as regards the abstraction of letters or packages through the letter-receiving slot, and the parts are so constructed and organized as to effectually exclude the entrance of water, snow, dust, or dirt, so that the mail-matter is protected from damage, while permitting its convenient deposit and collection.

Having thus described my invention, what I claim is—

1. A letter-box having a vertical end wall provided with a letter-receiving slot and a pendulous cover-plate pivoted at its upper extremity and swinging in the arc of a circle parallel with the slotted end of the box, in combination with an interior letter-chute and a letter-supporting shelf, one of which parts is moved by the cover-plate for depositing mail-matter, substantially as described.

2. A letter-box having one vertical wall provided with a letter-receiving slot and a pendulous cover-plate pivoted at its upper extremity and swinging in the arc of a circle parallel with the slotted end of the box, in combination with an interior letter-chute and

a letter-supporting shelf, one of which parts is oscillated in the arc of a circle by a connection with the cover-plate for depositing mail-matter, substantially as described.

5 3. A letter-box having one vertical end wall provided with a letter-receiving slot and a pendulous cover-plate pivoted at its upper extremity and swinging in the arc of a circle parallel with the slotted end of the box, in combination with an interior letter-chute and a supporting-shelf provided with a ratchet-faced surface for reducing the superficial contact with the deposited mail-matter, substantially as described.

15 4. The combination, with a letter-box having one of its walls provided with a letter-receiving slot, of an interior letter-supporting shelf, an oscillatory letter-chute suspended from its upper extremity within the box, and a cover-plate swinging in the arc of a circle parallel with the slotted wall of the box and connected with the chute, substantially as described.

5. The combination, with a letter-box having one of its end walls provided with a vertically-arranged letter-receiving slot, of an interior letter-supporting shelf, a letter-chute having at one end a crank-arm, and a cover-plate connected at its upper end with the crank-arm and swinging in the arc of a circle in unison with the swinging movements of the letter-chute, substantially as described.

6. The combination, with a letter-box having a letter-receiving slot, a cover-plate for the slot, and a letter-chute, of an interior letter-supporting shelf provided with a ratchet-faced surface, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

J. B. STONER. [L. S.]

Witnesses:

JAMES A. RUTHERFORD,
J. HARRY DALY.