

(No Model.)

P. B. DOWNING.  
STREET LETTER BOX.

No. 462,092.

Patented Oct. 27, 1891.

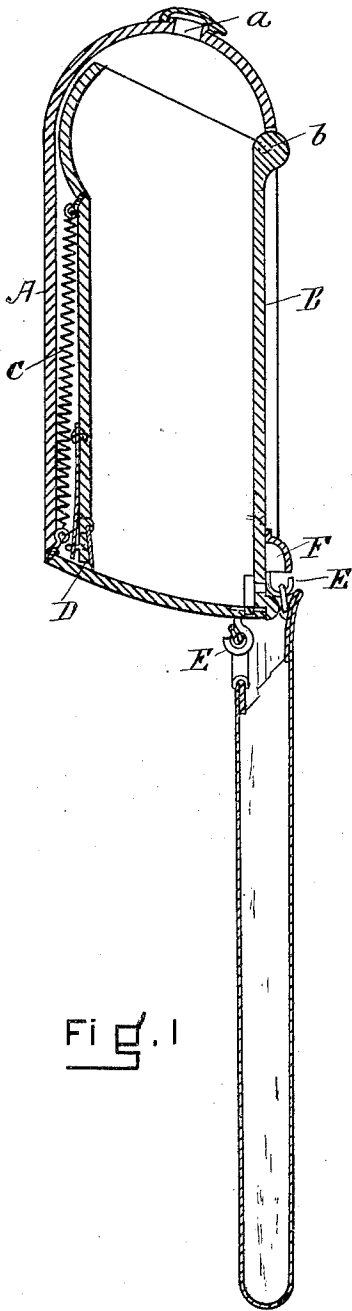


Fig. 1

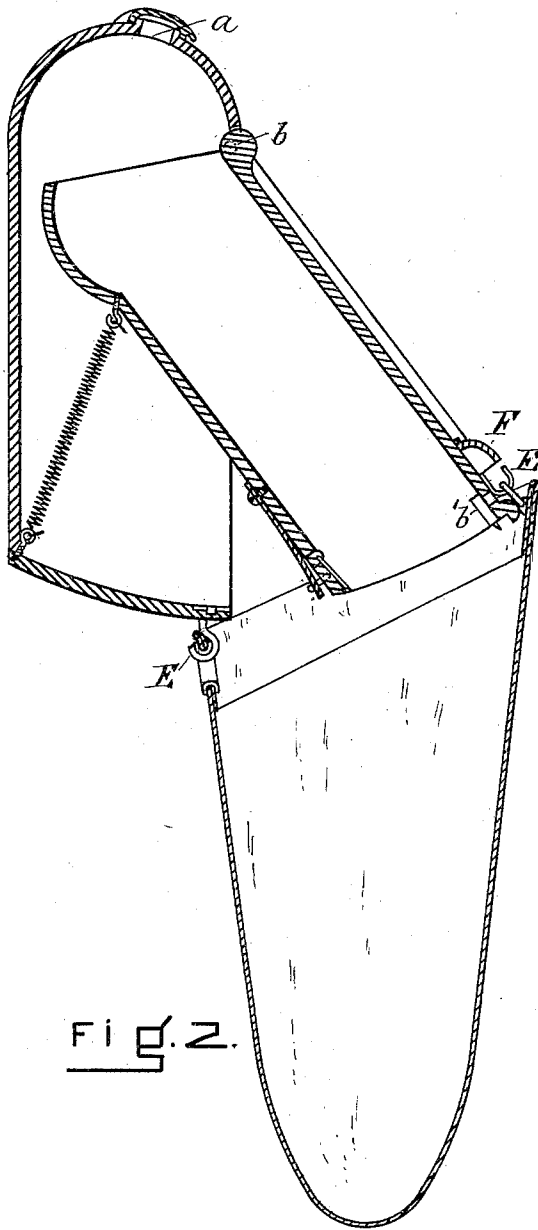


Fig. 2.

WITNESSES

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# UNITED STATES PATENT OFFICE.

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## STREET LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 462,092, dated October 27, 1891.

Application filed February 27, 1891. Serial No. 383,037. (No model.)

*To all whom it may concern:*

Be it known that I, PHILIP B. DOWNING, 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 is a specification.

My invention relates to letter-boxes such as are ordinarily used for the deposit of mail-matter by the public and the collection therefrom of the same matter by carriers.

The object of my invention is to improve the construction of these devices, so that the mail can be collected from them more rapidly, easily, and certainly than is possible with the devices now in use.

In the accompanying drawings I have shown a letter-box embodying my present improvement in the form now best known to me.

The apparatus is represented in two views in vertical section, Figure 1 showing the box closed or in the position to receive mail-matter, and Fig. 2 showing the box open or in the position after the mail-matter is discharged from the box in the act of collection.

The box consists of a two-part case made of iron or other suitable material.

A represents the standing part of the case, which in practice is rigidly secured to the wall, post, or other selected support. This standing part forms the top and bottom of the box and is provided at its upper part with a suitable mailing-slot *a* of any desired construction. The rest of the box is formed of a tube or chute B, open at top and bottom. It is of a size adapted to fold within the box A, and is pivoted thereto, as shown at *b*, so as to swing into and out of it. This tube or chute portion is so constructed and arranged relatively to the standing part A that when secured in place therein by means of a lock or other suitable fastening device *b'*, if the lock be unlocked, the box may be swung outwardly, as shown at Fig. 2, so as to discharge its contents. This swinging outwardly may be conveniently and automatically done by means of a spring C, interposed between the fixed portion and the swinging portion by the power of which the chute is thrown out when the detent mechanism is released.

To insure the complete delivery of all the mail and with a box constructed and pivoted

as shown in the drawings, it is preferable to slightly curve the bottom of the standing portion A of the letter-box to correspond with the arc traversed by the lower edge of the swinging portion while moving around its pivot *b*. Furthermore, to make sure that no letter fails to be carried out and delivered by the chute when the box is opened, I provide the chute at its lower back edge with a hinged transverse strip D, having a spring-backing, as shown, which will hug closely to the bottom of the box portion A when passing over the same.

To enable the tube portion B to be operated by hand when desired, a handle F may be placed thereon, as shown; but the key of the box when turned in the lock would also ordinarily answer for this purpose.

The operation of the box is as follows: When in the position shown at Fig. 1, it forms an ordinary receiving-box made in two portions, the top and bottom, as before stated, being formed by the box portion A and the four walls of the box, including the front wall, by the chute portion B. The lock or detent *b'* serves the ordinary function of keeping the box closed against unauthorized opening. When this lock or detent is released, the chute portion, by reason of its spring and pivot connection, is automatically thrown out, its back edge acting as a scoop to pass over the bottom of the box, and as it assumes the outward position it also acts as a chute, out of which the contents are discharged by gravity. It is assumed that in practice the letters will be collected or received from the box in a mail-bag of ordinary construction, and as a convenient means of attaching this to the box in readiness to receive its contents when discharged I provide suitable attaching devices—as, for example, hooks E—adapted to engage with suitable rings in the edge of the bag. In practice two of these hooks should be set at the two lower front corners of the standing portion A of the box and two at the same corners of the swinging portion. When so arranged, the same force which operates to work the chute and discharge the mail will also operate to distend the bag ready to receive it. Assuming the box to be fitted and the mail-bag attached, as described, the collector of the mail has only to unlock the box,

which thereupon immediately and certainly discharges all of its contents into the bag. He then immediately closes the box again, which, if provided with a spring-lock, such as is usual, locks itself automatically, and he has then merely to remove the bag from the hooks. In this way the collector is not obliged to handle the mail-matter at all in the act of collection and collection is made rapid, easy, and certain.

I claim—

1. A letter-box for the receipt and delivery of mail-matter, consisting of a fixed case A, forming its top and bottom portions, and a movable tube or chute B, open at both ends, pivoted to the case A and adapted to be swung into and out of the said case A, and means for locking the chute B within the case A, for the purpose set forth.
2. An automatic delivery letter-box having its top and bottom formed of a standing or non-movable case, as A, and its sides and front composed of a movable tube or chute pivoted thereto, means, substantially as described, for causing the pivoted chute to swing outwardly over and beyond the fixed bottom,

and detent mechanism, substantially as described, for holding the chute within the standing part of the box until it is desired to collect the contents, all substantially as set forth.

3. In a letter-box, the combination of the standing part A, forming the top and bottom thereof, mailing-slot *a* in the top thereof, the tube or chute B, pivoted to and adapted to be enclosed within the box A, a spring C, connecting the box A and chute B and under tension when the box is closed, and a lock *b'*, whereby the chute may be locked within the box against the tension of the spring.

4. In combination, the box A, pivoted chute B, provided at its lower and back portion with the transverse hinged strip D, spring C, lock *b'*, and hooks E E, arranged upon the front lower corners of the box and chute, as described.

In testimony whereof I have hereunto subscribed my name this 16th day of February, A. D. 1891.

PHILIP B. DOWNING.

Witnesses:

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