(No Model.)

2 Sheets—Sheet 1.

J. E. SMITH.

LETTER BOX.

No. 384,596. Patented June 12, 1888.

Fig. 1.

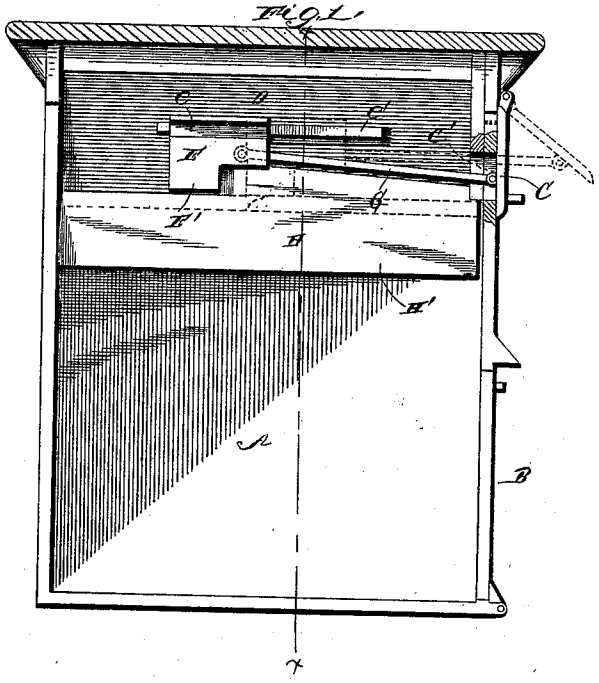


Fig. 2.

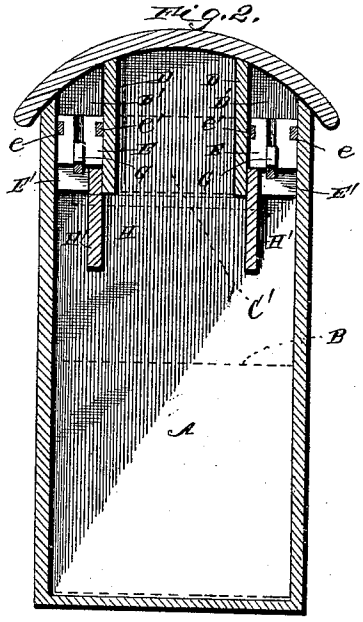


Fig. 3.

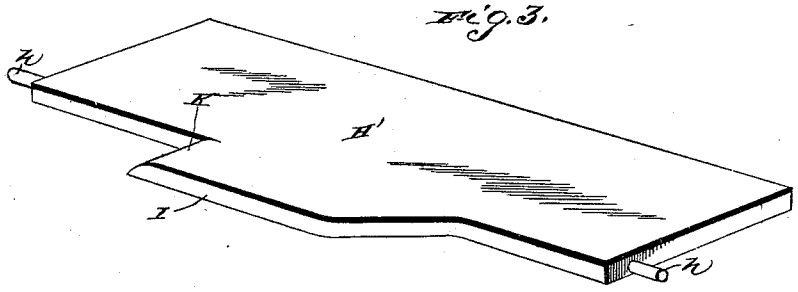
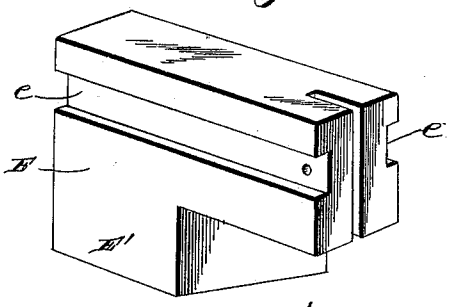


Fig. 4.



Witnesses

C. L. Taylor,

C. E. Doyle.

Inventor,

James E. Smith.

By his Attorneys

C. A. Snow & Co.

N. PETERS, Photo-Lithographer, Washington, D. C.

(No Model.)

2 Sheets—Sheet 2.

J. E. SMITH.

LETTER BOX.

No. 384,596. Patented June 12, 1888.

Fig. 5.

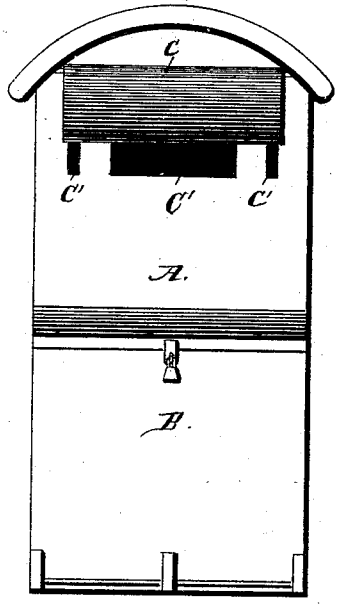


Fig. 6.

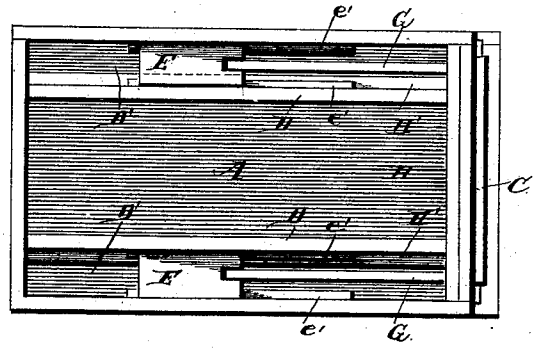
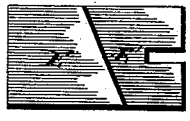


Fig. 7.



Witnesses.

Geo. Thorpe.

C. E. Doyle.

Inventor.

J. E. Smith.

by C. A. Snow & Co.

Attorneys.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JAMES E. SMITH, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO WALTER I. AVERILL, OF SAME PLACE.

LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 384,596, dated June 12, 1888.

Application filed June 8, 1887. Serial No. 240,641. (No model.)

To all whom it may concern:

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

My invention relates to improvements in letter-boxes; and it consists in a certain novel construction and arrangement of parts for service, fully set forth hereinafter, and specifically pointed out in the appended claims.

With the letter-boxes now in general use it is necessary, owing to the smallness of the opening for the reception of the mail, to either carry packages, newspapers, &c., to the post-office, or to leave them on the top of the letter-box. It is obvious that in this situation said parcels are exposed to the weather and also to thieves, thus rendering it very uncertain whether the same will reach their destination.

To enable parcels of any considerable size to be placed in the letter-box would necessitate such an enlargement of the receiving-opening as to allow thieves to insert the hand or a pair of pinchers or a wire to abstract the mail. It is to provide means to obviate the above difficulties that I have invented the herein-described letter-box, which is so constructed that, although the opening for the reception of mail matter is large enough to pass quite large packages, there is no possibility for a thief to insert either his hand, a wire, or any other instrument, to rob the box of letters. Further, I provide means whereby, when the box is full, there is no chance for a letter to be extracted, as is the case in the boxes now in general use, where the use of a wire will enable quite a number of letters to be drawn out.

In the accompanying drawings is illustrated a letter-box embodying my improvements, in which—

Figure 1 is a side view of the improved letter-box, with one of the sides thereof removed to show the operating mechanism for the leaves, and showing the said leaves raised in dotted lines. Fig. 2 is a transverse section on the line *x x* of Fig. 1. Fig. 3 is a detail view of the trap-door. Fig. 4 is a similar view of the sliding block. Fig. 5 is a front view of the box. Fig. 6 is a plan view with the top removed. Fig. 7 is a bottom plan view of the sliding block.

Referring by letter to the drawings, A designates the box, having the locked door B at the bottom on the front and the small flap or door C to cover the receiving-opening C′ near the top of the box.

D D are longitudinal partitions disposed near the sides of the box at the top to form the ways D′ D′, and in the said ways are arranged the sliding blocks E E, having the grooves *e e* in the sides thereof to receive the ribs *e′ e′* on the sides of the said ways D′ D′ and slide thereon. The said blocks are provided on the lower sides with the depending lugs E′, which are beveled on the front side, for a purpose hereinafter explained.

Slots are formed in the front of the box on each side of the opening C′ and in such a position that the door C, when closed, will cover the same, and G G designate rods pivoted to the rear side of the door at one end and to the blocks E E at the other end, and operating through the said slots in the face of the box, so that when the door is opened the blocks are drawn forward, for a purpose set forth hereinafter.

H is a trap, comprising the drop-doors or leaves H′ H′, provided with trunnions *h h* to operate in bearings in the front and rear sides of the box, and the outer edges of the said doors are provided with the tongues I, having the beveled shoulders K at one end to bear against the beveled front ends of the lugs E′.

It will be seen that when the blocks E are drawn forward by raising or opening the door C the beveled portions of the lug and shoulder will slide on each other, and as the tongue is beyond the trunnions of the drop-door the door will be raised at the inner edge. Thus the leaves will be caused to extend inwardly, and the inner edges thereof will meet and form a complete partition between the upper and lower portions of the box. The partitions D D entirely inclose the operating mechanism of the leaves, and as the said leaves are pivoted just below the lower edges of the said partitions and adapted to close up tightly against the same when raised, there is no chance for

the said operating mechanism to be tampered with. As the beveled end of the lug E′ rests against the beveled shoulder of the leaf, and as the said beveled portions are very abrupt, it will be seen that the moment the door C is moved the leaves will be raised, and they will entirely cut off the lower part of the box from the upper before the door C has been opened sufficiently to insert a finger or pass a wire down into the box. The under sides of the lugs E are flat, and after the beveled front ends thereof have raised the leaves by depressing the tongues I the said lugs will pass over the tongues and will hold the leaves firmly in place until the door C is again closed, when the inner edges of the said leaves will swing down into the vertical and normal positions.

The operation of the device is obvious from the above. When a letter or package is to be placed in the box, the door C is raised (thereby closing the trap, as described) and the said mail is placed in the upper part of the box on the doors or leaves H′. The door C is then closed, allowing the leaves to drop and deposit the mail in the lower part of the box.

It will be seen that each article of mail matter is laid in a horizontal position on the leaves and dropped thus into the box, thus arranging them therein horizontally and enabling the box to hold more than those in which the mail is thrown in endwise and allowed to assume an inclined position. In other words, by the means herein provided, the mail is arranged systematically or packed in the box, thus economizing the space. When the box becomes full, the last package which is placed therein will not drop below the leaves, but will remain between the lower edges thereof, and prevent the same from assuming the horizontal positions, and by this means the door C is held from being opened—that is, when the box becomes full, the entrance-door is locked to prevent the insertion of more mail. When the postman or collector opens the locked door and extracts the mail from the box, the article which is between the leaves will drop out, and the box will be in operative condition again.

Having thus described the construction, operation, and advantages of my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a letter-box, the combination of the trap H, arranged across the box, the sliding blocks E, and the door C, connected to the blocks, whereby when the door is opened the trap will be closed by the blocks, substantially as specified.

2. In a letter-box, the combination, with the door C, of the drop-doors H′, pivoted near the sides of the box and having tongues I on the outer edges, and the sliding blocks E, connected, substantially as described, to the door C, whereby when the said door is opened the blocks will slide and operate the said tongues to raise the doors H′, substantially as and for the purpose set forth.

3. In a letter-box, the combination of the door C, leaves or drop-doors H′, pivoted near the sides of the box, and having the tongues I, provided with beveled shoulders thereon, the sliding blocks having the depending lugs E′, provided with beveled front ends, to impinge against the said beveled shoulders when the blocks are moved forward, and the rods connected at opposite ends to the door C and the blocks E, substantially as and for the purpose set forth.

4. The herein-described letter-box, comprising the box A, door B at the lower end, opening C′, having the slots on each side thereof, door C, to cover the said opening and the slots, partitions D D, arranged along each side of the box at the upper end to form the ways D′ D′, ribs *e′ e′*, disposed in the said ways, leaves or drop-doors H′, pivoted at the outer edges under the said partitions D, tongues I, having beveled shoulders K on the outer edges of the said leaves, sliding blocks E, having grooves *e* in the sides to receive and slide on the ribs *e′*, depending beveled lugs E′ on the said blocks, and rods G G, pivoted at the outer ends to the door C and at the other ends to the said sliding blocks, and operating through the said slots on each side of the opening C′, all constructed, arranged, and operated substantially as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES E. SMITH.

Witnesses:

CHAS. M. HEYMANN,

WILLIAM F. BRADFORD.