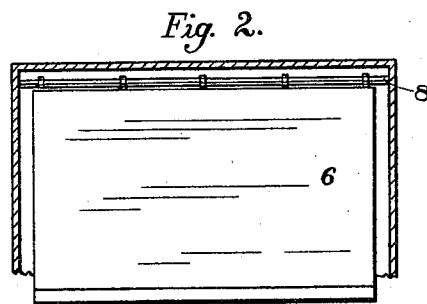
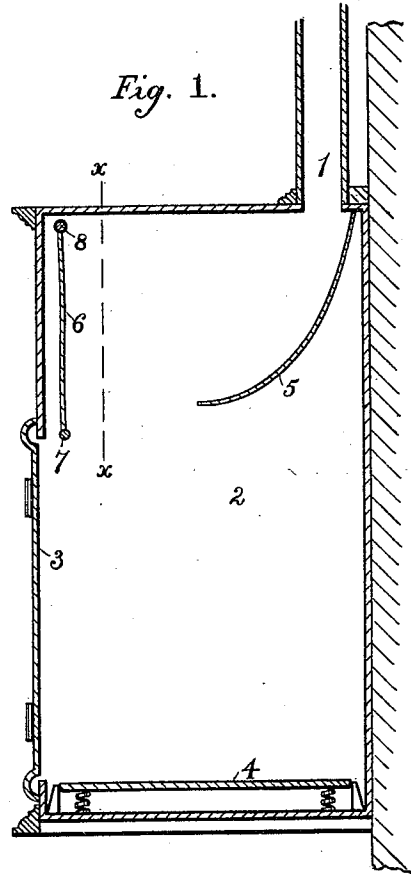


(No Model.)

J. W. CUTLER.
LETTER BOX.

No. 459,974.

Patented Sept. 22, 1891.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOSEPH WARREN CUTLER, OF ROCHESTER, NEW YORK.

LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 459,974, dated September 22, 1891.

Application filed May 1, 1891. Serial No. 391,195. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH WARREN CUTLER, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Mail-Chutes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures of reference marked thereon.

My present invention has for its objects to provide a buffer or arresting device adapted for application to mail-chutes, in which letters or other mail-matter placed in a chute some distance above falls into a box or receptacle below, whereby the mail-matter will not be damaged by being suddenly arrested by contact with a rigid substance or material, but the fall will be cushioned, and thus the envelopes of heavy letters will not be burst, nor will the previously-deposited matter be damaged. Heretofore devices adapted for this purpose have consisted of elastically-supported cushions arranged at the bottom of the retaining-receptacle, upon which the mail-matter falls directly; but the objection to this arrangement is that after the accumulation of a certain amount, which is piled upon the cushion, the latter will lose its efficiency and the falling mail-matter is apt to be damaged more or less by being suddenly arrested by the practically solid and rigid mass that has accumulated on the cushion, and also the mail-matter previously deposited is liable to be damaged more or less by this impact.

With the object in view, therefore, of overcoming these objections my invention consists in certain improvements in construction and combination of parts hereinafter described, and the novel features being pointed out in the claims.

In the drawings, Figure 1 is a vertical sectional view of a portion of a chute and a receiving-box, showing the application of my invention. Fig. 2 is a sectional view on the line $x x$.

Similar figures of reference in the several figures denote similar parts.

The chute proper 1, which may be of any desired length and dimensions, having any num-

ber of depositing-apertures, enters the receiving box or receptacle 2, with which it communicates at the top, the latter being provided with a door 3, as usual, for permitting access to the interior and the removal of the letters, when desired. At the bottom of this receptacle is arranged the usual cushion 4 on elastic supports, upon which the mail-matter is received; but instead of permitting said matter to fall from the chute directly upon this support, as heretofore, and thus destroying its efficacy as a buffer or arresting device for heavy letters after a very slight accumulation, I arrange beneath the chute-aperture a smooth curved plate 5, upon which the letters from the chute are received, said plate serving to deflect them, in the present instance toward the front of the box, though they could as well be directed toward the rear or to one side. In front of this deflecting-plate is arranged a buffer or cushion, shown in the preferred construction as consisting of a piece of canvas 6, having a weighted rod at its lower end, and freely suspended upon a rod 8 near the top of the receptacle. It will be seen that all the letters descending the chute will be directed against this buffer, which is more or less elastic, and will check their force without in any way damaging them, as would be the case if they were suddenly arrested by a rigid mass—as, for instance, the letters at the bottom. After striking the cushion and having their momentum checked the letters will of course drop to the bottom of the box, leaving the cushion free to check the fall of the next ones in the same manner.

Instead of employing the freely-suspended canvas or curtain, it is obvious that any other form of cushion could be employed that would be elastic and would not form the ultimate support for the mail-matter—for instance, an air-cushion or a spring-supported buffer arranged at the top of the box, against which the plate 5 would direct the mail-matter and permit it to fall to the bottom of the box.

I claim as my invention—

1. The combination, with the mail receptacle or box and a chute or conduit leading thereto, of an elastic cushioning or retarding device for receiving the impact of matter entering from the chute, removed from the bot-

tom or normal support of the contents, substantially as described.

2. The combination, with the mail receptacle or box and a chute or conduit leading
5 thereto, of a cushion or buffer for receiving the impact of matter entering from the chute at one side the chute-opening, and a guiding-plate arranged between the chute-opening
10 and the box-bottom for directing mail-matter against said cushion, substantially as described.

3. The combination, with the mail recepta-

cle or box and a chute or conduit leading thereto, of a cushion or buffer formed of a
suspended curtain or apron arranged at one 15 side said chute-opening, and a guiding-plate for directing matter entering the box from the chute against said curtain, substantially as described.

JOSEPH WARREN CUTLER.

Witnesses:

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I. A. RODA.