LETTER BOX CONNECTION.

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No. 284,951.
Patented Sept. 11, 1883.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Attest.

J. G. Cutler

By his attorney.

Harry Shipley

Philip T. Dodge.
To all whom it may concern:

Be it known that I, JAMES G. CUTLER, of Rochester, in the county of Monroe and State of New York, have invented certain Improvements in Letter-Box Connections, of which the following is a specification.

The purpose of this invention is to enable person on the different floors of a building to deliver letters and other matter to be mailed into a letter-box or other receptacle on the lower floor without the necessity of descending thereto; and to this end it consists, essentially, in the combination, with the receptacle, of one or more tubes or conductors extending upward past the various floors, and provided with openings to permit the introduction of the letters, which descend by gravity to the receptacle. This arrangement enables the numerous occupants of office-buildings, hotels, tenement-houses, and other places where large numbers are congregated to secure the prompt delivery of their mail-matter within reach of the carrier or collector without the labor and annoyance of visiting the receptacle. Another and great advantage is that it enables the sender to deliver letters of value directly into the official sealed letter-box without the interposition of servants, messengers, or others of doubtful reliability. The conductor may consist of a tubing of suitable material, either within or without the building, or of a flue built in the wall, and it may be made, if desired, with latticings or branches leading at a suitable inclination to different points on the same floor. The inlet-openings may be made in any suitable form and provided with hinged inwardly-opening doors or equivalent coverings, and also with suitable guards to prevent the improper extraction of the letters and to prevent a person on one floor from arresting a letter in its course of descent from a higher floor. The conductor may also be provided with glazed openings, and with openings to permit the movement of the air therein, that the letters may not be impeded thereby.

Referring to the accompanying drawings, Figure 1 represents a vertical section of a building containing my improvement. Fig. 2 is a diagram illustrating the arrangement of the conductor with branches. Figs. 3 to 6 are views of details.

A represents a building, of any ordinary construction, having two or more stories. It represents the letter box or receptacle, located in the lower story in any suitable position, but ordinarily applied to the surface of a wall, as indicated. This box or receptacle may be made of metal or other suitable material, in any approved or desirable form, the ordinary forms of street letter-boxes now in general use by the United States Government answering a good purpose. When it is desirable to have the letters accessible only to the official collectors or other special persons, the box is to be provided, in the usual manner, with a hinged door, d, and with a lock for securing the same. It is also preferred to provide the box with a glazed opening, c, to admit of an inspection of its interior.

C represents my tube or conductor, opening through or into the top of the receptacle B, and extending thence upward through any desired number of stories in the building, and provided in said stories with openings D, to permit the introduction of the letters. The tube may be constructed of any suitable material and of a rectangular or other suitable form in cross-section. It may be extended either in a vertical position or with an inclination, as circumstances may render advisable, its position to be such, however, in all cases that letters introduced through the openings D will descend by gravity and with certainty into the receptacle below. The inlet-openings 2 are preferably provided, as shown in Fig. 2, with forwardly-swinging doors or covers E, hinged at their upper edges and closing by gravity; but these doors, which are not a necessary part of the apparatus, may be omitted or varied in form as required. The size of the inlet-openings relatively to the size of the conductor is to be such that articles which will pass through the opening will descend loosely and with freedom through the conductor. They are also to be of such 95 size with respect to the conductor that in the event of a letter or package in its descent from one floor encountering a package introduced from another floor there shall be no danger of the two lodging against each other and remaining fast within the conductor.

As a precautionary measure, to prevent per-
sons upon one floor from intercepting letters in the course of their descent from a floor above, I propose to arrange within the conductor a depending skirt or guard, G, extending downward opposite the inner side of each inlet. This guard will serve to protect the letters during their descent past the various inlets.

For the purpose of preventing the conductor from becoming damp or moist on its inner surfaces by condensation, as well as to prevent the letters from becoming obstructed in their descent, I propose to provide the conductor with small openings or perforations II at suitable points, these openings serving to permit the proper circulation of air through the conductor.

To facilitate the delivery of the mail from different points on the floor to a common receptacle, the latter may be provided with two or more of the conductors C, diverging from each other as they ascend; or the single conductor may be provided with lateral branches or extensions, care being taken in all cases to give the same sufficient inclination to insure the descent of the letter. These two modifications are indicated in Fig. 2.

In order that the sender of a letter may be certain that the letter introduced through the opening descends the conductor, the latter will be provided at suitable points below the inlet-openings with windows or glazed openings d.

As to all matters which may be described or shown herein, but which are not specifically claimed, the right is reserved to make the same the subject of a separate patent.

Having thus described my invention, what I claim is—

1. In combination with a building of two or more stories, a mail-receptacle consisting of a box or receptacle located in a lower story, and a conductor extending thence upward to a higher story, and there provided with an inlet-opening.

2. In combination with a building of two or more stories, a box or receptacle located in a lower story, and a tube or conductor extending thence upward to one or more upper stories, said conductor being provided on the respective floors with openings for the admission of letters.

3. In a building of two or more stories, an upright tube or letter-conductor connecting two or more of said stories, provided with inlet-openings of a size smaller than the sectional area of the tube, whereby the lodging of letters and their interference with each other are avoided.

4. In a building of two or more stories, a 60-sealed box or receptacle located upon a lower story, combined with a tube or conductor extending thence upward to the higher stories, and there provided with inlet-openings, whereby letters may be delivered from the different stories into the receptacle below, and there confined and protected.

5. In an upright mail-conducting tube arranged and provided with inlet-openings, as described, the ventilating-openings therein, as and for the purpose described.

6. In a building of two or more stories, a series of letter-conductors extending to the different stories and terminating at a common delivery-point in a lower story, said conductors being provided with inlet-openings in the respective stories, substantially as described.

7. In a mail-conducting tube, substantially as described and shown, the combination of an inlet-opening and a glazed opening thereunder, as and for the purpose described.

8. In combination with a mail-conducting tube or passage connecting two or more stories of a building, and provided with inlet-openings in the respective stories, an internal guard, G, substantially as described, located adjacent to the inlet-opening, whereby a person upon one floor is prevented from intercepting letters in their descent from a higher floor.

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Witnesses:
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