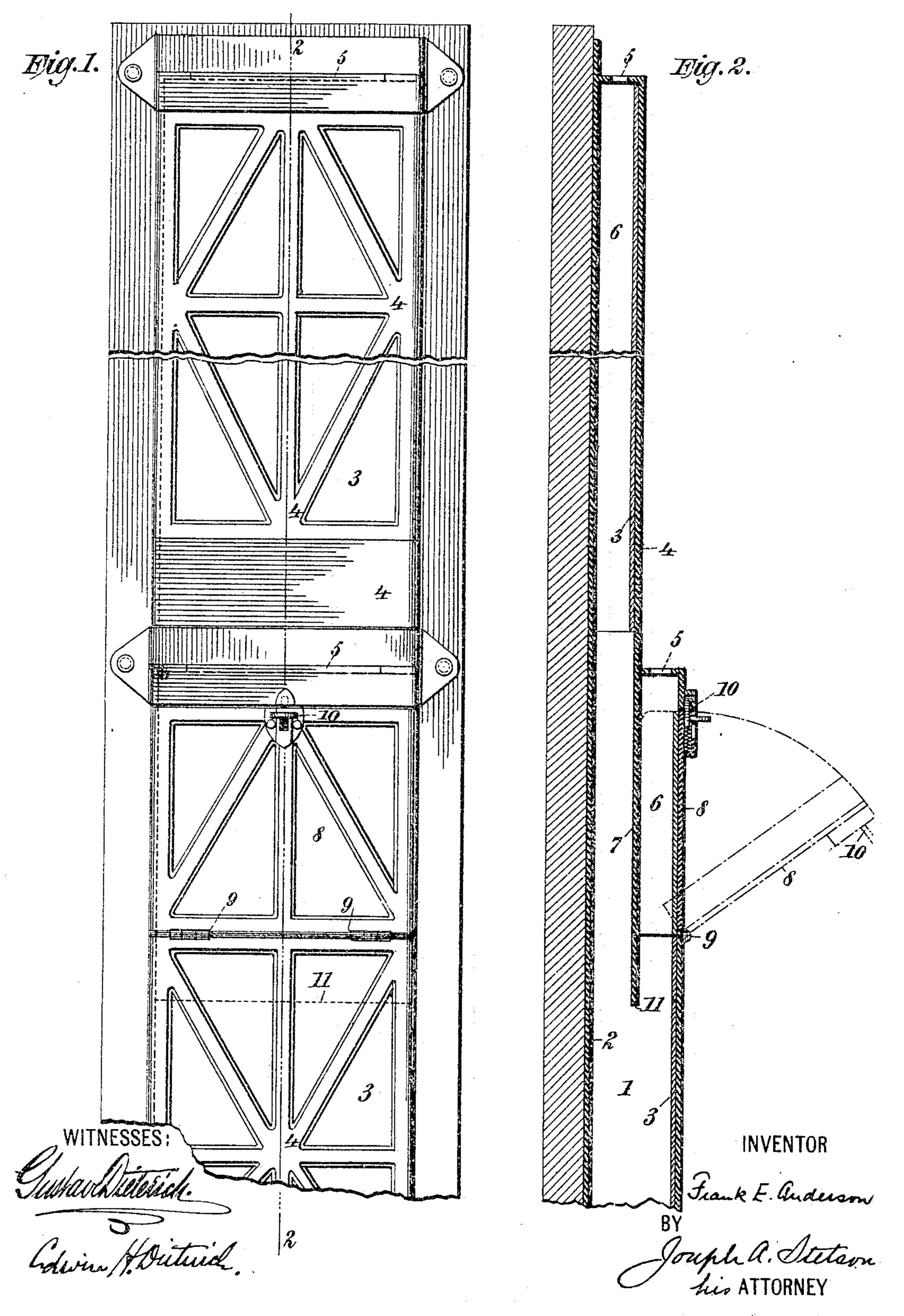
F. E. ANDERSON.
MAIL CHUTE.

APPLICATION FILED NOV. 29, 1904.



## UNITED STATES PATENT OFFICE.

FRANK E. ANDERSON, OF NEW YORK, N. Y.

## MAIL-CHUTE.

SPECIFICATION forming part of Letters Patent No. 788,084, dated April 25, 1905.

Application filed November 29, 1904. Serial No. 234,723.

To all whom it may concern:

Be it known that I, Frank E. Anderson, a citizen of the United States, and a resident of the borough of Manhattan, New York city, in 5 the county of New York and State of New York, have invented certain new and useful Improvements in Mail-Chutes, of which the following is a specification.

My invention relates to mail-chutes designed to receive mail-matter at the different floors of a building and transmit it under the influence of gravity to a receptacle on a lower floor, from which the collector removes the

mail at stated intervals.

The object of my invention is to secure greater certainty in the transmission of mail through the chute to the receptacle below, and especially to prevent the clogging of the chute.

This invention is an improvement upon the mail-chute described in Letters Patent No. 746,233, issued to me December 8, 1903. The present invention, however, is adapted for use in mail-chutes of any ordinary type not cov-

25 ered by said Letters Patent.

In the operation of mail-chutes a serious objection is the clogging of the chute by mailmatter too bulky for the chute or by mailmatter which expands after being pushed 30 through the mail-slot, so as to block the passage. To obviate this, I provide in the chute a door or opening immediately below the mailslot and opposite a point where mail-matter improperly inserted will lodge. The clog-35 ging then being observed and located may at once be remedied by the user of the chute and the impediment quickly and easily removed, so as to put the chute in operative condition.

Referring to the accompanying drawings, 4º Figure 1 is a front view of my improved mailchute. Fig. 2 is a sectional view on the line

2 2 of Fig. 1.

In the drawings, 1 is a mail-chute. 2 is the

rear side thereof.

3 is the front of the chute, preferably made of smooth transparent material—as, for instance, glass.

4 is the outer frame of the chute.

5 is the mailing-slot. Immediately below 5° the mailing-slot 5 is a passage 6, formed be-

tween the front of the chute and that part of the rear of the chute immediately below the mail-slot. On the top floor of a building installed with my improved mail-chute the rear wall of the passage 6 will be the rear side of 55 the chute; but for floors below the top a guard 7 is provided at each mail-slot to prevent interference with mail-matter dropping past from above. That guard 7 will form the rear wall of the passage 6, as indicated in Fig. 2. In 60 mail-chutes constructed in accordance with the specification and claims of my Letters Patent No. 746,233 the rear wall of the passage 6 will be an extension of the front of that section of the mail-chute immediately above, as 65 best shown in Fig. 2.

8 is a door in the front of the chute immediately below the mailing-slot 5. The door 8 is preferably provided with hinges 9 and a

catch 10.

The operation of my invention is as follows: In the ordinary use of the chute the door 8 remains closed, and mail-matter is inserted through the mail-slot for transmission to the lower floor in the usual manner. If, how-75 ever, a letter or other article forced through the mailing-slot is of such a character that it will expand, contact with the walls of the chute, and clog the passage, such clogging will take place immediately after the article is 80 free from the impetus imparted as it is thrust through the mailing-slot 5. By providing a comparatively narrow passage immediately below each mailing-slot between the front of the chute and rear thereof or between the 85 front of the chute and the guard opposite the retention of all matter improperly forced through the mailing-slot will be insured immediately below the mailing-slot and before such matter has passed beyond the door 8. 90 By providing the door 8 with apertures or a transparent front the user of the mail-chute will at once see that the chute is clogged and at a point opposite the door 8. By then opening the door 8 the user will be able to remove 95 the obstruction and rearrange it so that it may be properly inserted into the chute or else take it for mailing to a mailing-receptacle better adapted for its receipt. Where the door 8 is placed opposite a guard designed to protect 100

against tampering with mail-matter coming from above, such guard should be extended considerably below the bottom of the door, as indicated at 11 in the drawings, so that 5 such guard will protect against interference through the door 8 with mail passing by from above. I have shown the door 8 provided with an ordinary catch or latch, so that any one may remove mail which has clogged the 10 chute at that point. Instead of such an easilyobserved latch a secret latch might be provided or a lock for the door 8. It will be observed, however, that one who opens the door 8 to remove an obstruction does not have ac-15 cess to the main passage of the chute, but only to that part of the chute immediately below and leading from the mailing-slot just above, so that substantially the only reason for providing a secret latch or lock for the 20 door 8 would be to prevent the insertion of mail through that door rather than through the mailing-slot 5. Such an attempt to mail matter through the door 8 would of course be contrary to the purposes of my device, which 25 in substance is the provision of a narrow passage immediately below each mailing-slot, where improperly-mailed matter will be held, easily observed, and readily removed through a door to put the chute in operative condition 3° again.

In the drawings I have indicated the door 8 under only the lower of the two mailingslots shown. In a mail-chute such doors may be provided for all the mailing-slots or for

35 selected slots.

What I claim as new, and desire to secure

by Letters Patent, is—

1. In a mail-chute having a mailing-slot, a rear wall or guard immediately below said 40 mailing-slot adapted to form with the front wall of said chute a narrow passage adapted to trap and retain mail-matter which will not readily pass through the chute, and a door in said chute at said narrow passage through which the obstructing matter may be reached and removed.

2. In a mail-chute having a plurality of mail-receiving apertures and so constructed as to provide a path for the mail enlarged at each aperture below the top, guards placed at each aperture parallel with and flush with the face of the chute, and forming with the front

wall of the chute a narrow passage adapted to trap and retain mail-matter which will not readily pass through the chute, and a door in 55 the chute at said narrow passage through which obstructing matter may be reached and recovered.

3. In a mail-chute having a plurality of mail-receiving apertures in different horizon-60 tal planes and with a path for the mail enlarged at each aperture, guards fixed at each aperture below the top, but not projecting into the path of descending mail, and forming with the front of the chute a narrow passage 65 adapted to trap and retain mail-matter which will not readily pass through the chute, and a door in the chute at said narrow passage through which obstructing matter may be reached and recovered.

4. In a mail-chute, a plurality of mail-receiving apertures in different horizontal and vertical planes and so constructed that at each aperture an enlarged path is provided for mail-matter, guards at each aperture below 75 the top so placed as to form with the front of the chute narrow passages immediately below the mailing-slot, adapted to trap and retain mail - matter which will not readily pass through the chute, and a door in the chute at 80 each of said narrow passages through which obstructing matter may be reached and recovered.

5. In a mail-chute, a mailing-slot, a transparent door just below said mailing-slot adapt-85 ed to give access to a narrow passage beneath said mailing-slot in which mail-matter which will not readily pass through the chute will

be trapped and retained.

6. In a mail-chute having a plurality of 9° mail-receiving apertures, a corresponding number of doors, each immediately below its respective mail-receiving aperture, adapted to give access to a narrow passage leading from each aperture wherein too bulky mail-matter 95 will be trapped and retained.

Signed at New York city, in the county of New York and State of New York, this 28th

day of November, A. D. 1904.

FRANK E. ANDERSON.

Witnesses:

M. Kauffman, Joseph A. Stetson.