



(No Model.)

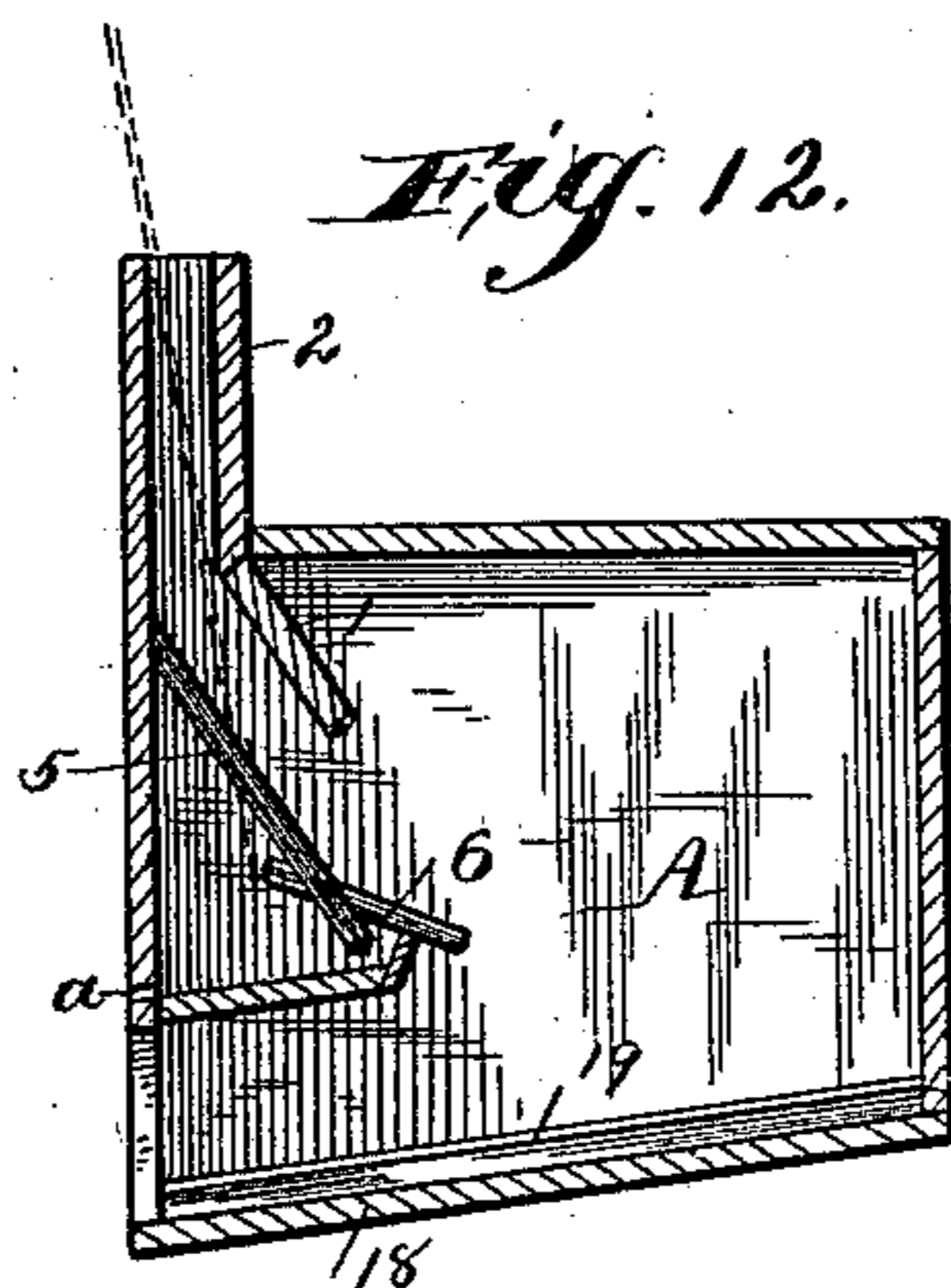
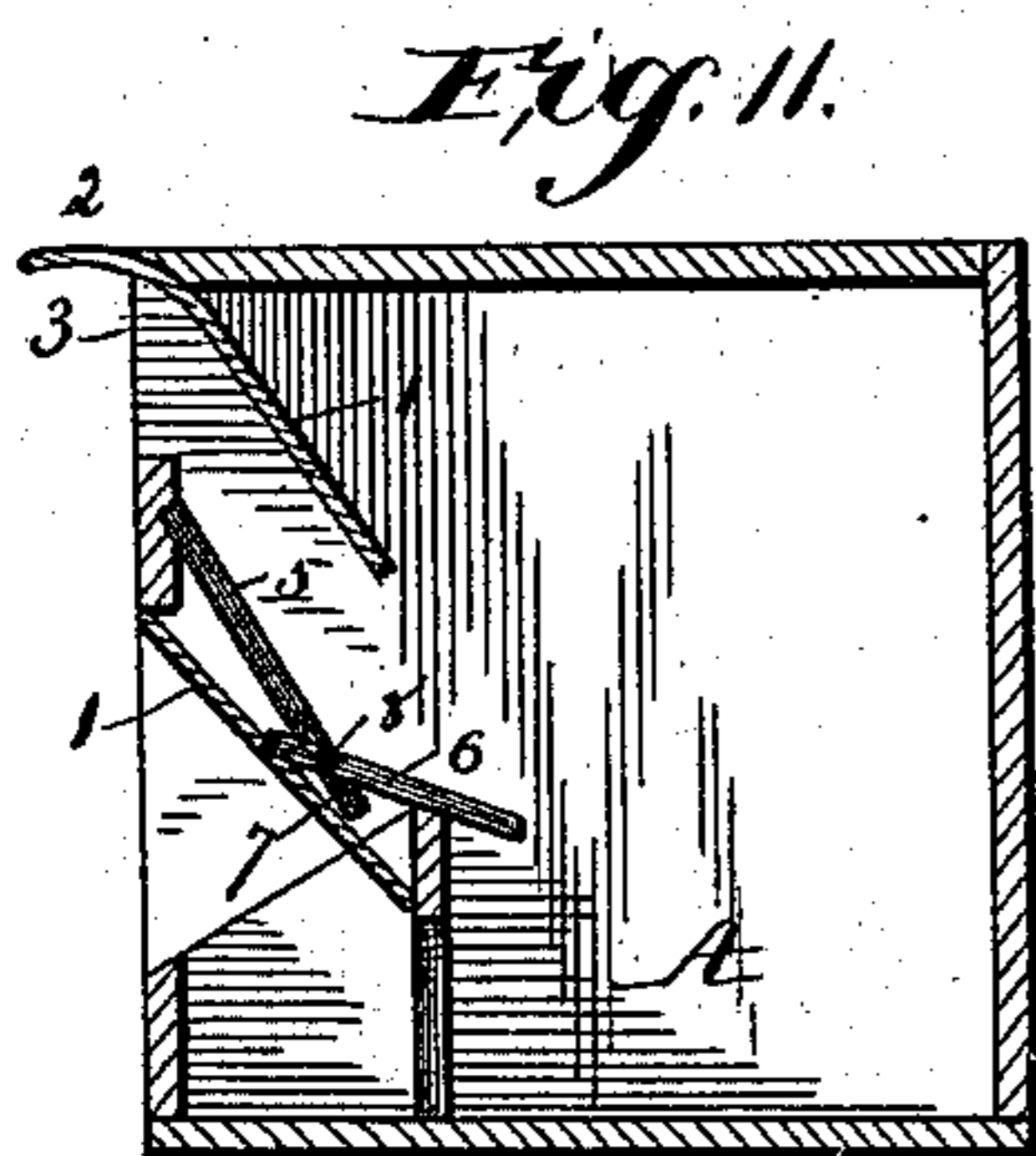
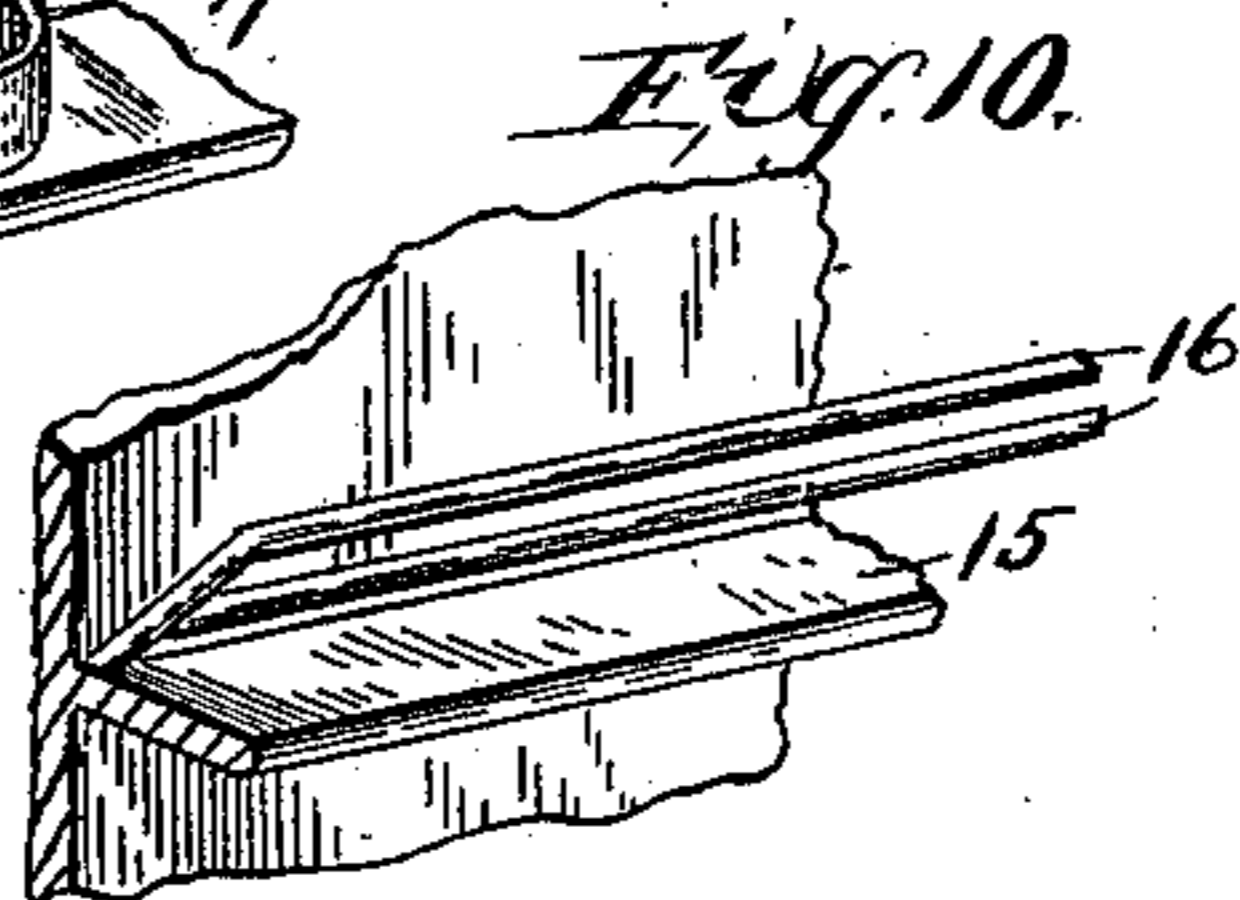
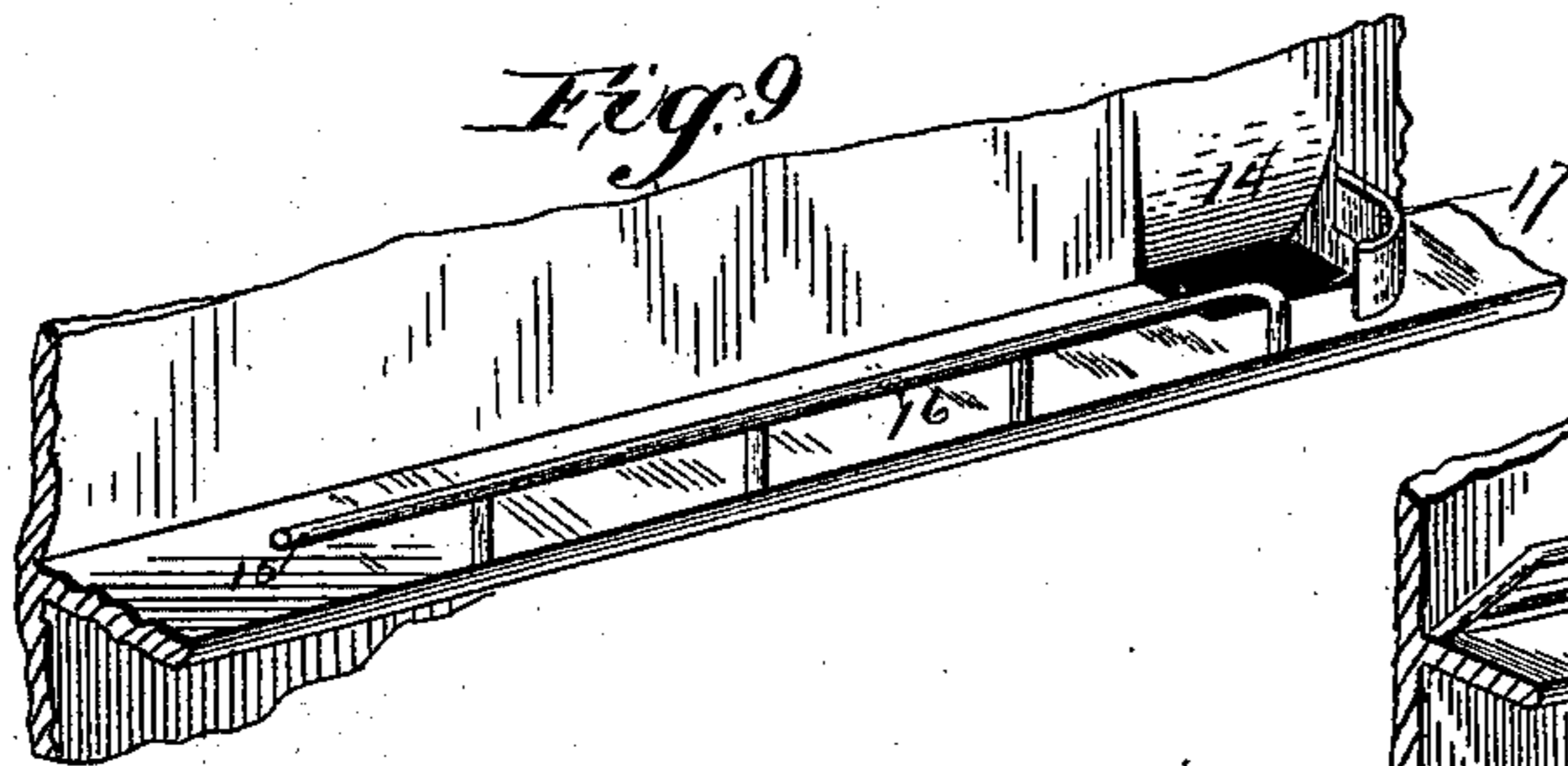
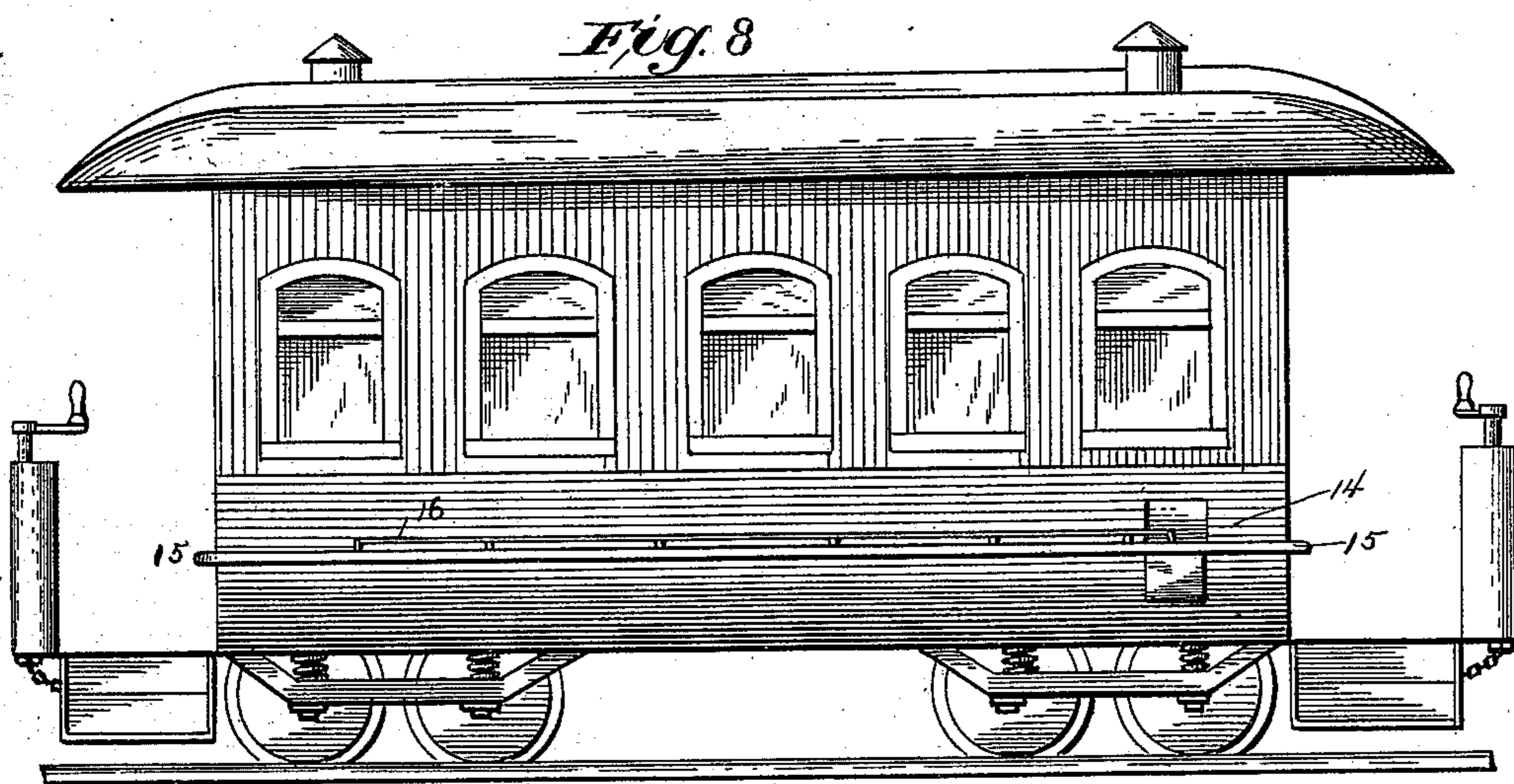
2 Sheets—Sheet 2.

G. B. McALLISTER.

LETTER BOX FOR STREET CARS.

No. 402,028.

Patented Apr. 23, 1889.



WITNESSES

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# UNITED STATES PATENT OFFICE.

GEORGE B. McALLISTER, OF BALTIMORE, MARYLAND.

## LETTER-BOX FOR STREET-CARS.

SPECIFICATION forming part of Letters Patent No. 402,028, dated April 23, 1889.

Application filed November 24, 1888. Serial No. 291,752. (No model.)

### *To all whom it may concern:*

Be it known that I, GEORGE B. McALLISTER, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Letter-Receptacles for Street-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in receptacles for letters, papers, packages, &c.; and the invention consists, first, in a weather-proof receptacle the mouth of which is adapted to receive the letters, &c., to be mailed by simply dropping them into the receptacle from the outside of the car while it is in motion, thus obviating the use of the ordinary mechanism of a mouth-covering.

The invention also consists in an attachment to letter-receptacles on the exterior of a street-car or other vehicle, whereby it is adapted to convenient, safe, and effective use while the car is in motion; and the invention further consists in the novel details of construction and combinations of the several parts, as will be hereinafter more particularly described, and specifically pointed out in the claims.

In the accompanying drawings, to which reference is had, and which fully illustrate my invention, Figure 1 is a perspective view of my improved receptacle and chute. Fig. 2 is a view of one of a series of inclined conveyer-strips of the chute, showing in dotted lines the course taken by the rain-drip when broken by its gravity on the beveled or fine edge of the strip. Fig. 3 is a plan or top view of the receptacle, the top being removed, showing the intersecting strips connected together by means of a rod. Fig. 4 is an inner side perspective view of one side of the receptacle and chute, showing the vertical groove for preventing the flow of the rain-drip beyond the groove. Fig. 5 is a transverse section showing the intersecting and inclined strips. Figs. 6 and 7 are detail views of the inclined strips, the latter, Fig. 7, showing the beveled edges of the strips, a determined number of the strips being shown higher than the others. Fig. 8 is a side ele-

vation of a car having my invention connected thereto. Figs. 9 and 10 are perspective views of the attachment or guide on the exterior of the car running to the mouth of the chute, the latter figure being a modification of the former. Figs. 11 and 12 are modifications of the chute and receptacle.

Similar letters of reference indicate corresponding parts throughout the several figures.

Referring to the drawings, A designates my improved receptacle, which may consist of any proper construction and material, having its top covered or closed, substantially as shown in the drawings. Extended from one side of the receptacle is a chute or way, 1, having an inclined bottom and opening into the receptacle through its open inner end, and at the outer end of the chute 1 is a mouth-piece 2, arranged substantially vertical, having an opening, 3, through which the letters, &c., are deposited, finding their way down through the chute into the receptacle. The opening 3 may be made to suit the purposes of receiving a limited-size letter, package, or other matter by inserting pieces 4 in the sides, substantially as shown. These pieces 4 also serve to direct the mailed matter centrally through the chute and prevent such matter from lodging against the vertical sides of the chute.

To carry the mail-matter through the chute and deliver it free from water contact, I arrange in the chute false bottoms 5 6. These preferably consist of a number of thin bars or plates the meeting ends of which are intersected, as at 7, and supported on a bar, 8, substantially as shown in Figs. 5, 11, and 12 of the drawings. The upper edges of the bars or strips composing these false bottoms are beveled to an edge, as shown at 9, and in order that ways may be formed in the false bottoms the upper edges of certain of the bars are made higher than the others, as shown at 10 in Fig. 7 of the drawings. The false bottoms 5 and 6 are arranged at different angles of incline, as shown, in order that the upper one may serve to speedily and readily carry off whatever water from rains or other sources may find its way into the mouth-piece, from whence it trickles down on the slats of the bottom 5, and that which fails to fall through the interstices of the false

bottom runs down on the bars of the bottom and drops from the projecting lower ends, 11, into the inclosure below, thus leaving the other portion, 6, of the false bottom entirely free from moisture, and over which the letters find their way into the receptacle. The lower end of the part 6 is arranged to project somewhat above the entrance to the main receptacle, and projects into the receptacle to carry the letters into the box, and the lower end of the bottom of the chute stops short of the receptacle, as shown in Fig. 1 of the drawings, in order that the drippings of rain may find their way into a drip-trough, 12, secured to the side of the chute, as shown in Fig. 1 of the drawings. By means of the beveled edges of the false bottoms a very small surface is exposed to the rain, and that finding its way to the inside is carried down on the sides of the strips forming the false bottoms, thus presenting a comparatively dry runway or floor for the letters to pass over under any circumstances. If rain strikes down through the open mouth of the device, it passes through the interstices or strikes on the beveled edges and is broken, as illustrated in Fig. 2, and runs down on the sides of the strips. To prevent rain from finding its way down into the receptacle by running down the sides of the chute, I form in the vertical sides of the chute a stop, 13, which may consist of a rib or a channel, which stop 13 directs the drip downward into the rain receptacle or trough.

In Figs. 11 and 12 I have illustrated modifications of my device, wherein the receptacle incloses the chute, the lower false bottom shown in both figures being formed as heretofore described.

In Fig. 11 the false bottom rests upon an inclined piece. The front of the casing is open and exposed to the inclined piece and constitutes an opening for a door of the receptacle. The ledge, together with the bottom of the receptacle, forms a shelf for the reception of large packages.

In Fig. 12 the receptacle is completely inclosed in front, as shown, having an opening for a hinged or sliding door running beneath the chute. A shelf or conductor serves to conduct rain-drip to a slot, *a*, in front of the casing at or near its inner end, and has an upward turn to protect the receptacle A from rain-drips falling from the strips of the first of the intersecting planes.

In Figs. 8 and 9 the mouth of the chute is let through the wall of a car, as at 14, and communicates with the receptacle arranged beneath the car-seat.

Secured upon the side and exterior of the car at right angles to the same, and running horizontally across the mouth of the chute, is a shelf-strip, 15, provided with a railing, 16, secured to the outer or free edge thereof, and running parallel therewith, terminating at a suitable point in front of the mouth of the chute, whereby mail-matter to be deposited

in the receptacle through the mouth of the chute is guided by the hand of the depositor within the channel formed by the wall or side of the car, the upper surface of the shelf-strip 15, and the railing 16 into the mouth of the chute, the extension of the railing in front of the chute guarding the mail-matter falling at this point from the hand of the depositor, and thus insuring the insertion of the same into the beveled opening in the wall or side of the car. A curved piece, 17, having its inner end secured to the side or wall of the car at one side of the beveled opening leading to the chute and approximating the curved end of the railing 16, serves as a prolongation of said railing, for the purpose hereinbefore set forth.

By the guidance of the mail-matter in the channel formed upon the side or wall of the car to and over the beveled opening to the chute while the car is in motion, the difficulties attending the awkward and dangerous approach of the hand to the beveled opening are obviated and the matter directed with certainty to the entrance of the beveled opening, where it drops down the chute to the receptacle below under the seat of the car.

Another form of guide for guiding the mail-matter to the beveled opening in the side or wall of the car is illustrated in Fig. 10 of the drawings, consisting of a plane of parallel rods secured to said wall or side of the car and inclined relatively to the wall of the car at an angle of about forty-five degrees, and by this construction and arrangement of guide snow and other foreign matter is prevented from accumulating thereon.

The bottom 18 of the receptacle is inclined substantially as shown, and on the bottom are arranged a series of strips, 19, having their edges beveled similar to the edges in the inclined false bottoms, the object being to facilitate the motion of the letters toward the door of the receptacle or to permit them to be more readily removed, as affording a ready and convenient manipulation by the party withdrawing them. The beveled strip shown in Fig. 2 runs entirely to the rim of the receptacle, and its edge may be formed with notches *b*, to prevent the rain-drip from coming down the strip farther than the notches.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a letter receptacle or box arranged in the car with its receiving-opening in the opening of the car, of a guide plate or rib secured to the side of the car and arranged parallel therewith, and provided with a guide-bar on its outer edge, substantially as described.

2. The combination, with a letter-receptacle arranged in the car with its receiving-opening in said opening of the car, of a guide plate or rib secured horizontally on the side of the car, and provided with guides to direct the packages in the opening of the car, substantially as described.

3. The combination, in a letter-receptacle formed with an inclined chute opening therein, of the false bottoms arranged at different angles of incline and consisting of thin strips having their meeting ends intersecting, substantially as described, and for the purpose specified.

4. The combination, in a letter-receptacle, of false bottoms arranged at different angles of incline and consisting of thin strips having their meeting ends intersecting and supported on a common bearing, substantially as described.

5. The letter-receptacle herein described, composed of the receptacle A, inclined chute 1, mouth-piece 2, partially covered by the pieces 4, and the false bottoms arranged in said chute on different inclines and consisting of strips having beveled upper edges, substantially as described.

6. In a letter-receptacle, the inclined false bottoms composed of thin strips formed with beveled upper edges, substantially as described.

7. A letter-receptacle formed with a chute, constructed as described, leading into the main receptacle, and provided with vertical stop-pieces on the inner surface of the sides of the chute, whereby rain-drip is prevented from entering the receptacle.

8. The combination, with a letter box or receptacle, A, of a letter-chute, 1 2 3, constructed as herein described, that is of two sections arranged at different angles of inclination, and inclined bottom arranged to stop short of the receptacle, substantially as set forth.

9. The combination, with the receptacle A, constructed as described, having an inclined bottom, 18, of a series of beveled slats arranged on the bottom of the receptacle, as herein shown and specified.

10. The herein-described device, composed of a receptacle, A, a chute leading therein, and a mouth-piece opening into the chute, false bottom in the chute arranged at different angles of inclination, and a bottom in the receptacle composed of strips, all as specified.

11. In a letter-receptacle, the combination of the false bottom 5 6, composed of strips having beveled upper edges formed with notches, substantially as described, and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE B. McALLISTER.

Witnesses:

EUGENE M. MERRICK,  
N. DUMONT.