

(No Model.)

J. H. SMALL.  
HOPPER FOR FARE CONVEYERS.

No. 301,170.

Patented July 1, 1884.

Fig. 1.

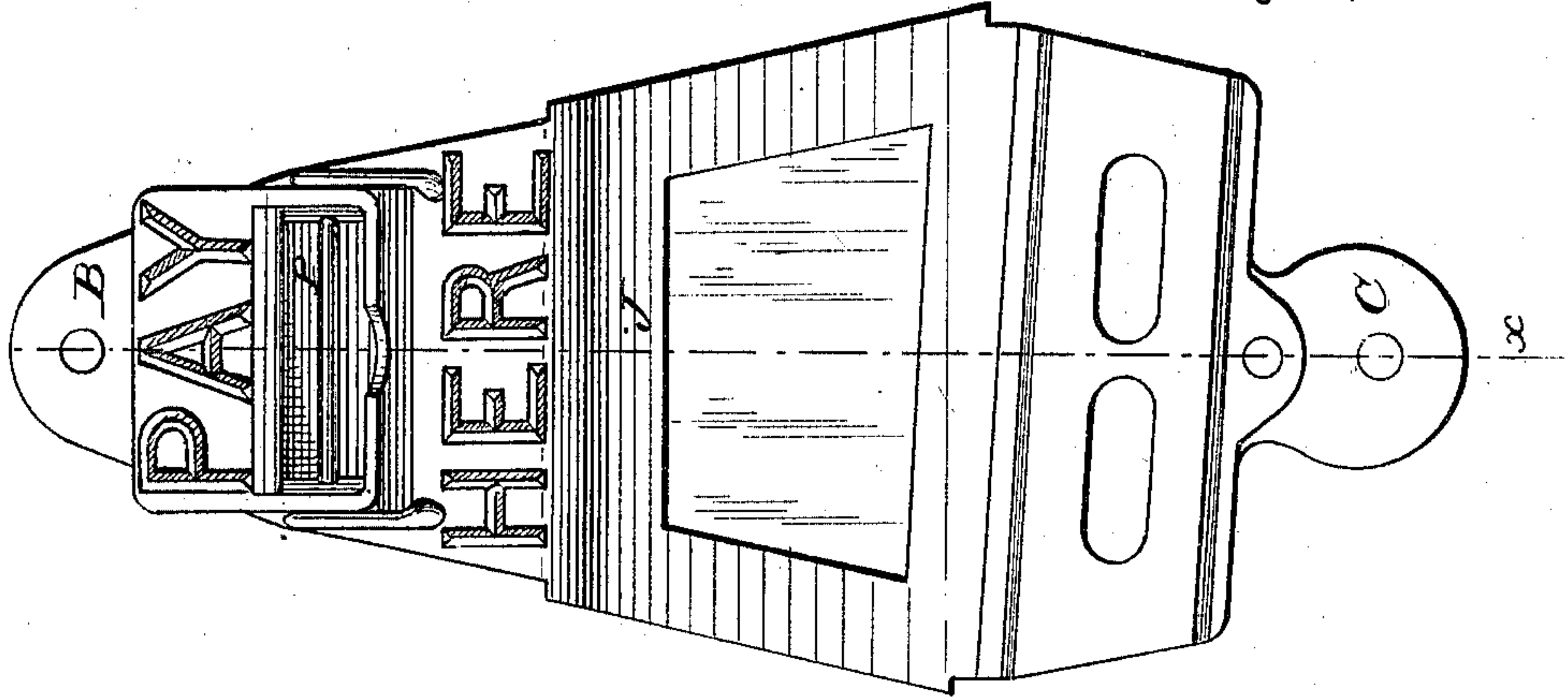


Fig. 2.

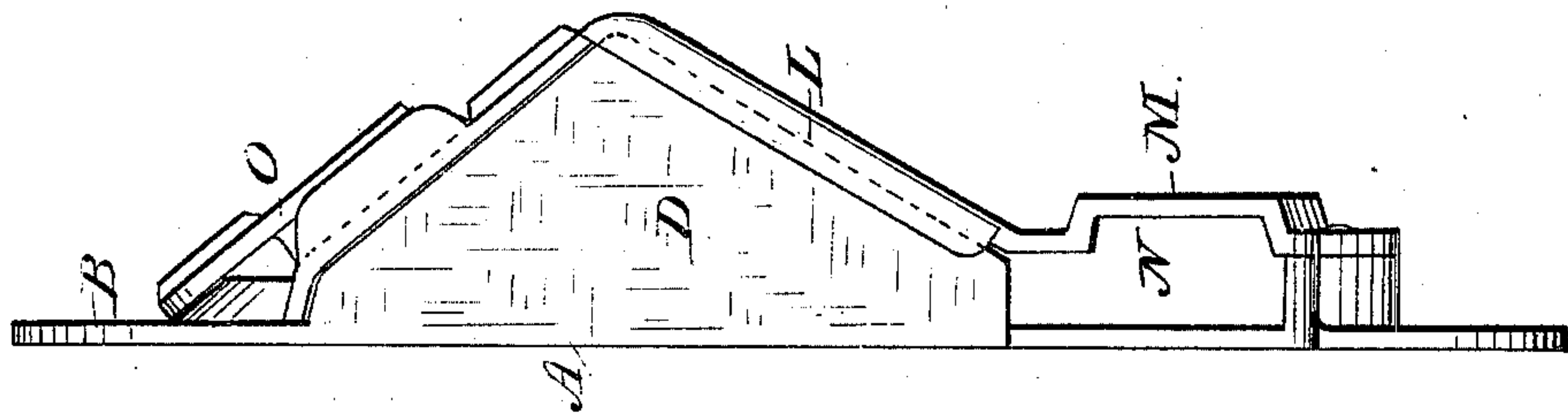


Fig. 3.

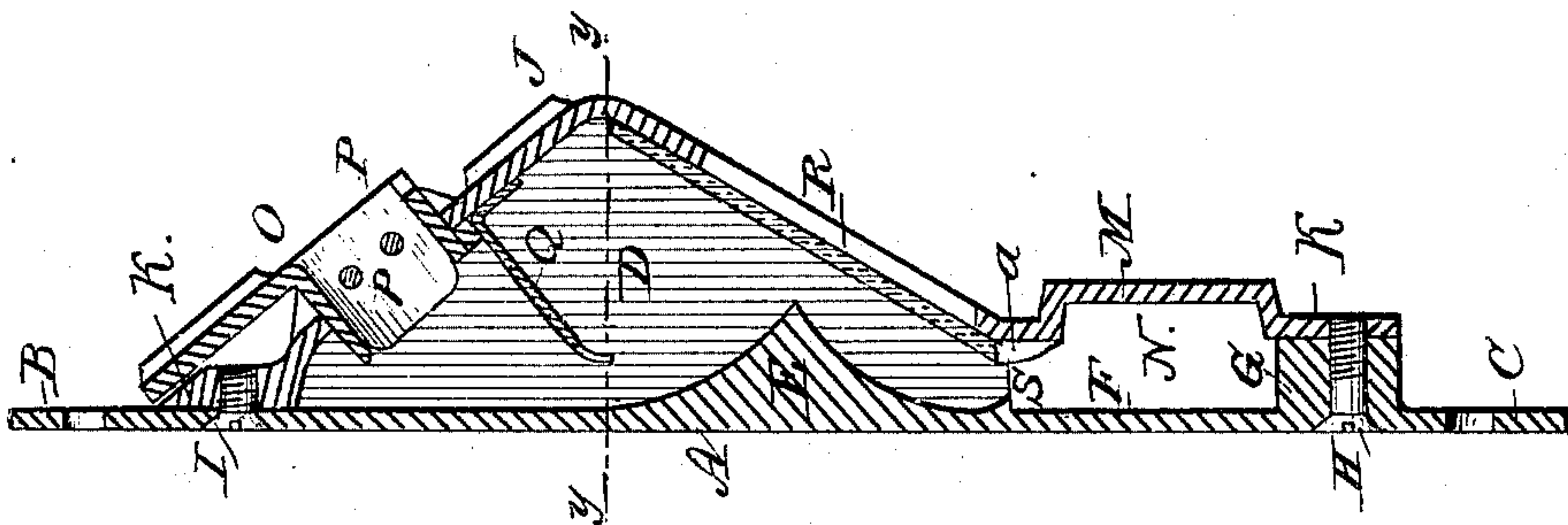
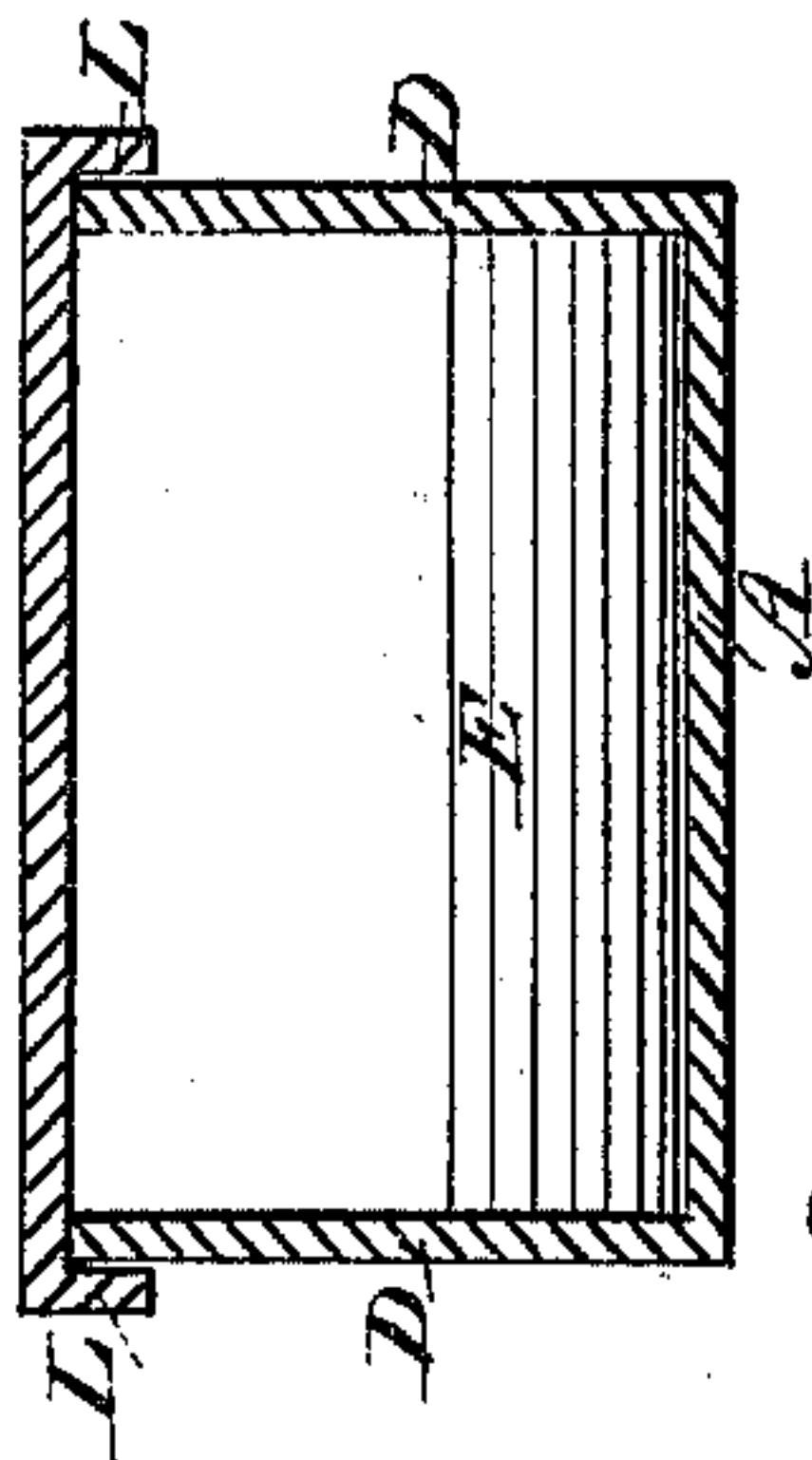


Fig. 4.



Witnesses:

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# UNITED STATES PATENT OFFICE.

JAMES H. SMALL, OF NEW YORK, N. Y.

## HOPPER FOR FARE-CONVEYERS.

SPECIFICATION forming part of Letters Patent No. 301,170, dated July 1, 1884.

Application filed November 9, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. SMALL, a citizen of the United States, residing at New York, N. Y., have invented new and useful Improvements in Hoppers for Fare-Conveyers, of which the following is a specification.

My invention relates to certain new and useful improvements in receiving-hoppers to be used in connection with fare-conveyer tubes in street-railway cars, &c.

My invention has for its object to provide a hopper simple and economic of construction which shall serve the purpose not only as a hopper, but which shall also serve as a means for securing the conveyer-tube in position, and in such manner that the latter is free in such longitudinal movement as might be caused by expansion and contraction, or by the possible vibrations of the car to which it is secured; and with these ends in view my invention consists of a metallic hopper the body of which is cast in two parts, and adapted to be put together in such manner as to embrace the conveyer-tube to which it is to be applied, and hold the same in position, as will be hereinafter explained.

My invention also consists in other details of construction, hereinafter fully described and specifically claimed.

In order that others skilled in the art may know how to make and apply my improved hopper, I will describe its construction and the manner in which it is used, referring by letters to the accompanying drawings, in which—

Figure 1 is a front elevation of my improved hopper; Fig. 2, a side elevation of the same; Fig. 3, a vertical section taken at the line *x x* of Fig. 1, and Fig. 4 a transverse section taken at the line *y y* of Fig. 3.

Similar letters indicate like parts in the several figures.

A is the back casting, which is formed with the extensions B C, provided with screw-holes, and by which the device is secured in position in an obvious manner. This back piece is formed also with sides D D, of about the shape shown particularly at Figs. 2 and 3, and with an interior forward deflecting-surface, E, (see Fig. 3,) which serves as a guard against obstruction of money, &c., deposited in the hop-

per. That portion of the back plate extending below the point where the hopper proper terminates is slightly recessed, as shown at F, and at the lower extremity of such recess the casting extends forward, as shown at G, thus forming a recess and seat for the conveyer-tube to be used in connection therewith, and as fully described in another application filed by me simultaneously with this. The solid portion G is provided with a screw-hole adapted to receive a screw, H, which, with another screw, I, at the top, is used to secure the front plate, J. The form of this plate, as shown in section in Fig. 3, is such as to fit upon the angular sides D of the back plate, the upper and lower extremities terminating in lugs K K, to receive the threads of the securing-screws H I. Flanges L are cast with the plate J, to overlap the sides D, as is clearly shown at Fig. 2. The lower portion of the casting, below the point at which the hopper proper terminates, is so formed with a recess, M, that when the two plates A J are in fixed relation to each other a space or channel, N, (see Fig. 2,) is formed, corresponding in shape to and adapted to receive one of my improved conveyer-tubes. The upper end of the front plate, J, is formed with an opening, through which the fare is introduced. As an economy in construction, I provide a separate escutcheon-plate, O, having an opening for the introduction of fare, and provided with one or more bars or partitions, P, which are designed to separate coins or tickets when more than one are introduced together, and in order that by such separation they shall be required to follow one another in their descent to the bottom of the hopper, and thus avoid any possible clogging, which might otherwise ensue. This escutcheon-plate may be secured to the plate J in any suitable manner, as by bolts, screws, rivets, &c. Just below the fare-opening I provide a serrated plate, Q, which serves as a deflector and guard. On the escutcheon-plate O and upper portion of the plate or casting J any suitable notice—such as “pay here”—is provided by casting or otherwise.

The plate J may be cast with an opening or window, R, and closed or guarded by a glass located between the back and front plates, its



lower edge supported on suitable slight projections, *a*, on the front plate, and the side edges of the glass protected by the flanges L, and in this manner the glass is fastened in place.

It will be observed that the form and relation to each other of the two plates or castings A J is such that a throat, S, (see Fig. 3,) is formed, through which the deposits in the funnel are permitted to pass into the opening in the top surface of the conveyer-tube.

The whole device is simple and economic of construction, and when the conveyer-tube is placed in position between the plates, and the latter are fastened together by the screws H I, no further device is necessary to properly locate the tube and hopper other than the screws through the extensions B C of the back plate, A. The hopper is held in proper relation to the money-opening in the top edge of the conveyer-tube, and the latter is not bound against longitudinal movement, and is thus freed from the strain it would be subject to were it rigidly secured to the car.

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

1. A hopper for use in connection with fare-

conveyer tubes, made in two parts, provided with a suitably-shaped channel near the lower end, to receive and support the conveyer-tube, and secured together at the upper and lower ends, substantially as herein described.

2. The back plate or casting, A, provided with sides D, recess F, and deflecting-surface E, substantially as shown and described.

3. The front plate or casting, J, formed with tube-recess M and flanges L, substantially as shown and described.

4. The escutcheon plate or casting O, adapted to be secured within the front plate, J, and serve as the entrance to the hopper, provided with separating bars or partitions P, arranged near the outside of the entrance, whereby the coins, when introduced, are separated before they are permitted to enter the hopper, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

JAS. H. SMALL. [L. S.]

Witnesses:

GILBERT J. MCGLOIN,  
ROBERT J. SMACK.