(No Model.)

J. H. SMALL.

FARE CONVEYER.

No. 301,169. Patented July 1, 1884.

Fig. 1.

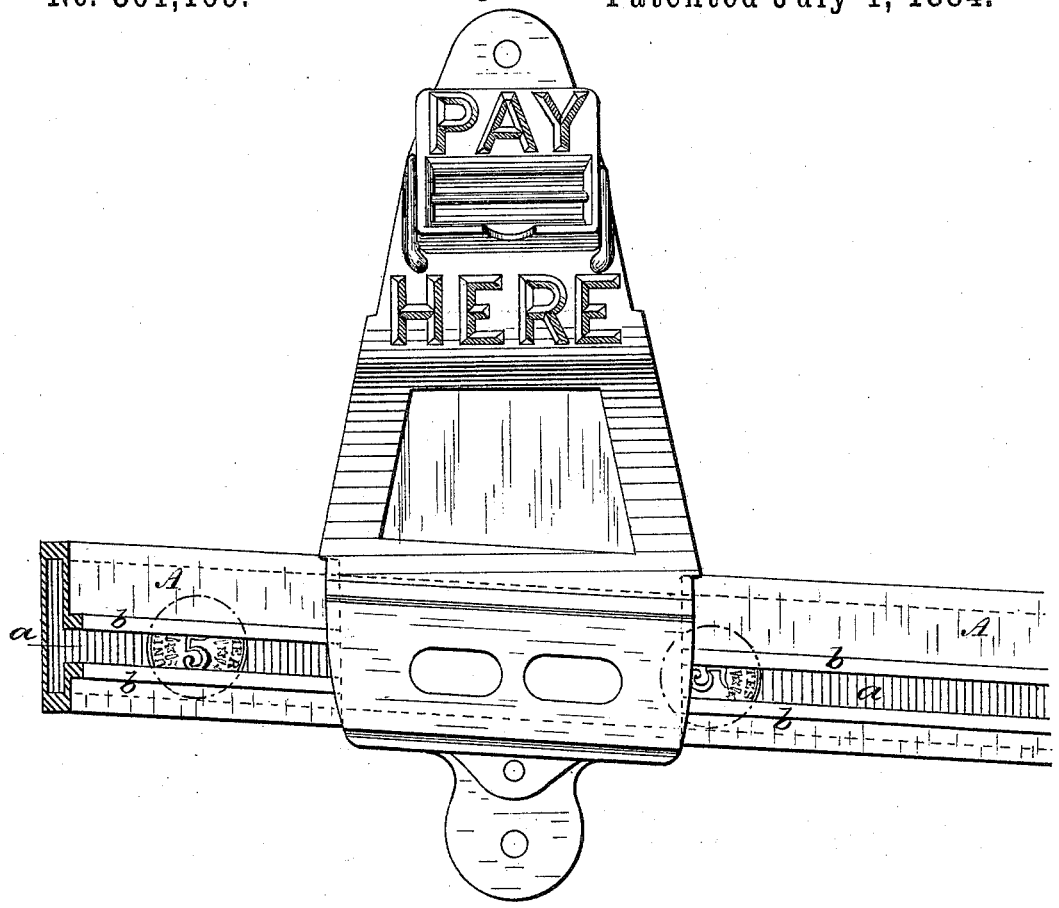


Fig. 4.

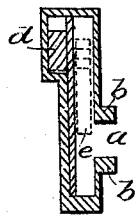


Fig. 3.

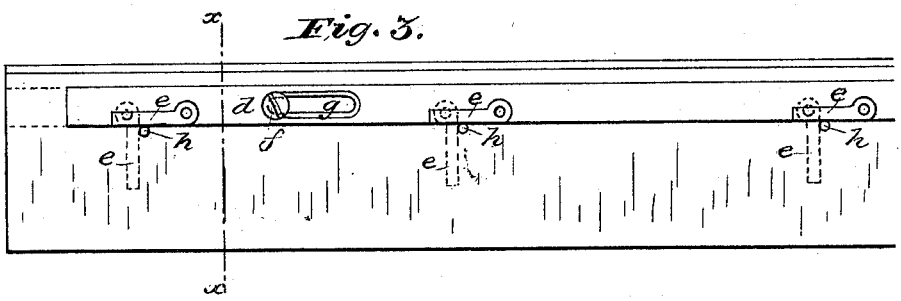
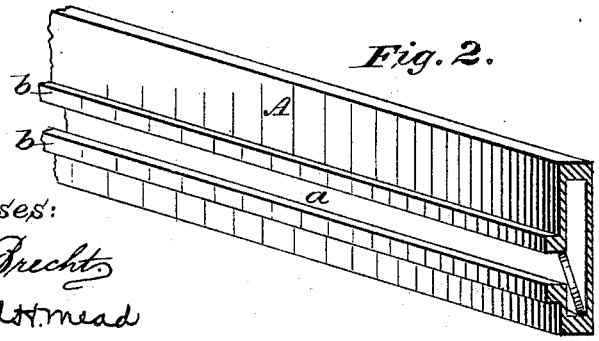


Fig. 2.



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UNITED STATES PATENT OFFICE.

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

FARE-CONVEYER.

SPECIFICATION forming part of Letters Patent No. 301,169, 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 Fare-Conveyers, of which the following is a specification.

My invention relates to certain new and useful improvements in fare-conveyers.

It has for its object to provide a means by which the fare of passengers in street-railroad cars may be deposited at various points and travel by gravity to a lock-box at the end of the car, and in such manner that the fare so deposited may be readily observed at any point during its travel.

I am aware that tubes have been devised for conducting money or other bodies from one point to another, and do not wish it to be understood that I am claiming any such broad idea, my present invention relating only to the peculiar construction of the conveyer-tube.

My invention consists in forming the tube preferably of brass, and with a longitudinal opening in its exposed side, through which the money or other evidence of value may be clearly seen during its transit to the box-receptacle, such opening being provided with laterally-projecting flanges so constructed and proportioned that the money contained in the tube connot be fraudulently removed therefrom, as will be hereinafter and in detail explained.

In order that those skilled in the art to which my invention appertains may fully understand the same, I will proceed to describe the construction and advantages of the same, referring by letters to the accompanying drawings, in which—

Figure 1 is a front elevation of a portion of the conveyer-tube embodying my invention, and with a deposit-hopper, which forms the subject of another application, arranged thereon. Fig. 2 is a perspective view of the tube shown at Fig. 1. Fig. 3 is a plan view of a modified form of tube with the face removed to show the application of a longitudinally-movable bar, with gravity-fingers designed to drop down to intercept the travel of the money when it is desired to carefully count or inspect the same before its delivery to the receiving-box; and Fig. 4 is a cross-section taken at the line *x x* of Fig. 3.

Similar letters denote like parts in the several figures.

A represents a tube, which I prefer to draw from sheet-brass in the form shown at Figs. 1 and 2, whereby an opening, *a*, throughout the length of the tube is left, through which the fare deposited at different points may be inspected, as is clearly shown at Fig. 1. In order that the fare so exposed to view shall be perfectly protected against fraudulent extraction, and without the necessity for any transparent covering to such opening, I extend the edges of the metal on each side of the space or opening *a* outwardly, to form short flanges *b*, the extent of which and their relation to the opening *a* being such that the smallest coin or other evidence of fare cannot be taken through the opening, as is clearly indicated at Fig. 2. The protecting-flanges *b* I prefer to form, as stated, by drawing the edges of the metal outward; but it will be understood that such flanges may be made separately and secured in place in any suitable manner; and it will be understood that they not only serve as a protection against fraudulent extraction of the contents of the tube, but also serve to strengthen the latter.

In adapting my improved tube for use in street-railroad cars I have constructed the tubes of such length and longitudinal conformation as to extend along the sides of the cars and ends of the same. At any number of points most convenient to the passengers I arrange conducting-hoppers B, through the lower ends of which the tubes pass and in which they are supported. The hoppers are securely attached to the sides of the cars; but as the form and construction of the hoppers and the mode of securing the tubes in place by them forms the subject of another application by me for Letters Patent, no further explanation is here necessary; and I do not in this case wish to confine myself to the use of the hoppers, or the mode described of securing the tubes in place, as it will be understood that the tubes may be secured in any other manner, and that simple openings in the top edge of the tube or hoppers of any other construction may be used to facilitate the depositing of the fare.

The use of my improved tube involves, necessarily, the employment of specie for fare, or

that the tickets used instead of specie should be of a circular form, in order that by reason of the inclination of the tube toward the lock-box the specie or tickets will roll by gravity. I may here remark that I have successfully used metallic and also celluloid checks or tickets, and have found them practical.

It may sometimes become necessary to thoroughly inspect the fare contained in the tube before it is permitted to gravitate to the general receptacle; and in order that this may be done I modify the form of my improved tube to the extent of providing, preferably on the rear, a projection, C, (shown clearly at Fig. 4,) forming an interior longitudinal channel, in which may be located a rod or bar, *d*, to which are pivoted gravity-fingers *e*. The bar *d* is secured in place by rivets or screws *f*, passing through elogated slots *g*, in order that the bar *d* may be reciprocated to such extent as may be necessary to bring the backs of the fingers *e* in contact with short bridges or bolts *h*, passing through the tube transverse to the movement of the bar and in a plane coincident with the bottom edge of said bar, so that as the bar is reciprocated in one or the other direction the fingers will be allowed to drop down into the channel in which the money or tickets roll a sufficient distance to stop the same; or they may be lifted up out of the way, so that the money or tickets may proceed.

While I have shown the tube extending rearward to form the channel for the reciprocating bar *d*, and prefer for some reasons this construction; it will be understood that the bar *d* may be applied to a tube of the form shown at Figs. 1 and 2, if the fingers *e* are pivoted in suitable depressions in the rod.

I have described my improved tube as designed for and I have successfully applied it to use in railroad-cars; but it will be of course obvious that it may be advantageously used in restaurants, stores, &c.; and I do not of course wish to be limited in the application, the gist of my invention resting in the broad idea of a conveyer-tube formed with an opening through which the transit of fares, &c., may be observed, while the opening is provided with means to guard against fraudulent abstraction.

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

1. A tube for fare and other conveyers, formed of a single continuous piece of metal in cross-section, and having a longitudinal inspection-opening, substantially as and for the purpose set forth.

2. A tube for fare and other conveyers, formed of metal, and provided with a longitudinal inspection-opening protected at each side by laterally-projecting flanges, substantially as shown and described.

3. In combination with a fare-conveyer tube provided with an inspection-opening in the front side, and bridges or bolts *h*, a reciprocating rod, *d*, provided with gravity-fingers *e*, substantially as and for the purpose set forth.

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 S. MCGLOIN,
ROBERT J. SMACK.