

(No Model.)

J. STEPHENSON.  
CHANGE GATE FOR CAR DOORS.

No. 331,010.

Patented Nov. 24, 1885.

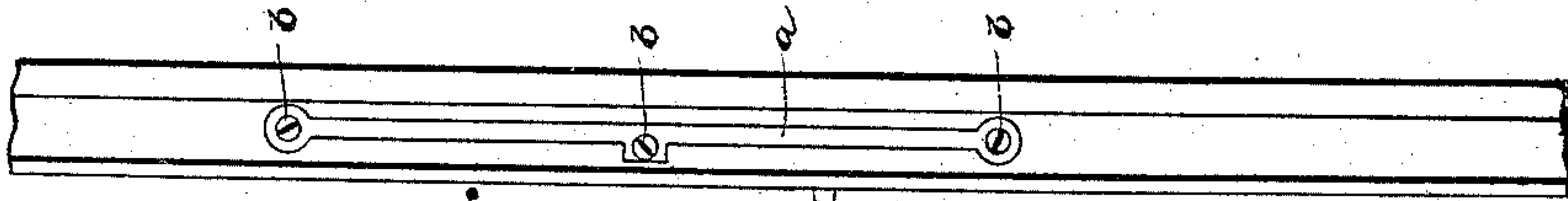


Fig. 1.

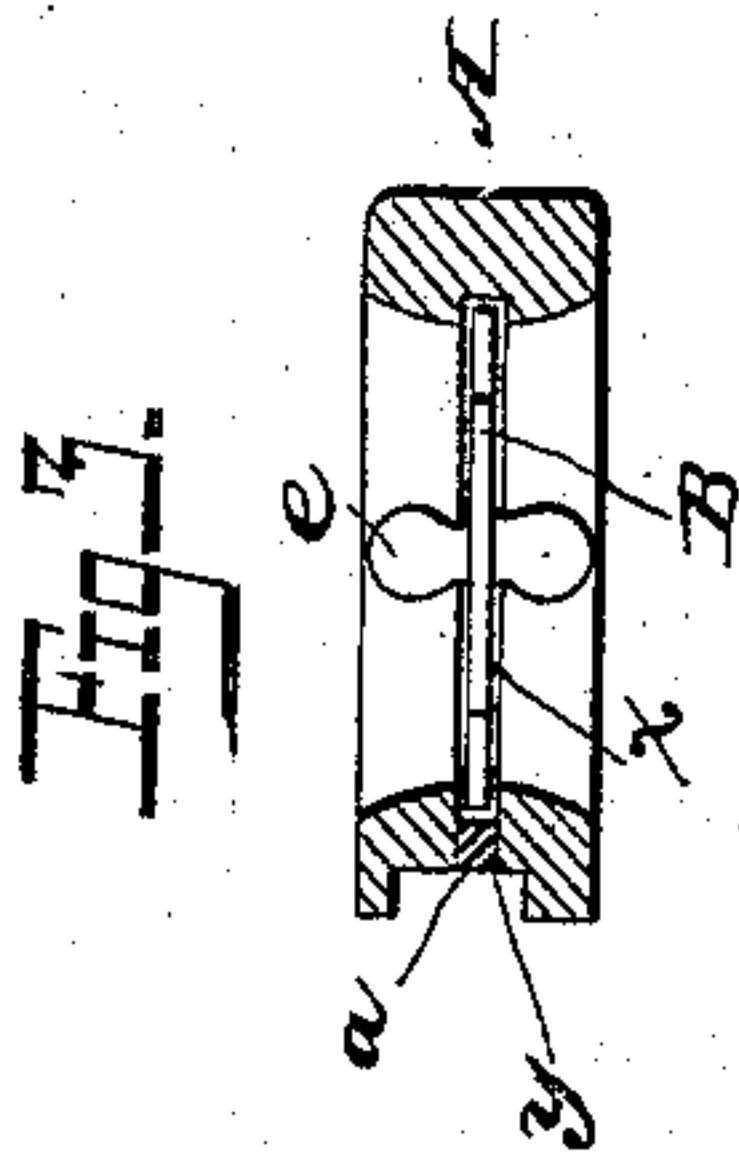


Fig. 2.

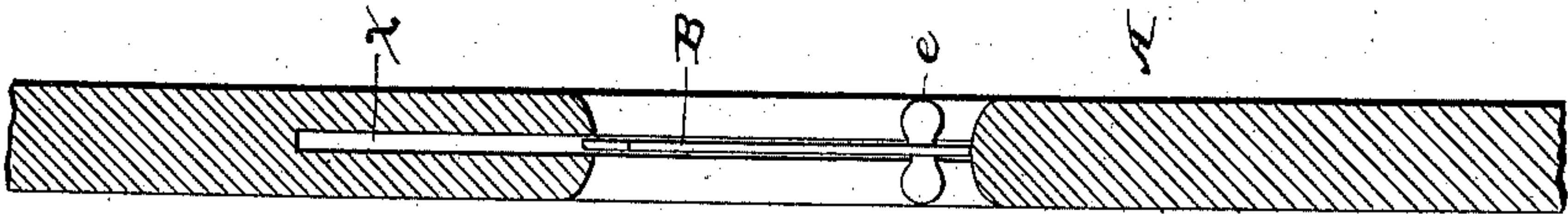


Fig. 3.

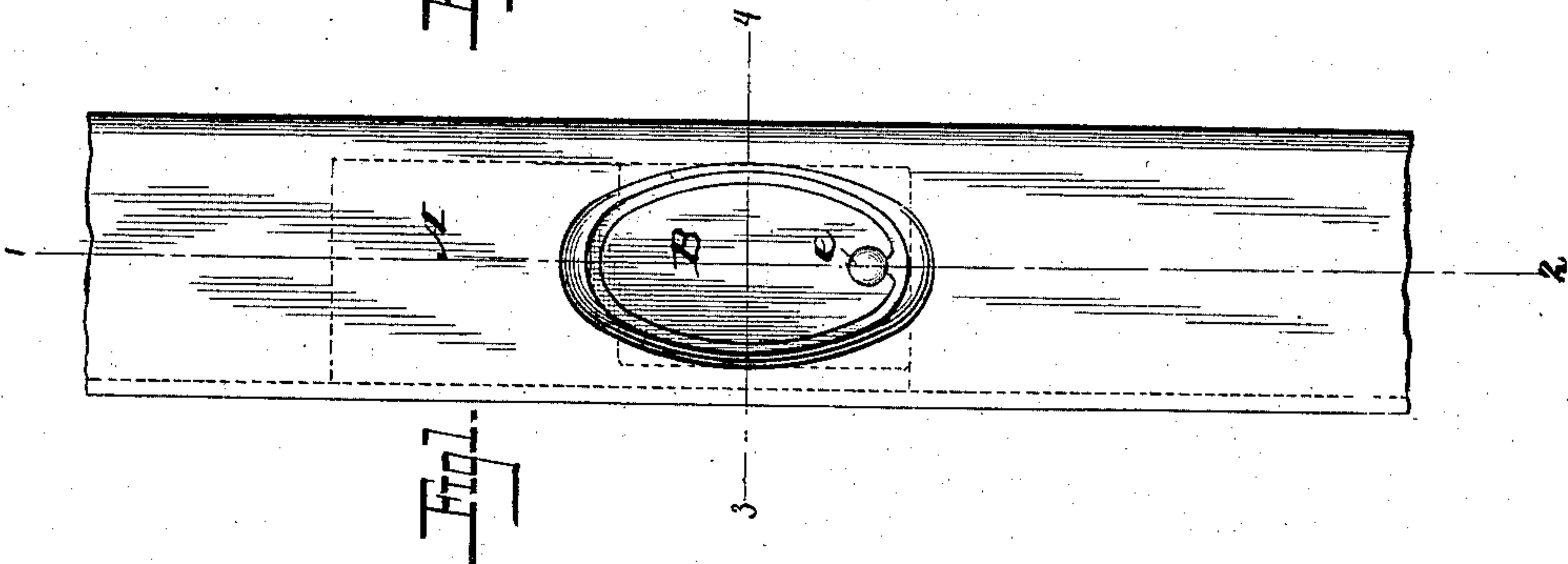


Fig. 4.

Attests:  
John G. Hinkley Jr.  
J. F. Jayers.

John Stephenson  
Inventor: by  
Foster Freeman  
attys

# UNITED STATES PATENT OFFICE.

JOHN STEPHENSON, OF NEW YORK, N. Y.

## CHANGE-GATE FOR CAR-DOORS.

SPECIFICATION forming part of Letters Patent No. 331,010, dated November 24, 1885.

Application filed July 2, 1885. Serial No. 170,553. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN STEPHENSON, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Tram-Car-Door Change-Gates, of which the following is a specification.

My invention has for its object to facilitate communication between the conductor of a tram-car and passengers on the platform when the door is closed; and this object I attain by providing the door with a chambered stile and sliding gate, as fully set forth hereinafter, and as illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a tram-car-door stile, showing my improvement. Fig. 2 is a longitudinal section on the line 1 2, Fig. 1. Fig. 3 is a section on the line 3 4, Fig. 1. Fig. 4 is an edge view of Fig. 1.

In street-cars carrying passengers on the front platform it is necessary for the conductor to obtain their fares without opening the front door, because of cold winds and storms detrimental to passengers within the car. Several plans are in use, but not free from objection, because of complication or inconvenience or expense, which I propose to avoid. I therefore have a car sliding door of usual form and construction, except that the door is preferably thicker and should be made of best grade of timber for strength, with the lock-stile wide enough for a hole to be made therein sufficiently large to let a hand pass through at an elevation of about four feet from the floor. For the purpose of readily closing and opening this hand-hole I make a vertical chamber in the stile of twice the height of the hole, with a side entrance, and in this chamber I place a gate of size sufficient to close the opening, and when raised affording a free passage through the opening for a hand, the withdrawal of which allows the gate to fall and close the aperture. To retain the gate in position I insert in the sash edge of the door-stile a closure to the chamber, preferably of

metal, held in place by screws at the upper and lower ends, so that it can be readily extracted to admit or remove the change-gate. The closure also performs a function of the fourth wall of the chamber, and is a guide to the edge of the slide in its vertical movement.

In the drawings I have not shown the entire door, but only the stile A thereof, with an oval opening or hand-hole, *x*, vertically arranged, the opening being extended through the outer edge of the stile to leave the passage *y*, and to this is fitted the closure *a*, the same being a metallic strip perforated for the passage of screws *b*, by which it may be detachably secured. The gate B slides vertically in the opening, and has a knob or handle, *c*, by which it can be lifted.

I claim—

1. A car-door stile thickened and having a hand-hole above the lock-rail, with a passage at one of the edges of the stile extending into a chamber surrounding the hand-hole, and a slide in said chamber adapted to be lifted upward to expose the hand-hole, and to descend automatically by its gravity, substantially as and for the purpose set forth.

2. A car-door having a hand-hole in the stile, with a chamber receiving a vertically-moving slide, open at the side toward the edge of the door, and provided with a removable closing-piece, substantially as described.

3. A tram-car door having in its stile a hand-hole surrounded by a chamber for holding a slide, with an entrance into the chamber from the sash-edge of the stile, the entrance covered by a closure arranged to be concealed when the sash is up in position, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN STEPHENSON.

Witnesses:

JOS. B. STEPHENSON,  
STUART A. STEPHENSON.