

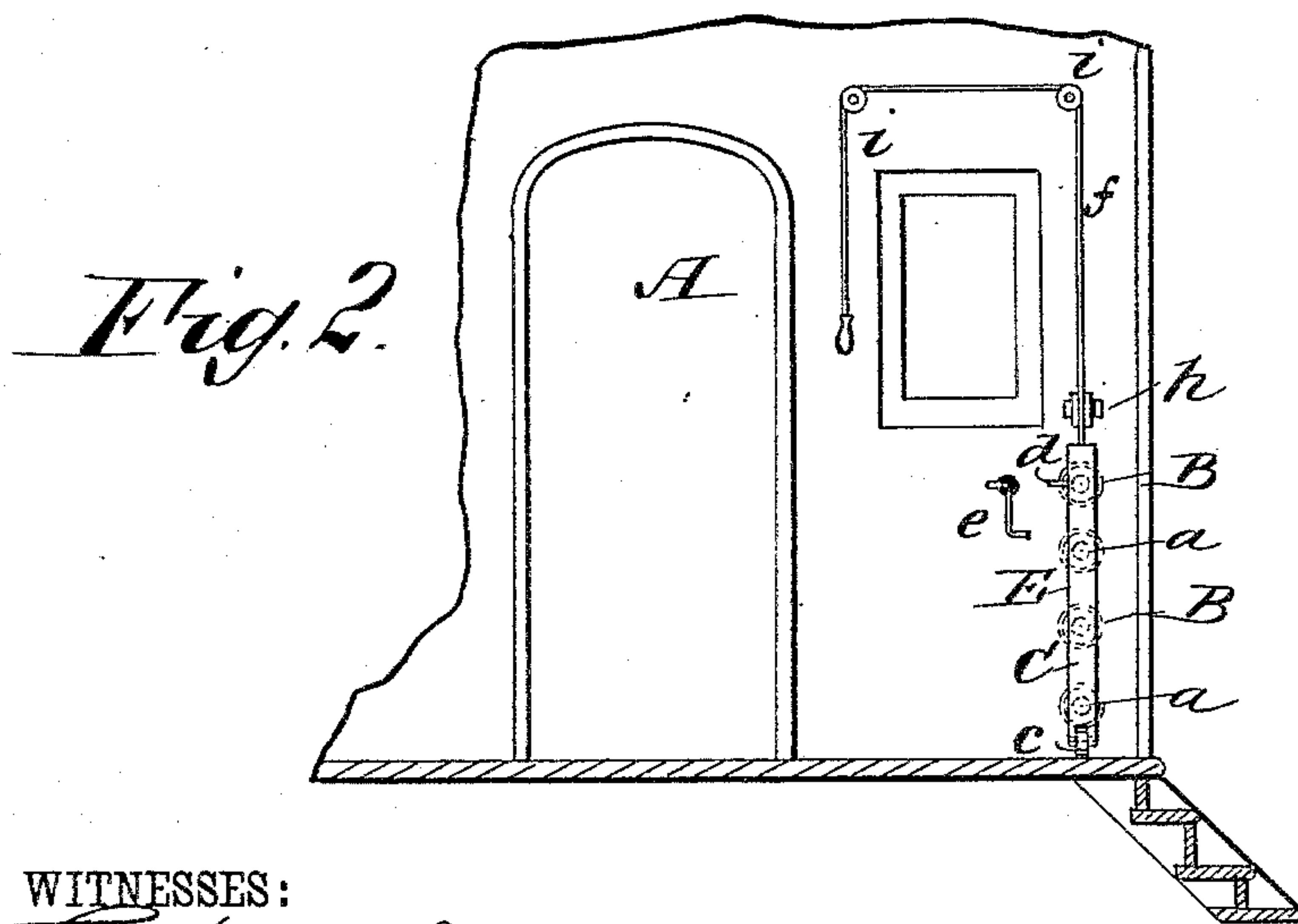
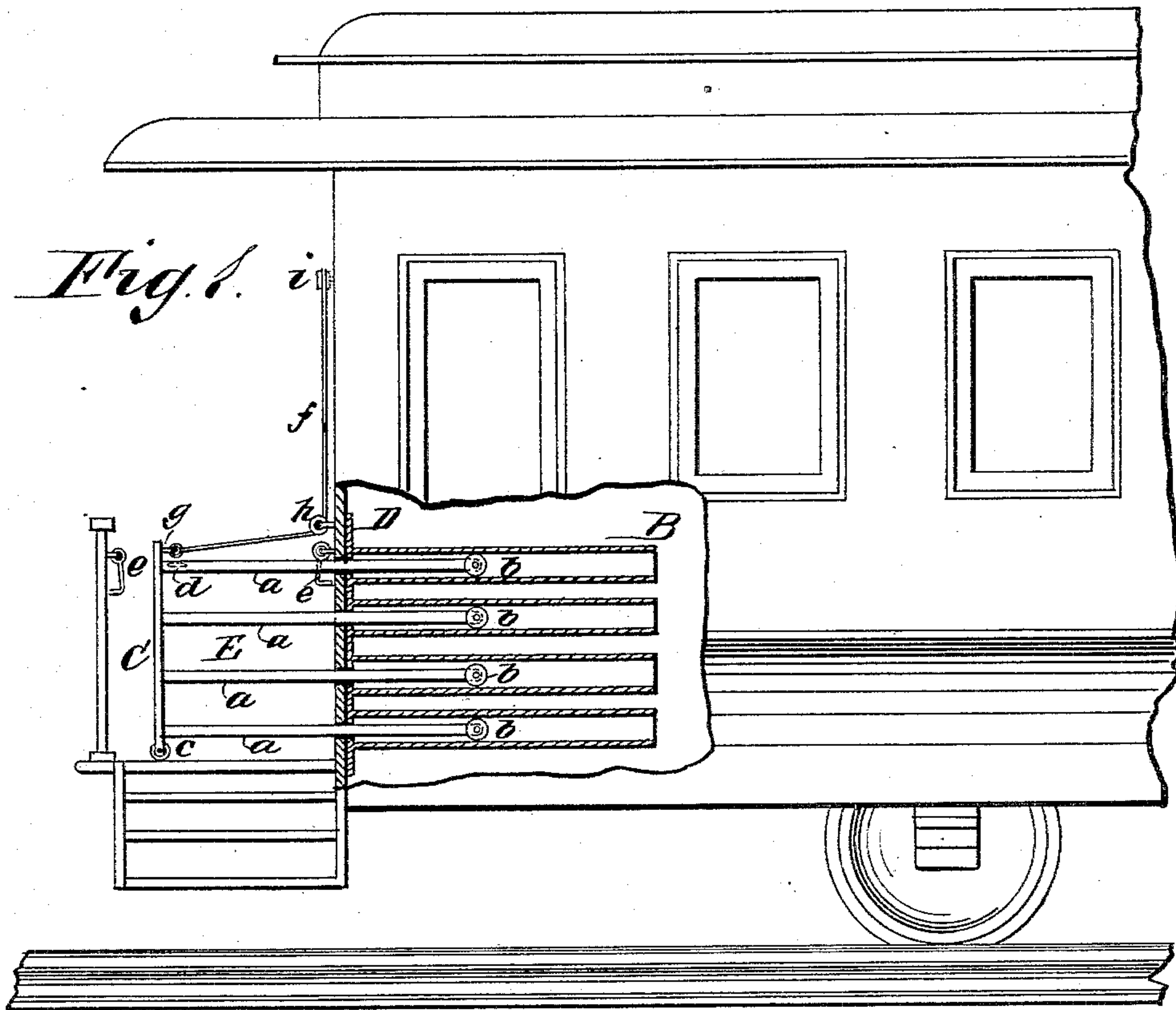
(No Model.)

C. H. HUGHES.

CAR GATE.

No. 304,104.

Patented Aug. 26, 1884.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES HAMILTON HUGHES, OF ST. LOUIS, MISSOURI.

## CAR-GATE.

SPECIFICATION forming part of Letters Patent No. 304,104, dated August 26, 1884

Application filed May 1, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES HAMILTON HUGHES, of St. Louis, State of Missouri, have invented a new and Improved Car-Gate, of which the following is a full, clear, and exact description.

The object of my invention is to provide a simple, safe, and effective gate for railroad and street cars, depot-platforms, and for other similar uses.

My invention consists in a series of bars forming the gate, and, in combination therewith, of a series of tubes inserted in the car-wall and adapted to receive the bars, each bar being provided with a roller on its free end to run on the inner surface of the pipe.

The accompanying drawings form part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side elevation, partly in section, of a part of a car with my improved gate applied; and Fig. 2 is an end elevation.

In the side wall of the car A is inserted a series of tubes, B, which are preferably screwed into a plate, D; but they may be inserted in the car-wall separately. The openings in the plate D are made smaller in diameter than the tubes B, to prevent the gate-bars from being drawn out of the tubes. A gate, E, composed of the bars *a*, projecting through the end wall of the car into the tubes B, and secured at their outer ends to a vertical bar, C, is capable of sliding in or out over the car-platform. The ends of the bars *a* within the tubes B are provided with rollers *b*, or with semicircular or circular heads, to steady them in the tubes, and the vertical bar C is provided at its lower end with a roller, *c*, which rests upon the car-platform and supports the outer end of the gate. The openings in the plate D, through which the bars *a* slide, are made smaller in diameter than the tubes B, to prevent the rollers or knobs at the end of the gate-bars from being drawn out of the

tubes. When the gate is closed, the bars *a* are partly withdrawn from the tubes B, and when it is opened the said bars are pushed into the said tubes. The gate is provided with an eye, *d*, which is capable of being engaged by either of the hooks *e*, attached to the end of the car and to the platform-rail, to hold the gate in either an open or closed position. A cord, *f*, secured to an eye, *g*, in the upper end of the bar C, extends under a pulley, *h*, attached to the side of the car and over pulleys *i*, which bring it within easy reach of the conductor or other person near the door of the car. By pulling this cord the gate may be opened.

The gate can be set on an incline, so as to open or close automatically by gravitation.

My improved car-gate will not open by lateral pressure; consequently no accidents can happen from crowding against the gate. It is applicable to street and railway cars, and platform-exits, and entrances from and to cars, and may be applied without material change in the cars or in the building. It may also be adapted to elevator-doorways.

By inclining the gate in one way or the other, it may be made to open or close automatically.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the car A, of a gate, E, formed of the vertical bar C and the horizontal bars *a*, adapted to slide into the walls of the car, as specified.

2. The combination of the car A, provided in its side walls with a series of tubes, B, with the car-gate, consisting of the vertical bar C and horizontal bars *a*, adapted to slide within said tubes in the walls, and provided with rollers on their ends, and mechanism for operating said gate, substantially as set forth.

CHAS. HAMILTON HUGHES.

Witnesses:

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