

(No Model.)

W. J. CAREY.

FREIGHT CAR DOOR FASTENING.

No. 278,092.

Patented May 22, 1883.

Fig. 1.

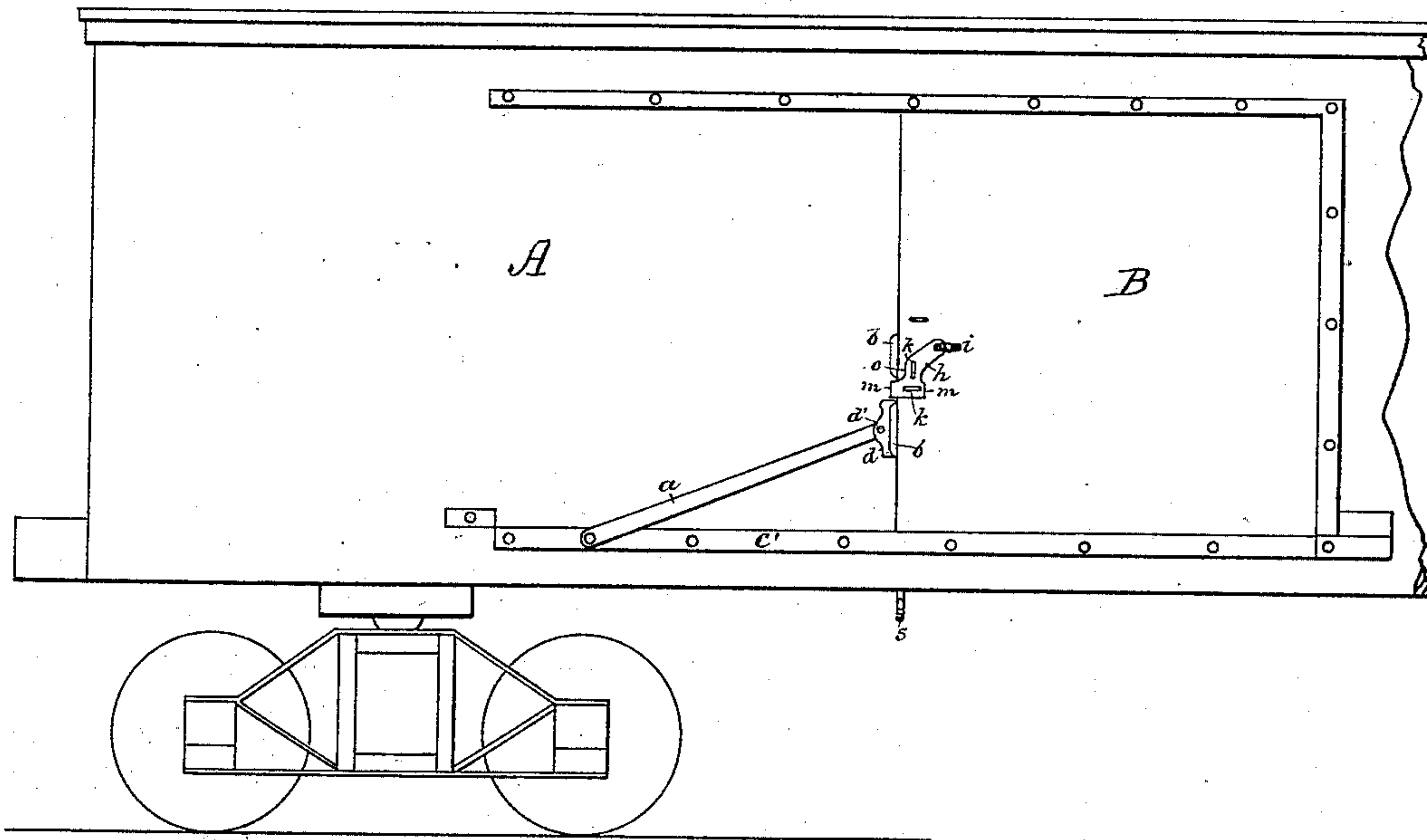
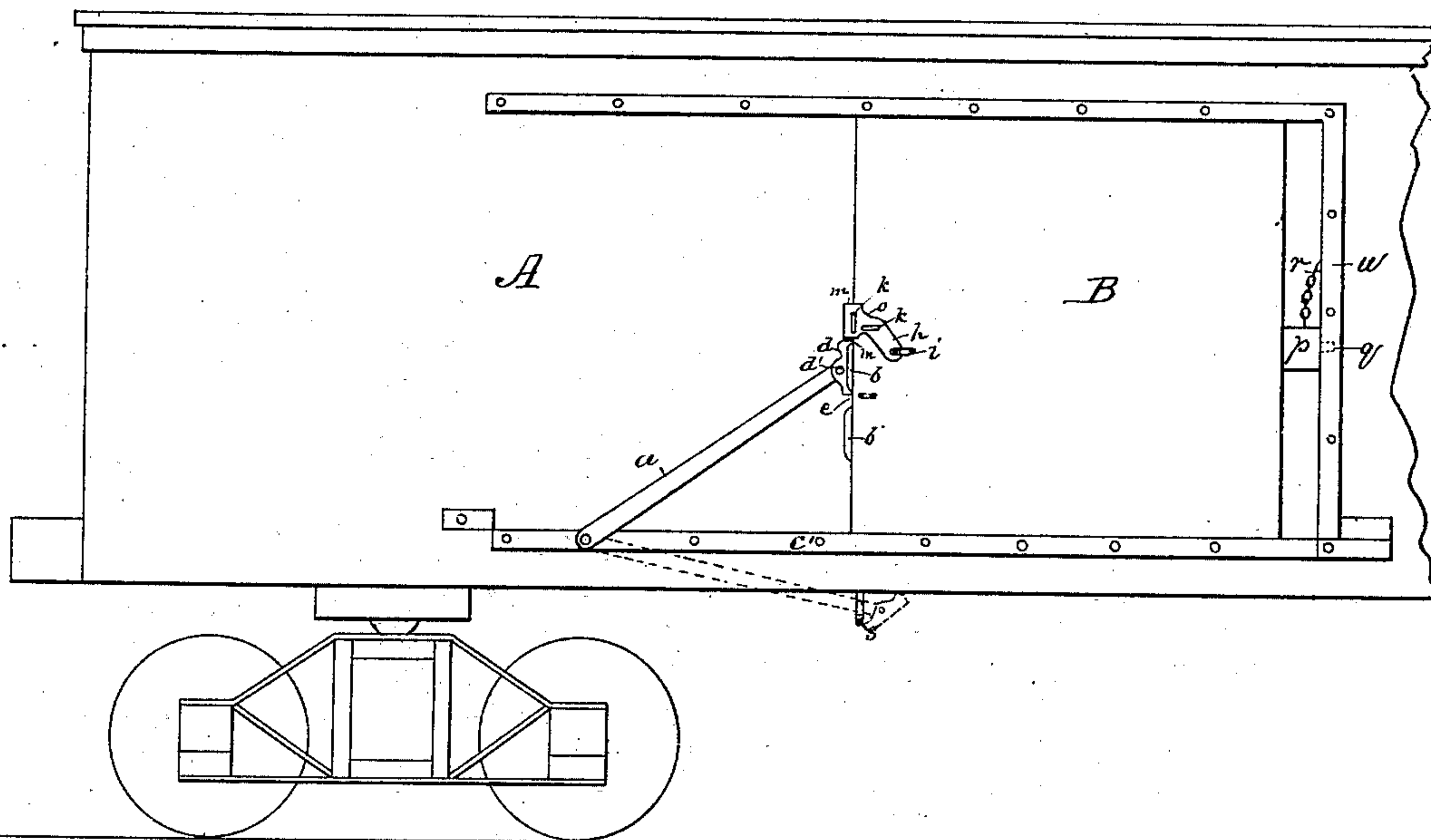


Fig. 2.



WITNESSES:

W. W. Hollingsworth
W. Read

INVENTOR:

W. J. Carey
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM J. CAREY, OF MILLVALE, ASSIGNOR OF ONE-HALF TO HENRY P. STAVING, OF ALLEGHENY, PENNSYLVANIA.

FREIGHT-CAR-DOOR FASTENING.

SPECIFICATION forming part of Letters Patent No. 278,092, dated May 22, 1883.

Application filed March 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. CAREY, of Millvale, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Fastenings for Freight-Car Doors; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of a car and its door provided with my device. Fig. 2 is a similar view, the door being partly open.

The sliding doors of freight or box cars have heretofore been fastened on the closed side of the door by a hook and staple or hasp and lock, or latch, or equivalent fastening. The concussions consequent upon the bumping together of the cars frequently tear these fastenings apart, leaving the door free to slide open at any time, exposing the goods contained in the car to the weather, and rendering them liable in transit to be thrown from the car.

To remedy these defects is the object of my invention, and to these ends it is designed to prevent any undue strain on the hasp or locking device and to hold the door closed by means wholly independent of the locking device or any of its parts; and the invention consists of a prop or brace, constructed as hereinafter described, and hinged to the lower part of the car-body at one end, and having its opposite end resting, when the car-door is closed, against the approximate edge of the car-door, whereby the latter is held closed independently of the locking or fastening contrivances, and without any strain on the latter.

My invention further consists in devices whereby the sliding door may be held tightly closed by a hinged prop or brace when desired, or held nearly closed, with a slight space between the inner edge of the door and its stop for the passage of air into the car to ventilate it, as hereinafter more fully set forth.

In the accompanying drawings, A represents a freight-car provided with a sliding door, B, all of the usual construction.

a represents a brace, made of iron, wood, or any other suitable material, pivoted at its lower end to the lower guide-rail, *c'*, or thereabout.

d represents a shoe pivoted to the upper end of the brace *a* at *d'*, and adapted, when the door is closed or partially so, to rest against the approximate edge of the door and hold it closed independently of any locking or fastening devices which may be employed. The upper end of the brace *a* may be slotted to receive a central flange on the shoe, and the central flange may be recessed on each side to receive the sides of the slot, holes being made in the sides of the slot and in the center of the flange for the passage of a bolt provided with a nut, thus pivoting the shoe to the upper end of the brace. By recessing the opposite faces of the flange to receive the sides of the slots in the brace, any strain upon the shoe is brought to bear on it, and not on the bolt which pivots the shoe to the brace. The shoe may also be pivoted to the upper end of the brace by means of two side flanges secured to the shoe, between which the upper end of the brace is received, the pivoted bolt *d'* passing through a hole in the upper end of the brace and through corresponding holes in the flanges, thereby pivoting the shoe to the upper end of the brace, and allowing it to lie closely against the outer edge of the door when closed.

b b represent two guard-plates secured to the rear edge of the sliding door B, and projecting beyond its rear edge and over the side of the shoe, and preventing any lateral or side play of the latter. A space, *e*, is left between the guard-plates *b*, for a purpose hereinafter explained.

h represents a latch pivoted to the outer face of the sliding car-door by means of a staple or eyebolt, *i*, one leg of which passes through the pivoted hole in the hasp, and thence into the door, and the other leg into the door.

k k represent slots in the hasp *h*, at right angles to each other, for the passage of staples driven into the door, through which the hasp of a padlock may be inserted and locked when desired. The hasp *h*, pivoted to the sliding door, is also provided with projections *m m* and a recess, *o*, the function of which construction will be presently described.

p represents a block of wood or other material, provided with a pin, *q*, adapted to be inserted in a corresponding hole in the door—

stop *u* when it is desired to admit air into the car to ventilate it.

r represents a chain secured to the block *p* and to the interior of the car, near the rear end of the door.

When it is desired in practice to close the door tightly, the block is removed from between the inner edge of the door and its stop, the door closed, the brace placed in position so that the shoe will rest against the outer edge of the door, the hasp turned on its staple so that its projection *m* will pass into the space *e* between the guard-plates and prevent the shoe from rising, one of the staples is inserted in its slot in the hasp, and a lock is attached to the staple, and the door is securely held closed by the brace, and the door is locked. If ventilation is required, the block *p* is inserted between the inner edge of the door and its stop, and the door is closed against the block held in place by its pin, the brace is brought into position so that its shoe rests against the edge of the door, and the hasp is turned in the opposite direction, so that the projection *m* bears against the upper end of the shoe, and the hasp is locked in position by a padlock.

It will be perceived that by pivoting the hasp by a staple or eyebolt having two shanks lateral movement can readily be given to the hasp, to pass over the staples which are inserted in the slots in the hasp and secured therein.

When not in use, the lower end of the brace

is supported by a stirrup, *s*, or it may be turned over one hundred and eighty degrees and supported by a hook.

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

1. In a freight-car having a sliding door, the combination, with a pivoted brace having a vibratory shoe, of a slotted latch attached to the door, whereby the latter is kept tightly closed and prevented from backward movement, substantially as described.

2. The combination, with a sliding freight-car door and a pivoted brace provided with a vibratory shoe at its free end, of the hasp *h*, constructed as described, and adapted to hold the shoe in place in the closed or partially-opened position of the door, as set forth.

3. The combination, with a sliding freight-car door, *B*, and a pivoted brace, *a*, provided with the hinged shoe *d*, of the slotted reversible latch *h* and block *p*, substantially as described.

4. The combination, with a sliding freight-car door, *B*, having guard-plates *b*, with a space, *e*, between them, of the pivoted brace *a*, having hinged shoe *d* and hasp *h*, constructed to rest between the guard-plates when the door is closed, as set forth.

WILLIAM J. CAREY.

Witnesses:

A. C. SEARIGHT,
ROBERT COSKEY.