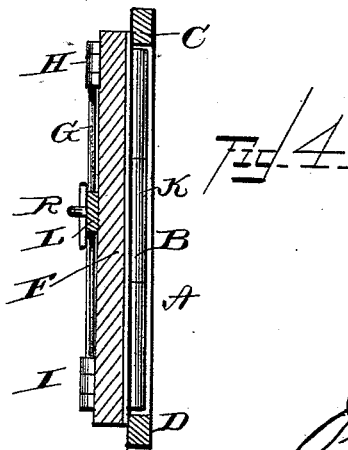
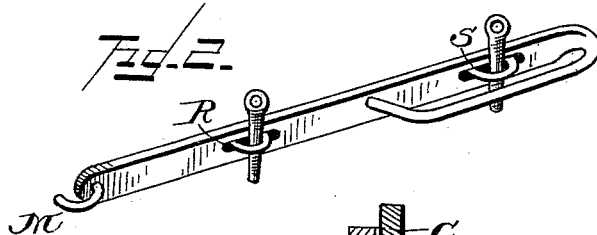
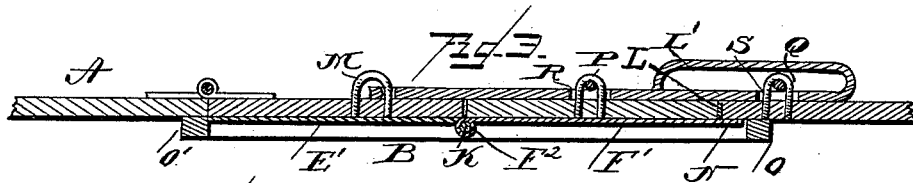
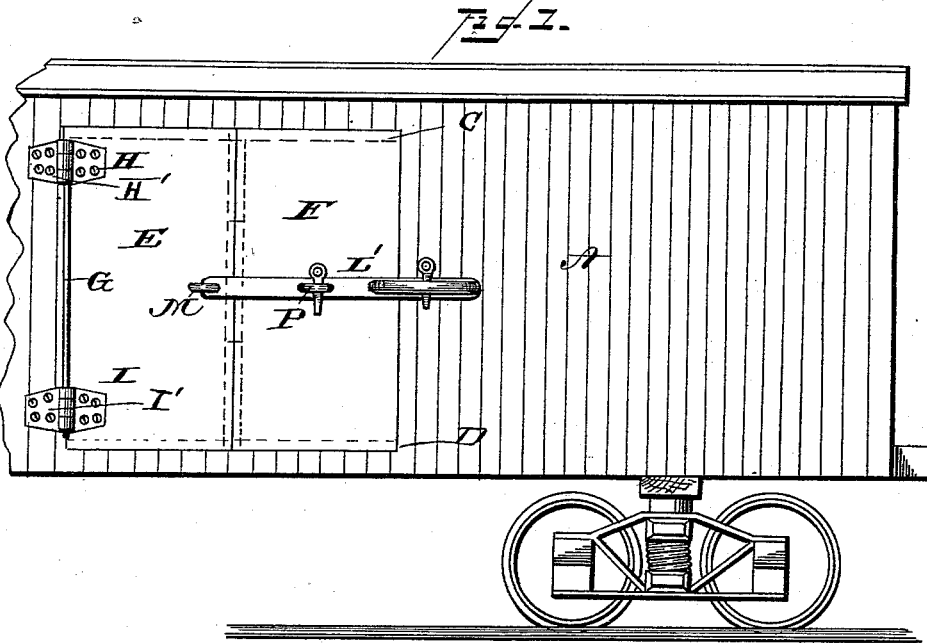


(No Model.)

J. K. LORTON.
CAR DOOR.

No. 420,305.

Patented Jan. 28, 1890.



WITNESSES
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L. A. Wooster.

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UNITED STATES PATENT OFFICE.

JAMES KNOX LORTON, OF BEECHER CITY, ILLINOIS.

CAR-DOOR.

SPECIFICATION forming part of Letters Patent No. 420,305, dated January 28, 1890.

Application filed June 17, 1889. Serial No. 314,633. (No model.)

To all whom it may concern:

Be it known that I, JAMES KNOX LORTON, a citizen of the United States, and a resident of Beecher City, in the county of Effingham and State of Illinois, have invented certain new and useful Improvements in Car-Doors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to car-doors for freight-cars; and it consists in the construction and novel combination of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, in which like letters of reference indicate corresponding parts, Figure 1 is a side elevation of a freight-car or of a refrigerating-car provided with my improved door and fastening. Fig. 2 is a detail view of the hinged securing-bar, staples or eyebolts, and locking-pins. Fig. 3 is a view of the open sectional door having the metal lining which projects beyond the edge of the outer door and engages the ledge of the car-wall opposite the hinge side of the door; and Fig. 4 is a detail sectional view of the car-door and the securing-bar.

Referring by letter to the accompanying drawings, A designates a portion of the side of the car-body, which is provided with a door-opening B, which is provided above and below with horizontal parallel stop pieces or bars C D, which prevent the closed door from moving too far inwardly after it has been closed.

The door proper is made in two sections E and F, hinged to each other, the rear one being hinged to the rear side of the door-opening B, preferably by means of a rod G, passed through the aligned eyes H H', and I I', secured to the car-body and to the rear section of the car-door, these aligned eyes being duplicated—that is, there being two of each near the upper and lower ends of the rear section of the car-door.

The inner faces of the car-door sections E and F are preferably metal-faced, (designated by the letters E' and F',) and the hinges F²

are formed on the meeting edges of the metallic facing, and the pintle K is passed down through the aligned eyes of the hinges in the ordinary manner employed in such instances. It will be seen from the drawings that the metallic facing F' extends laterally from the inner edge of the inner section of the door, forming a projecting lip or tongue, as indicated by the letter N, and is designed to come in contact with or in close proximity to a vertical strip O, which, together with an opposite parallel vertical strip O', connects the two horizontal strips C and D upon the inner side of the car-door, thus completing an inner rectangular frame, which not only serves to strengthen the opening, but also acts as a stop to limit the inward movement of the door. The front edge of the front door-section is also metal-faced, as at L, in order to protect the wood from wear in use.

The securing-bar L' is secured to the rear door-section by a staple M, passed through an opening in said bar into the rear section of the door, and staples P Q in the outer face of the front section of the door and in the outer wall of the car-body, near the door-opening B, enter the slots R S in the securing-bar and project through said slots, and are adapted to receive locking-pins or the hasps of padlocks to secure the locking-bar to the staples.

A bow or hand-piece is provided on the locking-bar near the front end of the same, whereby the locking-bar may be put in place and removed as necessity may require in locking and unlocking the securing-bar.

The device is both simple in construction and secure in its action, and is quite inexpensive when compared with its usefulness.

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

1. The combination, with a car-body having a door-opening provided with upper and lower stop-cleats, of the metal-lined door-sections hinged to each other, the hinged slotted door-securing bar, the staples entering the slots in the securing-bar, and the pins for securing the securing-bar in place, substantially as described.

2. The combination, with the car-body pro-

vided with a door-opening and a staple, of the hinged metal-lined door-sections provided with staples, and the slotted securing-bar provided with the bowed hand-piece, and locking-pins for holding the securing-bar in the closed position, substantially as specified.

3. The combination, with a car-body having a door-opening, said opening provided with upper and lower parallel inner strips or cleats projecting from the edge, respectively, of the upper and lower edges of the opening, vertical strips or cleats located upon opposite sides of the door-opening and connecting with the horizontal strips, a hinged sectional door

provided with a lining of metal, said lining projecting laterally at the inner end so as to form a projecting lip or tongue, a slotted securing-bar having a bowed hand-piece, and securing-bolts for fitting the projecting staples, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JAMES KNOX LORTON.

Witnesses:

JAMES HENRY PASLAY,
WILLIAM GREEN MARTIN.