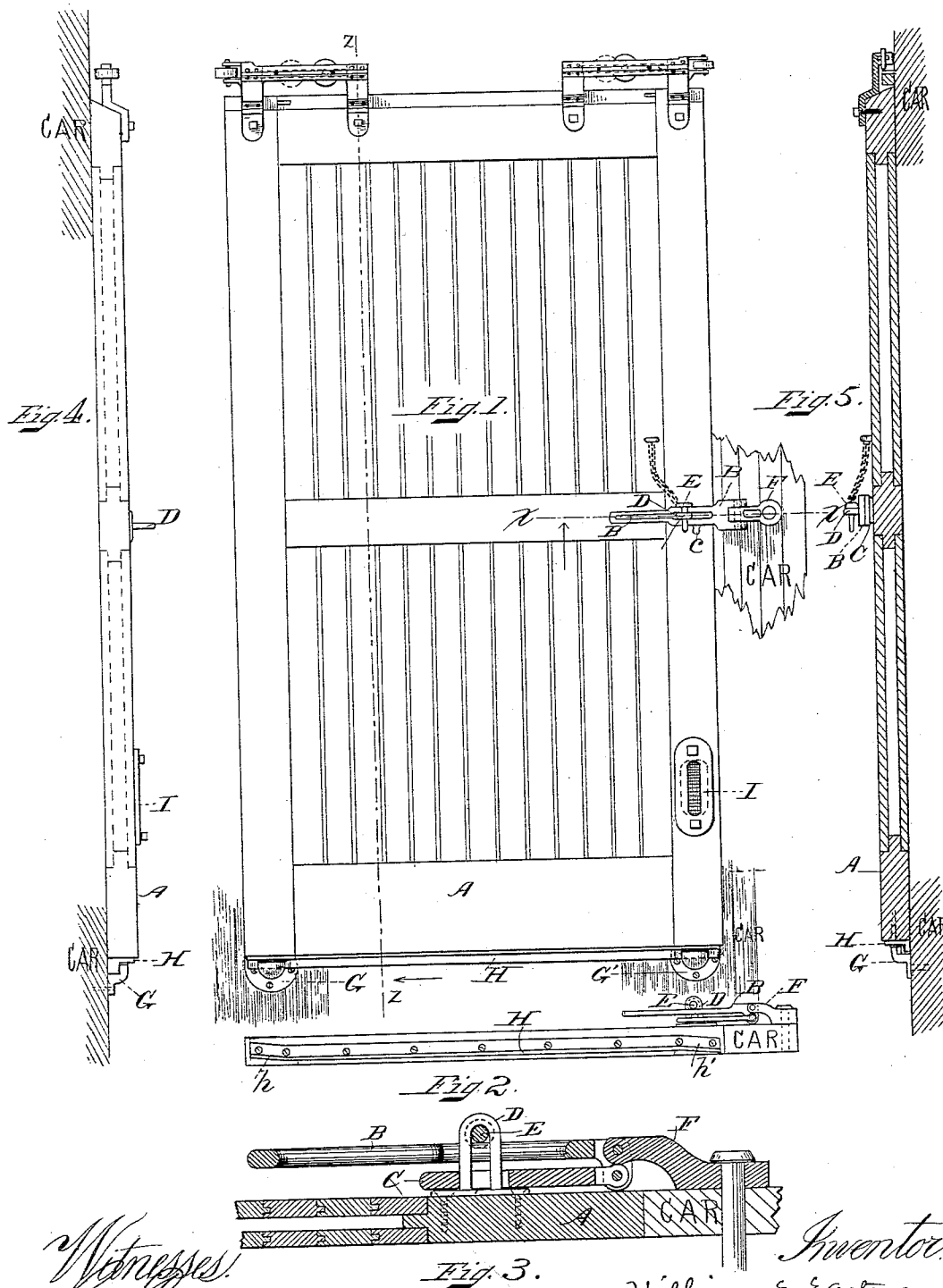


(No Model.)

W. E. EASTMAN.
SLIDING DOOR LOCK AND FIXTURE.

No. 476,373.

Patented June 7, 1892.



Witnesses:
R. Carson
E. Case.

Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM E. EASTMAN, OF BOSTON, MASSACHUSETTS.

SLIDING-DOOR LOCK AND FIXTURE.

SPECIFICATION forming part of Letters Patent No. 476,373, dated June 7, 1892.

Application filed September 28, 1891. Serial No. 406,993. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. EASTMAN, a citizen of the United States of America, residing at the city of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Freight-Car-Door Fixtures, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to provide certain fixtures for freight-car doors whereby the same may be tightly shut and firmly held and also drawn against the body of the car, and I attain these ends in the following-described manner:

Figure 1 is an elevation of a car-door with my fixtures attached. Fig. 2 is a bottom view of the door. Fig. 3 is an enlarged detail in line *x x* of my device for shutting closely the door and fastening the same. Fig. 4 is an edge view of the door, and Fig. 5 is a section of the door through line *z z* of Fig. 1.

My invention is particularly adapted to freight-cars in which it is desired to exclude the outside air, as in refrigerator-cars and heated cars, though the fastener may with advantage be applied to ordinary freight-car doors.

Like letters of reference denote the same parts in the several figures.

A is a car-door; B, the pivoted slotted lever; C, the hasp; D, the staple, and E the fastening-pin.

F is a stationary bracket bolted, as shown, to the body of the car. The locking-lever B is bent inward at its right-hand end at an angle, so that the motion of its two ends is in lines approximately at right angles to each other, acting as a bell-lever to move the hasp C, which is pivoted to the bent end against the staple D in either direction, according as the lever is pressed against or drawn away from the door, it being pivoted in the stationary bracket. When the door shall have been closed as far as is practicable by pulling upon the handle I and the hasp swung over the staple D, the lever in its sweep toward the door will, by virtue of operating as a bell-lever, exert a powerful pull on the staple and cause the door to be snugly pressed against the jamb-strip. When the door is to be opened, a movement of the lever away from the car will cause

the hasp to give a powerful thrust to start the door open until the bent ends *h h'* of the angle-iron H, attached to its bottom surface, shall have become disengaged from the clips G G'. This angle-iron strip H *h h'* at the bottom of the door works in the clips G G' and has its ends bent in such a manner that both ends are drawn as wedges into the clips whenever the door is close shut, and this action pushes the door against the side of the car (to prevent free ingress or egress of air) and at the same time wedges the door so tightly that the action of the locking-lever becomes necessary to disengage the angle-iron from the clips. As soon as the beveled bent surfaces of the angle-iron are disengaged from the clips the door moves freely and loosely.

To prevent the locking-lever and the hasp from leaving the staple together, I have provided the thumb-piece *c*, attached to or made a part of the hasp C, by which the same may be held in position for the angular action of the lever B in causing the hasp to act against the staple in opening the door. The pin E may of course be dispensed with and a padlock used in its place, or a hole drilled through its end will admit the wire of a seal.

The door-handle I is made flat and is chambered, as shown by dotted lines, for the fingers to get a hold on it; but the chamber is not carried lower than is shown to prevent retention of rain or snow water.

Having thus described my invention, I claim as new—

1. The combination of an angle-iron with ends bent to form inclined planes, a car-door, and suitable clips for pressing the door against the car, with a locking device working and constructed substantially as described to force the bent ends of the angle-iron into and out of the recesses of the clips, for the purpose specified, substantially as described.

2. In a freight-car-door fastening, the combination of a bracket permanently attached to the body of the car, a locking-lever hinged to said bracket, a hasp hinged only to said locking-lever, and a staple permanently attached to the door, which staple receives both the locking-lever and the hasp, substantially as described.

3. In a freight-car-door fastening, the combination of a bracket permanently attached

to the body of the car, a locking-lever hinged to said bracket, a hasp hinged only to said locking-lever and provided with a thumb-piece for holding it away from the locking-lever, and a staple permanently attached to the door, which staple receives both the locking-lever and the hasp, substantially as described.

4. A freight-car-door closing and locking device consisting of a lever in the form of a bell-lever, carrying at one end a hasp hinged thereto and itself hinged at its angle to a bracket permanently attached to the body of

the car, in combination with a staple attached to the car-door, against which the force of the bell-lever is exerted to both open and close the said door and through which a lock or other fastening may be passed above both the locking-lever and the hasp, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM E. EASTMAN.

Witnesses:

CHARLES ALMY, Jr.,

LOUIS T. HOWARD.