(No Model.)

W. D. PALMETIER.

DOOR FOR GRAIN CARS.

No. 590,332. Patented Sept. 21, 1897.

Fig. 1.

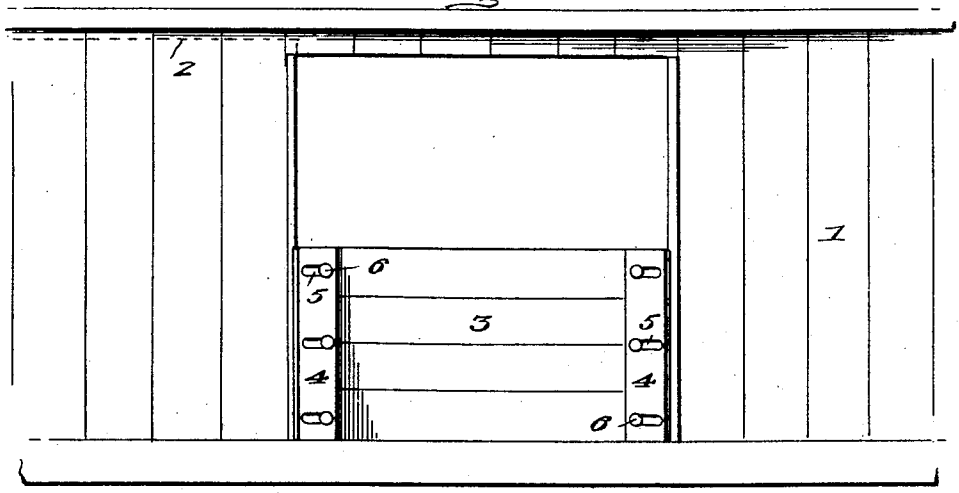


Fig. 2.

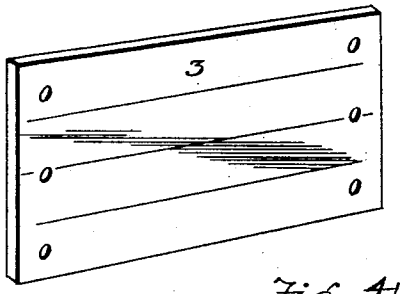


Fig. 4.

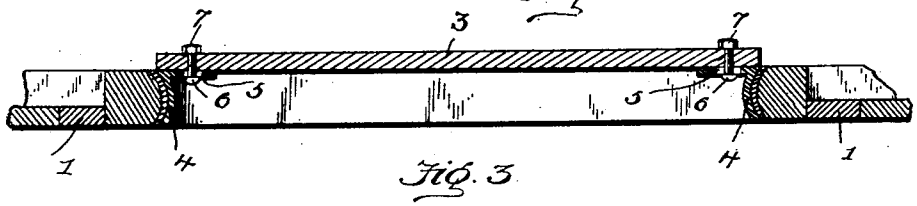
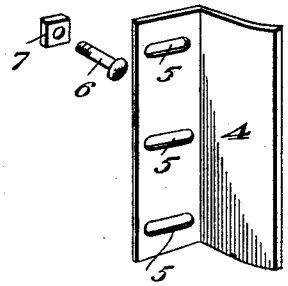


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WARREN D. PALMETIER, OF LISBON, NORTH DAKOTA.

DOOR FOR GRAIN-CARS.

SPECIFICATION forming part of Letters Patent No. 590,332, dated September 21, 1897.

Application filed February 27, 1897. Serial No. 625,366. (No model.)

To all whom it may concern:

Be it known that I, WARREN D. PALMETIER, a citizen of the United States, residing at Lisbon, in the county of Ransom and State of North Dakota, have invented certain new and useful Improvements in Doors for Grain-Cars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to doors for grain-cars, and more particularly to that class of doors which are adapted to be secured to the door-frame inside of the usual outside sliding door, so that when the sliding door is drawn to one side of the door-opening the grain contained in the car will not fall out.

The object of my invention is to provide a door of this character which may be securely fastened in place and which will not damage the door-frame, which is one of the main objections to the doors commonly used, wherein laths or cleats are nailed against the frame for the purpose of holding the grain-door in position.

With this object in view the invention consists of certain features of construction and combination of parts which will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of a portion of a car, showing the outside door slid away from the door-opening and the grain-door in position. Fig. 2 is a detail perspective view of the grain-door removed from the car, and Fig. 3 is a similar view of the grain-door casting. Fig. 4 is a horizontal sectional view through one of the door-castings and one of the battens.

In the drawings, 1 denotes the side of a car, 2 the ordinary sliding door, and 3 the grain-door. The outer ends of the grain-door are provided with angular castings 4, provided with horizontal slots 5, through which and the grain-door pass adjusting-bolts 6, having nuts 7 upon their ends.

In operation the doors are placed in the door-opening and the castings are moved laterally until they are brought into firm contact with the sides of the door-frame, and the nuts are tightened so as to hold the door firmly in place.

When it is desired to remove the grain-door, all that is necessary is to loosen the nuts on the ends of the bolts, slide the castings back, and the door may be readily taken out. The plain portion of the castings may be curved to fit the metallic batten-strip usually secured to the sides of the door-frame, or the plain portions may be otherwise shaped or constructed to correspond with the inner faces of the door-frame.

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

The combination with a grain-car, the door-frame of which is provided with curved metallic battens, of a grain-door having angular castings, one portion of each of which is curved to conform to the battens, and the other portion of which is provided with horizontal slots, and bolts and nuts for securing the castings to the ends of the door, substantially as set forth.

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

WARREN D. PALMETIER.

Witnesses:

W. A. PAUMBAKER,

H. P. GRINAYER.