

(No Model.)

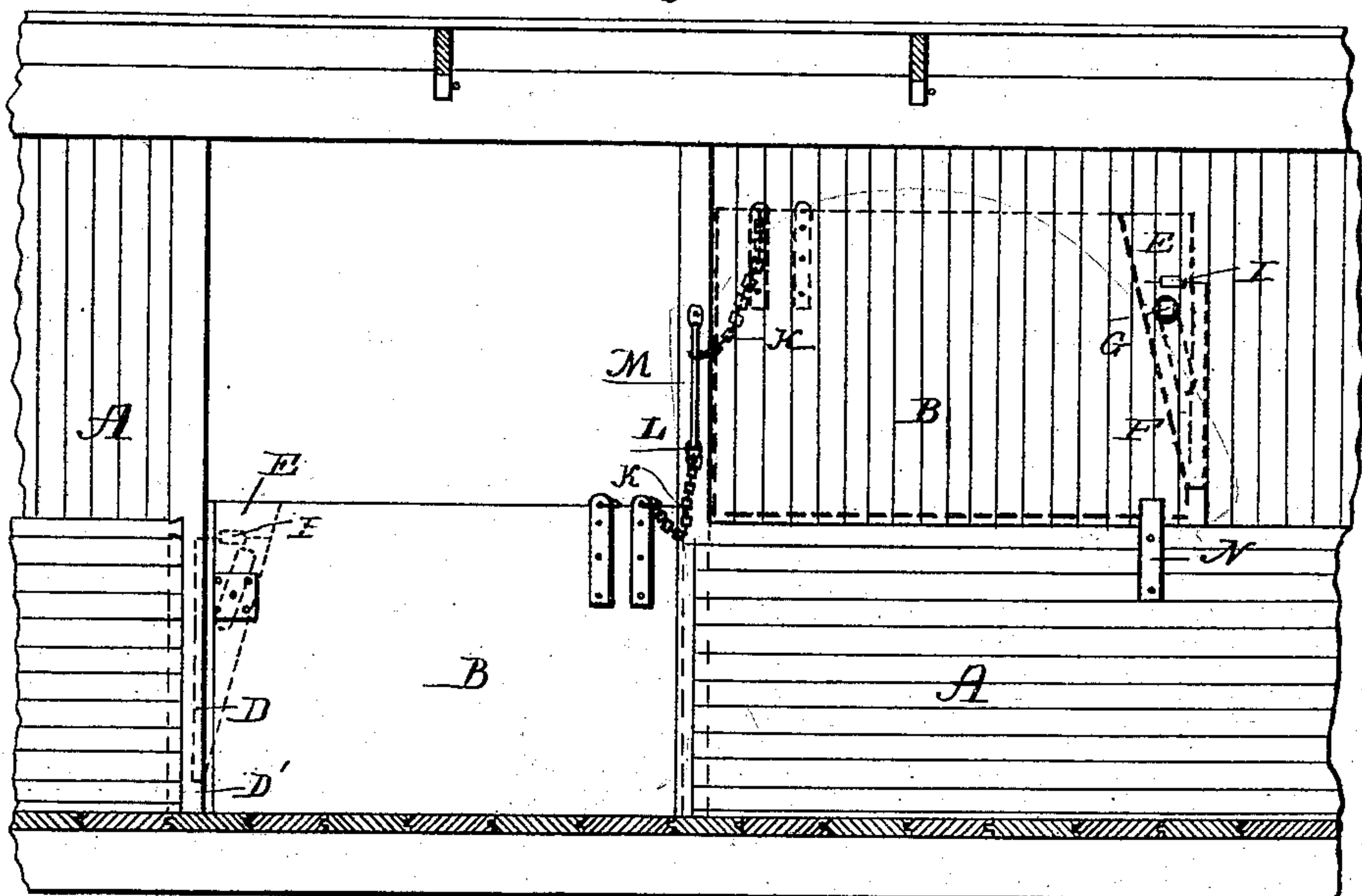
E. M. WILCOX.

GRAIN CAR DOOR.

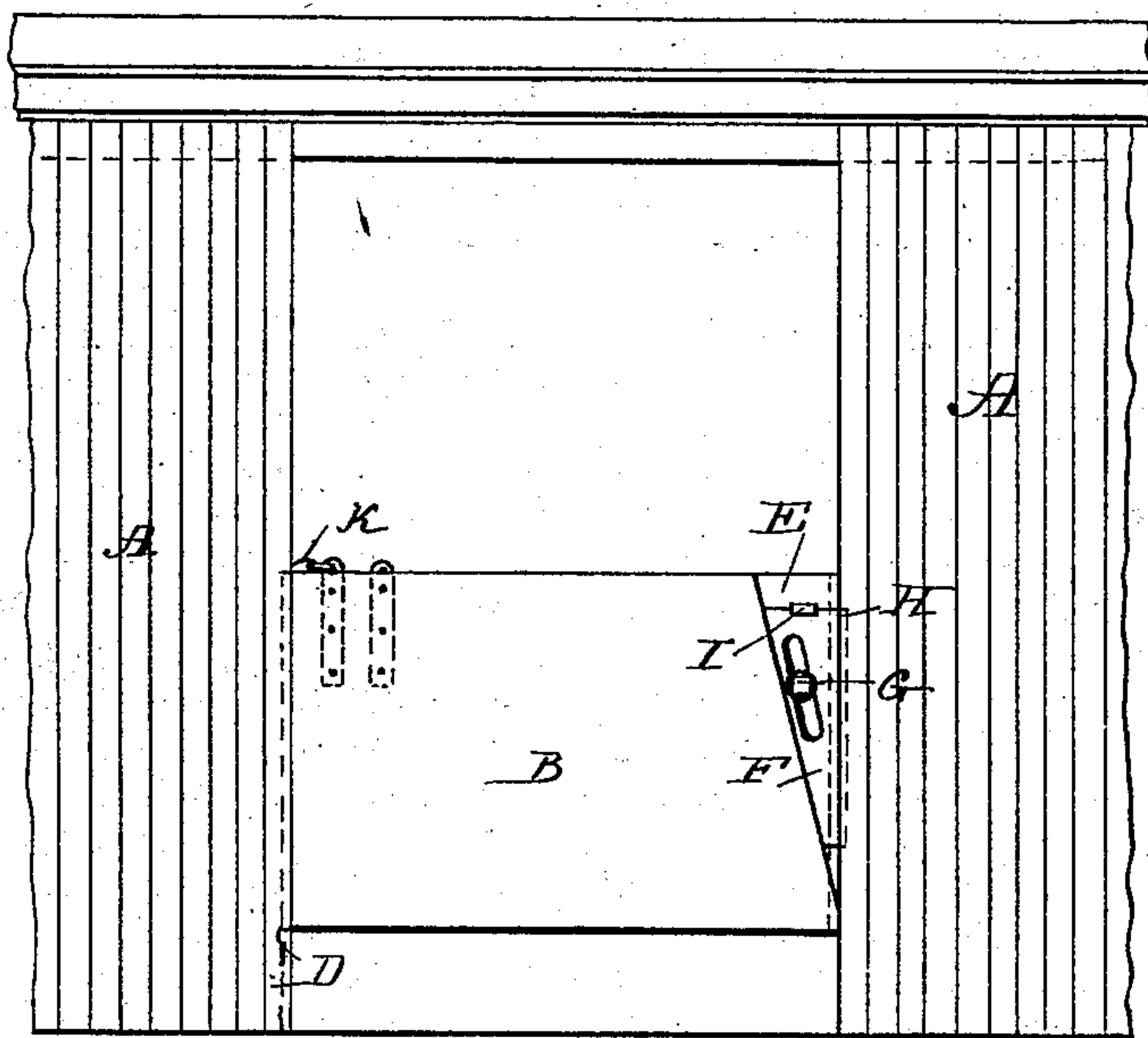
No. 275,448.

Patented Apr. 10, 1883.

*Fig. 1.*



*Fig. 2.*



Witnesses:

W. B. Masson  
J. O. Brust.

Inventor

Edward M. Wilcox  
by J. R. Nottingham atty.

# UNITED STATES PATENT OFFICE.

EDWARD M. WILCOX, OF OMAHA, NEBRASKA, ASSIGNOR OF ONE-THIRD TO  
JAMES MORRIS, OF SAME PLACE.

## GRAIN-CAR DOOR.

SPECIFICATION forming part of Letters Patent No. 275,448, dated April 10, 1883.

Application filed December 6, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD M. WILCOX, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Grain-Car Doors; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in grain-car doors; and it has for its objects to dispense with the usual hinges, latches, bars, and locks, and provide a door that may be securely held in place and removed when required, as more fully hereinafter set forth in the specification and pointed out in the claims. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a longitudinal sectional view of a car in which the door is shown in a closed position, and also, in dotted lines, the position in which it is suspended when unclosed and not in use; and Fig. 2 represents a side elevation of the outside of the car, showing the door sliding into a closed position.

The letter A indicates an ordinary grain-car, which is provided with the usual openings at the side, and B indicates the door provided to close said openings. One of the side posts of the car, at the opening, is provided with a vertical recess, in which the edge of the door sets when in a closed position, the said recess being indicated by the dotted lines and lettered D in the drawings. The other side post has secured on its inner side a rabbit strip or cleat, D', against which the edge of the door closes. One side of the door is formed with a beveled or angular recess, E, in which is located a slotted wedge, F, the said wedge being confined in the recess by means of a headed bolt, G, secured to the door and passing through the slot in the wedge. The side post of the car, adjacent to the wedge, is provided with a vertical recess, H, in which

the vertical edge of the wedge is adapted to set when the door is closed. The slot in the wedge is arranged obliquely, and the wedge is provided with a lug, I, by means of which it may be elevated. The door has attached to it one end of a chain, K, the other end of which carries a ring, L, adapted to move on a vertical bracket, M, secured to one of the side posts of the car.

The operation of my improved door is as follows: When in closed position the vertical edge of the door rests in the recess in one of the side posts, (shown at D,) and the vertical edge of the wedge rests in the recess in the opposite side post, securely fastening the door in place. To remove the door, the wedge is elevated, freeing the door at one edge, when the weight of grain behind it will force the door from its seat, permitting the grain to be discharged. The chain will hold the door and prevent it from being detached from the car. When the door is not in use it is held against the interior of the side of the car by means of a bracket, N, as indicated in Fig. 1 of the drawings.

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

1. The combination, in a grain-car provided with vertical recesses in the posts at opposite sides of the door-opening, of the door having a beveled or angular recess and a movable wedge located therein, and adapted to engage one of said vertical recesses to hold the said door in place, substantially as specified.

2. In combination with the side posts of the door, having vertical recesses, the door and its angular recess, and the slotted wedge confined in said recess by means of a bolt, and having a projection by which it may be elevated to release the door, substantially as specified.

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

EDWARD M. WILCOX

Witnesses:

C. W. WADSWORTH,  
B. M. WILLSEY.