

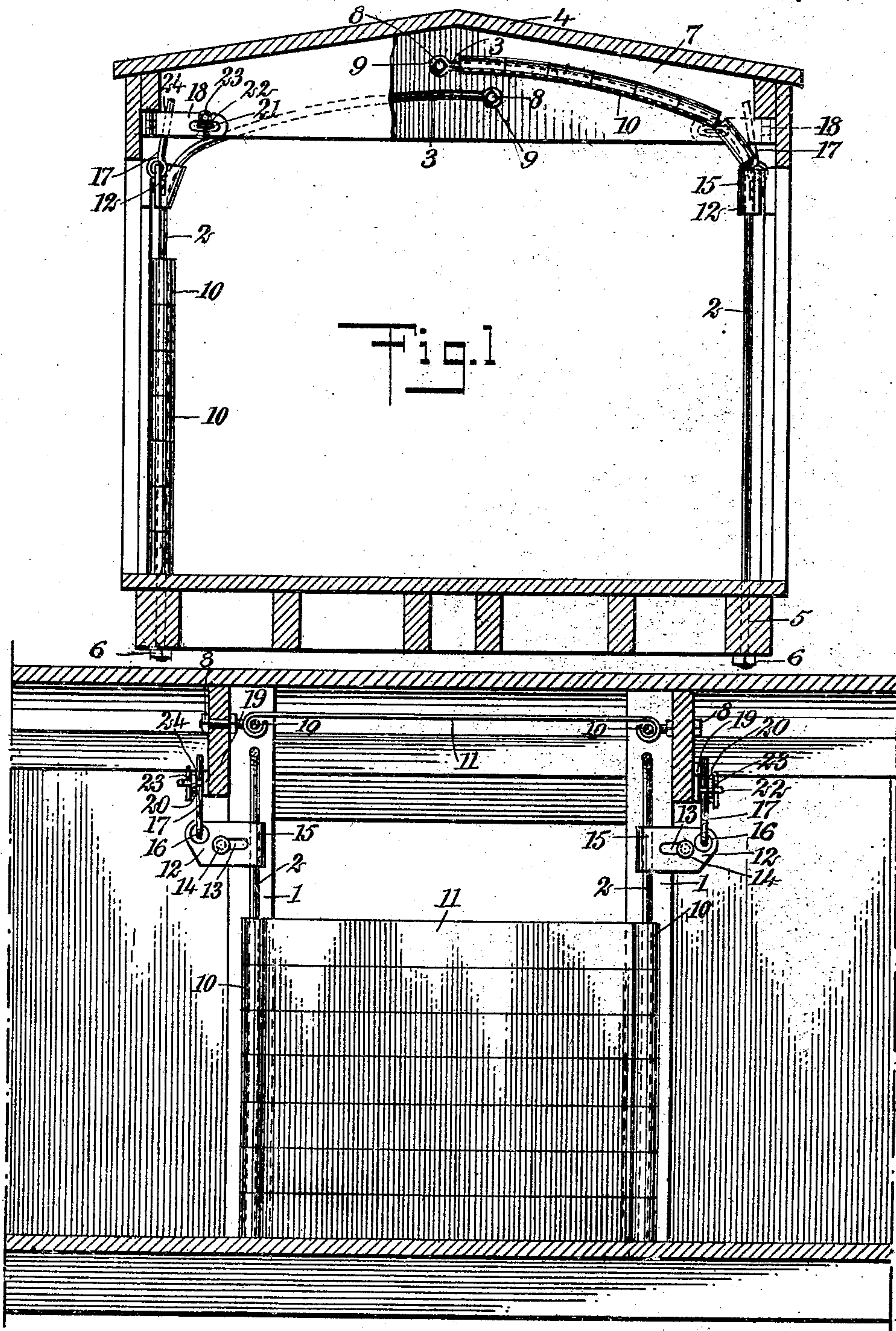
C. W. LEANING.

CAR DOOR.

APPLICATION FILED MAY 19, 1908.

929,453.

Patented July 27, 1909.



WITNESSES

*John A. Beeghly*

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Fig. 2

INVENTOR

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BY

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# UNITED STATES PATENT OFFICE.

CHESTER W. LEANING, OF YANKTON, SOUTH DAKOTA.

## CAR-DOOR.

No. 929,453.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed May 19, 1908. Serial No. 433,676.

*To all whom it may concern:*

Be it known that I, CHESTER W. LEANING, a citizen of the United States, and a resident of Yankton, in the county of Yankton and State of South Dakota, have invented a new and Improved Car-Door, of which the following is a full, clear, and exact description.

This invention relates to car doors, and more particularly such as are formed of a number of independently movable sections arranged on guideways and adapted to be moved into inoperative positions away from the doorway of the car when not in use.

The object of this invention is to provide a door adapted to be used in connection with cars or the like, and consisting of a series of sections or cross members arranged horizontally on substantially parallel guideways and adapted to be moved into position in front of the doorway to form a closure extending upward to any desired height from the floor, each section being further adapted to be moved into an inoperative position away from the doorway when not in use.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in both figures.

Figure 1 is a transverse section of a car showing one embodiment of my invention applied thereto; and Fig. 2 is a longitudinal section of the same.

Before proceeding to a more detailed description of my invention, it should be understood that I provide doors for inclosures of various kinds, but particularly adapted for freight cars and composed of a number of independently movable sections arranged on guideways and adapted, when not in use, to be arranged in inoperative positions away from the doorway, preferably above the same. This device is of particular advantage in that any desired number of sections can be moved into operative positions, according to what is being carried in the car; as, for instance, with grain or cattle, it would not be desirable to entirely close up the doorway. Further, in loading the cars, the sections are moved into inoperative positions at the roof of the car, and are thus out of the way, and the sections can be moved into

place one at a time as the car is being loaded. I further provide suitable means for locking the sections in the inoperative positions, so that only the desired number will be used as a door.

Referring more particularly to the drawings, I provide, at either side of the door casing 1 of a car, guideways 2 consisting of elongated members having their upper ends 3 laterally disposed and inwardly directed, so that they are positioned adjacent to the roof 4 of the car. The lower ends 5 of the guideways are suitably secured to the floor of the car by means of nuts 6 or the like, while their upper ends 3 are secured to the roof beams 7 adjacent the center of the car by means of bolts 8 or the like. As shown in the drawings, the ends 3 of the guideways are bent upon themselves to form eyes 9 to receive the bolts 8. The guideways are arranged in substantially parallel pairs, and each pair has a member arranged on opposite sides of the double doorways. As illustrated in the drawings, the opposite pairs of members are arranged so that the extremities of one overlap the extremities of the other on the roof beams 7, so that a suitable space is left between them. However, it should be understood that I do not limit myself to this particular construction of the guideways, particularly in regard to the upper ends thereof, as the guideways of one doorway may be integral with the guideways of the doorway at the opposite side of the car.

Arranged upon the guideways and having their opposite ends 10 suitably bent to form sleeves to receive the guideways, are sections 11, of any suitable material such as wood, metal, or the like, or of a combination thereof. These sections are adapted to move vertically along the guideways so that they can be inoperatively positioned at the roof of the car. When the sections are not in use, they occupy positions upon the guideways above the doorway and beneath the roof of the car. For holding said sections in this position I may employ any suitable locking means, but I prefer to use the means illustrated.

Located on the sides of the car adjacent to the guideways, are keepers 12 each having a slot 13 for receiving a bolt or screw 14 extending into the car wall. One end 15 of the keeper is suitably bent to removably engage the guideways 2. At the opposite end of the



keeper from that which is bent, is an opening 16 at which is arranged a locking rod 17 having one end bent upon itself to form a link connection at the opening 16.

5 Arranged on the cross beams 7 above the keepers 12, are retainers 18 consisting of face plates 19, and hinged lock plates 20. The lock plates have slots 21 near their outer ends, for receiving eyes 22 arranged on the  
10 face plates 19. Pins 23 are adapted to pass through the eyes 22 to secure the lock plates upon the face plates. Each lock plate further has a groove 24 on its inner face for receiving the end of the lock rod 17, so that  
15 when the latter is in position in the groove and the lock plate secured in a closed position by means of the pin 23, the lock rod serves to firmly hold the keepers 12 in position on the guideways to hold the sections  
20 in an inoperative position at the roof of the car.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

25 1. In a device of the character described, guide rods arranged on opposite sides of a door way, a door formed of sections and arranged to slide on the guide rods, headed projections adjacent to the guide rods, keep-  
30 ers slotted to receive the said projections and having their inner ends bent to extend partially around and removably engage the guide rods, and means connected with the

outer ends of the keepers for locking them in position. 35

2. In a device of the class described, guide rods arranged on opposite sides of the doorway of a car and having a portion laterally and inwardly disposed, door sections slidably mounted on said guide rods and adapted to  
40 be inoperatively positioned on said laterally and inwardly disposed portions of said guideways, sliding keepers adapted to engage the guide rods for securing said sections in said inoperative position, and means for locking  
45 the keepers in position.

3. In a device of the class described, guideways arranged on either side of the doorway of a car and having the upper portions thereof laterally and inwardly disposed, sections  
50 movable on said guideways and adapted to be held in inoperative positions at said laterally and inwardly disposed portions of said guideways, keepers adapted to engage said guideways for holding said sections in inop-  
55 erative positions, locking rods arranged upon said keepers, and retaining means for securing said rod and said keepers in an operative position.

In testimony whereof I have signed my  
60 name to this specification in the presence of two subscribing witnesses.

CHESTER W. LEANING.

Witnesses:

B. S. WILLIAMS,

G. W. FROSTENSON.