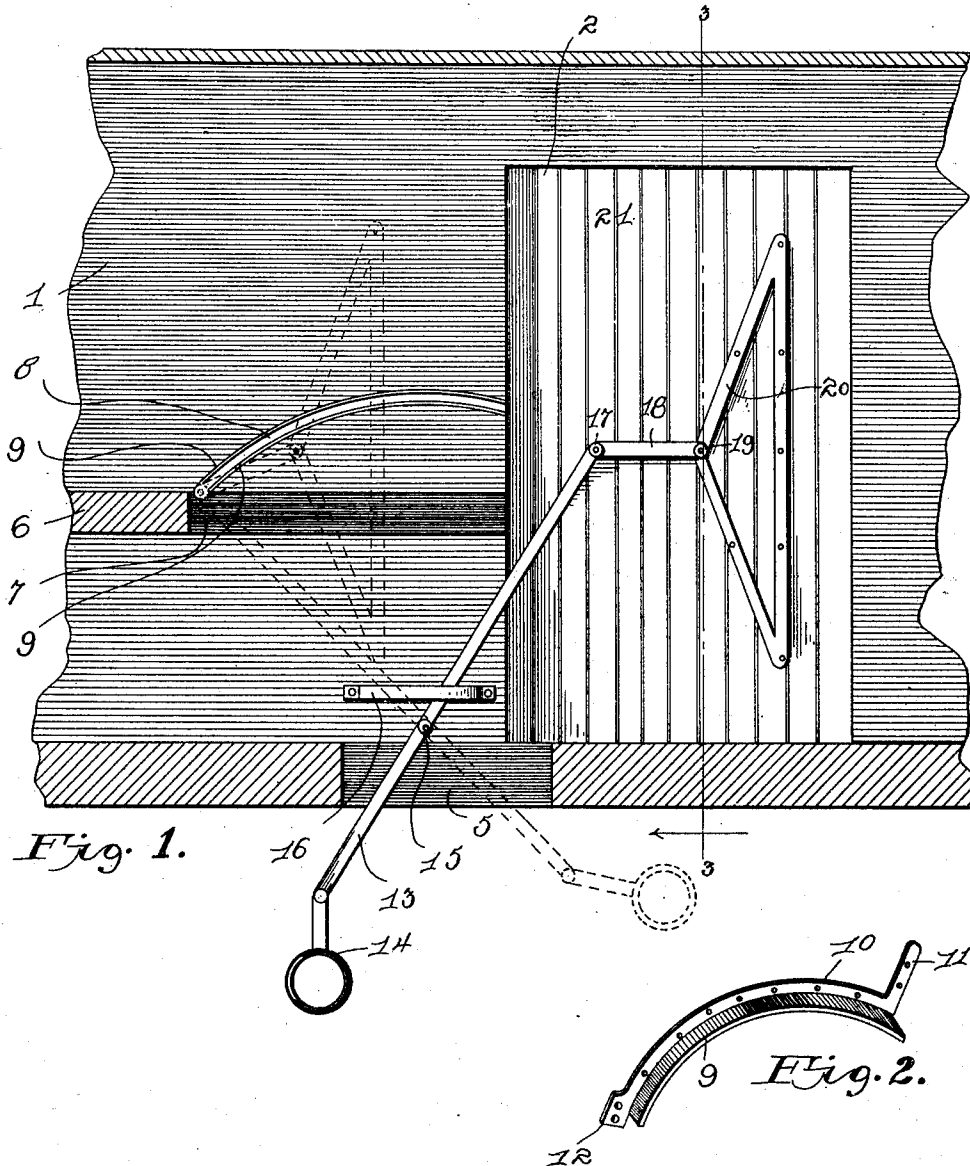


J. A. PICKETT.
FREIGHT CAR DOOR OPERATOR.
APPLICATION FILED SEPT. 10, 1909.

964,934.

Patented July 19, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES A. PICKETT, OF PULASKI, VIRGINIA.

FREIGHT-CAR-DOOR OPERATOR.

964,934.

Specification of Letters Patent.

Patented July 19, 1910.

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To all whom it may concern:

Be it known that I, JAMES A. PICKETT, a citizen of the United States of America, residing at Pulaski, in the county of Pulaski and State of Virginia, have invented certain new and useful Improvements in Freight-Car-Door Operators, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to car door operating mechanism and the principal object of the same is to provide means whereby a door of a car may be readily opened or closed by a person standing upon the ground.

In carrying out the object of the invention generally stated above, it is contemplated providing a car with a pivotally mounted lever which projects through the car and has a pivotal connection with a door, so that by rocking said lever, the door may be opened or closed.

In connection with the foregoing, the invention contemplates the employment of guiding means for the movements of the lever and also rockers and trackways which facilitate the movements of the door.

It will be understood, of course, that in the practical application of the invention, the essential features of the same are necessarily susceptible of changes in details and structural arrangements, one preferred and practical embodiment of which is shown in the accompanying drawing, wherein—

Figure 1 is a similar view of the interior of a car. Fig. 2 is a similar view of one of the guard plates for the curved guide slot of the car.

Referring to said drawings by numerals, 1 designates a car and 2 the doorway thereof. The bottom of the car adjacent one lower corner of the doorway 2 is provided with a longitudinal guide slot 5, and the usual longitudinal side beam 6 has its end which is adjacent the said doorway also provided with a guide slot 7, said guide slot 7 being longer than the guide slot 5. Above the said slotted end of the beam 6, the car is provided with a curved guide slot 8, the inner end of which terminates adjacent the inner end of the guide slot 7, and its outer end communicating with the doorway 2. Guard plates 9 are provided for the upper and lower edges of said guide slot 8, said plates each having an angular flange 10 for fastening along the outer edges of said guide slot 8, the outer end of each flange being

provided with an elongated strap 11 which is fastened along the edge of the doorway at the outer end of the slot 8, and their inner ends being widened as indicated at 12 and swung to close the inner end of said slot 8, as shown in Fig. 1 of the accompanying drawings.

A lever 13 projects through and beyond the slot 5 in the bottom of the car and has a handle 14 pivotally connected to its lower end. Said lever has a pivotal connection 15 with the side of the car above the slot 5, and passes between a retaining strap 16 and the side of the car. The upper end of said lever is fastened to one end of an elongated pivot bolt 17, the other end of said bolt 17 being in pivotal engagement with one end of a link 18, said link, in turn, having a pivotal connection 19 with a plate 20 rigidly fastened on the car door 21. Said plate 20 has been shown as of a triangular shape, the pivot bolt 19 being located at the apex of the triangle, but it will, of course, be understood that the shape of the plate is immaterial.

It will be seen from the foregoing that when the lever 13 is rocked to open the door, the pivot 17 will enter and be guided by the curved slot 8, until it contacts with the end of said slot, at which point the door is in an open position. By rocking the lever in an opposite direction, the door will be swung to a closed position. As will be obvious, the slots 5 and 7 guide the lever 13 in its rocking movements, and the loop 16 serves to retain the said lever in operative position.

As is clearly shown in Fig. 1, the handle 14 projects well beyond the bottom of the car, so that the lever 13 may be readily manipulated from the outside of the car to open and close the door.

What I claim as my invention is:—

1. In a device of the character described, the combination with the car and the door thereof, said car being provided with a curved guide slot, of a lever pivotally mounted in said car and having one end projecting through said car, a pivot pin projecting from the other end of said lever and adapted to travel in said guide slot, a link pivotally mounted on said pin, and a pivotal connection between said door and said link.

2. In a device of the character described, the combination with the car and the door thereof, said car being provided with a guide slot, a lever pivotally mounted within said

car and having one end projected below the car, a link pivoted to said door, and a pivot pin connecting said link and lever, said pivot pin being guided by said guide slot.

- 5 3. In a device of the character described, the combination with the car and the sliding door thereof, said car being provided with a lower, an intermediate and a curved upper guiding slot, a lever pivotally mounted in
10 said car and having one end projected through and beyond said lower guiding slot and also being guided in its pivotal move-

ments by said lower and intermediate slots, a pin carried by the inner end of said lever and guided by the said curved slot, and a 15 link having one end pivotally connected to said lever and its other end pivotally connected to said door.

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

JAMES A. PICKETT.

Witnesses:

R. D. WASHINGTON,
J. F. TURNER.