

(No Model.)

J. C. WANDS.
CAR DOOR.

No. 459,665.

Patented Sept. 15, 1891.

Fig. I.

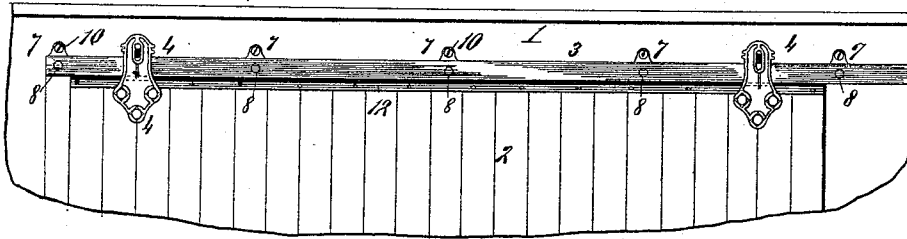


Fig. II.

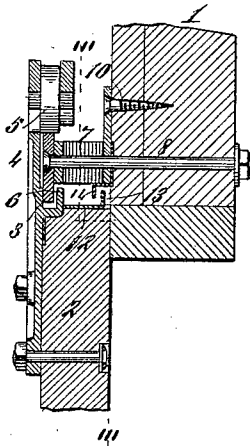


Fig. III.

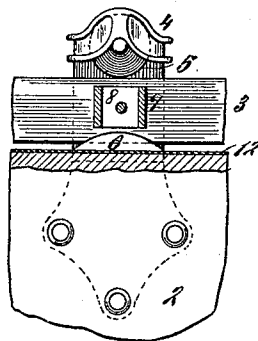


Fig. IV.

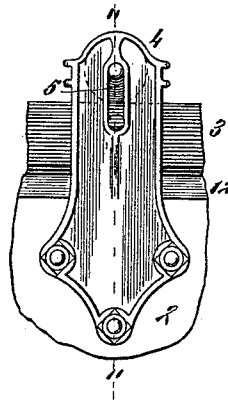
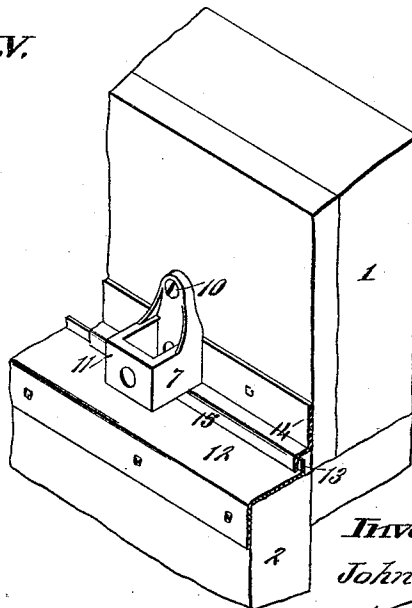


Fig. V.



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UNITED STATES PATENT OFFICE.

JOHN C. WANDS, OF ST. LOUIS, MISSOURI.

CAR-DOOR.

SPECIFICATION forming part of Letters Patent No. 459,665, dated September 15, 1891.

Application filed March 3, 1891. Serial No. 383,551. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. WANDS, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Car-Doors, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to means of forming a shelter which excludes rain or water, and which also serves to prevent the warping of the door.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a side elevation illustrative of my invention. Fig. II is a vertical transverse section taken on line II II, Fig. IV. Fig. III is a vertical longitudinal section taken on line III III, Fig. II. Fig. IV is an enlarged detail elevation. Fig. V is a detail perspective view.

Referring to the drawings, 1 represents part of the body of a car, and 2 part of the door.

3 represents a rail or track from which the door is suspended through means of suitable hangers 4. I have shown the hangers provided with rollers 5, which bear upon the rail 3, and with spurs or lips 6, which take under the lower edge of the rail, as shown in Fig. II, and prevent the displacement of the door from the rail.

In carrying my invention into practice the preferred manner of securing the rail 3 to the side of the car consists in the use of brackets 7, placed a suitable distance apart, and against the outer end of which the rail 3 rests and is held by bolts 8, passing through the rails, through the brackets, and through the body of the car, as shown clearly in Fig. II. The brackets may be further secured to the body of the car by means of screws 10. I prefer to make the brackets 7 open, as shown clearly in Figs. II and V, so as to prevent the lodging of dirt upon them. By the use of these brack-

ets the rail 3 is permanently secured to the car and without the use of a strip running along beneath it, as has been the usual practice. The outer ends of the brackets have preferably a flat surface, as shown at 11, Fig. V, so as to form a good bearing for the rail.

My invention relates strictly to a means for keeping the rain and water from entering at the top of the door, and which consists of a cap-plate 12, secured to the door, as shown clearly in Fig. V, and which has an upturned inner edge 13. In connection with this cap 12 I use a plate 14, secured to the body of the car, (preferably before the brackets 7 are applied,) and the lower edge of which is bent outward and downward, as shown at 15, Fig. V, and covering the edge 13 of the cap 12. It will thus be seen that these plates will form a joint preventing water and rain from entering at the top of the door, and in addition to this they will prevent the warping of the door by their respectively upturned and downturned edges coming in contact with each other.

I claim as my invention—

1. In combination with a car-door having a cap-plate 12, with an upturned edge 13, a plate 14, secured to the car-body and having an outwardly and downwardly extending lower edge, substantially as and for the purpose set forth.

2. The combination of the car-body, the rail secured thereto, the car-door suspended from said rail, a cap-plate 12, secured to the upper edge of said door and provided with an upturned edge 13, and a plate 14, secured to the car-body inside of the supporting-rail and having an outwardly and downwardly extending edge which overlaps the upturned edge 13, substantially as and for the purpose set forth.

JNO. C. WANDS.

In presence of—

A. M. EBERSOLE,
THOMAS KNIGHT.