

(No Model.)

A. M. BLACK.
CAR GATE.

No. 526,214.

Patented Sept. 18, 1894.

Fig. 1.

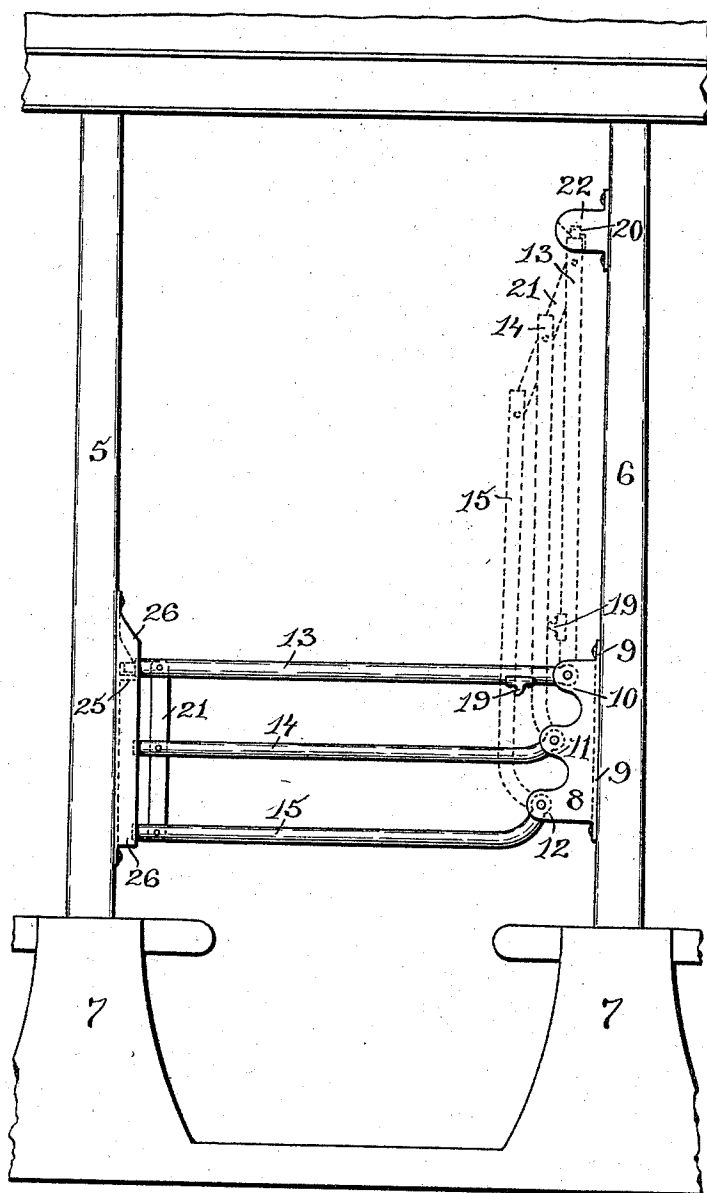


Fig. 2.

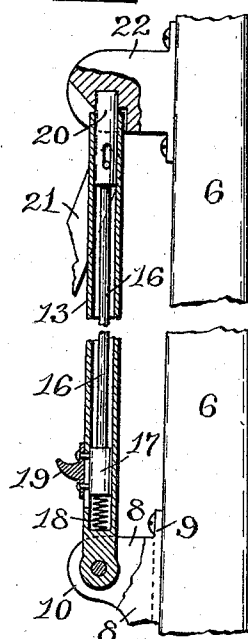
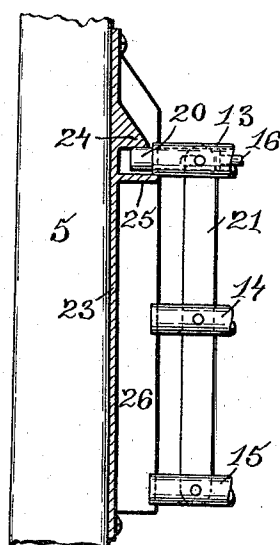


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ARTHUR M. BLACK, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF
ONE-HALF TO ALMOND S. BAXTER, OF SAME PLACE.

CAR-GATE.

SPECIFICATION forming part of Letters Patent No. 526,214, dated September 18, 1894.

Application filed May 10, 1894. Serial No. 510,741. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR M. BLACK, of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Car-Gates; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to improvements in gates for open cars having transversely arranged seats.

The object of the invention is to provide a novel device for closing the open ends of the seats in order to prevent accidents.

Another object is to so construct a car-gate of pivoted bars that they will at all times lie parallel to each other being at their widest separation when the gate is closed, and, when open, separated sufficiently to prevent the catching of a person's fingers between the same.

Still another object of the invention is to provide a new and improved gate for open cars which will be simple and durable in construction and efficient in operation.

The invention consists in the peculiar construction of the bracket, the gate bars of different lengths pivoted thereto and pivotally connected by a cross bar, a latching device contained within one of the bars, and catches with which the latch may engage.

The invention also consists in such other novel features of construction and combination of parts as may hereinafter be more fully described, and pointed out in the claims.

Figure 1 represents a side view of portions of a car showing the improved gate attached thereto. Fig. 2 represents a view of portions of one of the standards with the latching bar in section showing the details of construction. Fig. 3 represents an enlarged detail view of the end portions of the gate secured in the closed position.

Similar numbers of reference designate corresponding parts throughout.

In the drawings 5 and 6 indicate the side standards of an open car between which entrance is afforded to the seats 7—7. To the bracket 6, at its lower inner side, is secured a bracket formed by two side-plates 8—8

united by a back 9. The side plates are each furnished with the outwardly-extending arms 10, 11 and 12, the lower arms extending beyond the arm 10. Between these arms are pivoted the tubular gate-bars 13, 14 and 15. The bar 13 is straight and within it is contained the latch-rod 16 having the enlarged end 17 against which and the closed end of the rod bears the spring 18 which tends to throw the rod forward. To the enlargement 17 is secured the thumb-piece 19 by means of rivets extending through a longitudinal slot in the lower surface of the bar. To the opposite end of the rod 16 is attached the bolt 20 having a transverse slot and adapted to extend beyond the open end of the gate bar.

The gate-bars 14 and 15 are bent at the ends which are pivoted to the bracket, the bend in the bar 15 being greater than that in the bar 14, this bending, with the farther extension of the arms 11 and 12, compensating for the greater radius in which they move so that all the bars are practically parallel at any point in their swing. To the free ends of the bars is pivoted the cross-plate 21, the pivot which secures the upper end of this to the bar 13 passing through the transverse slot in the bolt 20 so that the bolt may be free to move for the length of the slot.

To the upper portion of the standard 6 is secured the end of the catch-box 22 having a socket to receive the end of the bolt 20 and a beveled entrance thereto, and to the standard 5, opposite to the gate bracket, is fastened the plate 23 having a beveled-catch 24, a supporting-plate 25 for supporting the end of the bar 13, and side-plates 26—26 between which the ends of the bars enter when the gate is in the closed position to prevent lateral motion of the bars when a strain is exerted thereon.

The operation of the device is extremely simple and will be readily understood by reference to the drawings. When the gate is in the closed position the thumb-piece 19 is drawn back sufficiently to disengage the bolt 20 from the catch 24. The free ends of the gate bars are then pushed upward until the bolt 20 engages with the catch of the box 22, the bars folding together until they are in the position shown in dotted lines in Fig. 1,

where they do not obstruct the space between the seats.

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

- 5 1. In a car-gate, the combination with a bracket adapted to be secured to a car standard, a straight gate-bar furnished with a latching device pivoted to the upper end of the
10 bracket, lower gate-bars also pivoted to the bracket and curved at their pivoted portions, and a cross plate pivoted to the outer ends of the gate-bars, of a catch bracket, adapted to be secured to the opposite car standard, hav-
15 ing side plates between which the ends of the gate-bars may be entered, and a catch for engaging the latching device of the gate-bar.
2. The combination with the standard 6, a bracket, secured thereto, having side-plates

8—8 furnished with the arms 10, 11 and 12, 20 the tubular bar 13 pivoted between the arms 10, the latch-rod 16 contained therein having the enlarged end 17, the bolt 20 and the thumb-piece 19, and the spring 18 for advancing the latch bar, the gate-bars 14 and 15 piv- 25 oted respectively to the arms 11 and 12 of the bracket, and the cross-plate 21 pivoted to the outer portions of the arms, of the standard 5, and the plate 23 having the catch 24, the sup- 30 porting-plate 25 and the sides 26—26, as and for the purpose described.

In witness whereof I have hereunto set my hand.

ARTHUR M. BLACK.

Witnesses:

JOSEPH A. MILLER, Jr.,
M. F. BLIGH.