No. 791,530. PATENTED JUNE 6, 1905.

G. ALMOND.

CAR DOOR.

APPLICATION FILED JUNE 28, 1904.

Fig. 1.

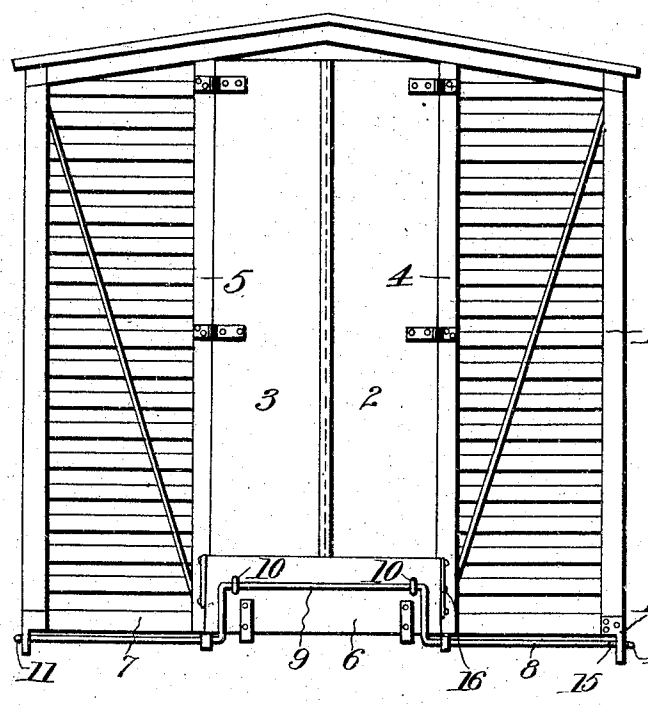


Fig. 2.

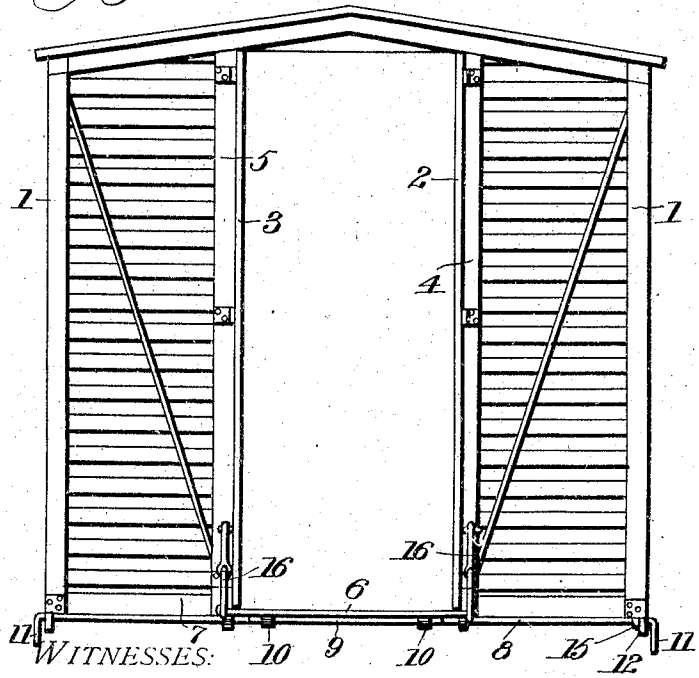


Fig. 3.

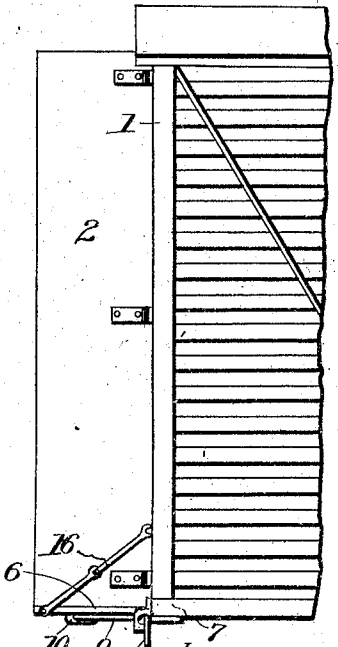
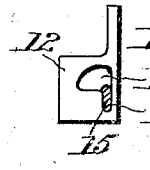


Fig. 4.



WITNESSES:

C. M. Walker.

L. L. Morrill

INVENTOR

George Almond

BY Shepherd & Parker

Attorneys.

PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 791,530. Patented June 6, 1905.

UNITED STATES PATENT OFFICE.

GEORGE ALMOND, OF PARKER, SOUTH DAKOTA.

CAR-DOOR.

SPECIFICATION forming part of Letters Patent No. 791,530, dated June 6, 1905.

Application filed June 28, 1904. Serial No. 214,543.

To all whom it may concern:

Be it known that I, GEORGE ALMOND, a citizen of the United States, residing at Parker, in the county of Turner and State of South Dakota, have invented certain new and useful Improvements in 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 figures of reference marked thereon, which form a part of this specification.

My invention relates to car-doors, and has for its object to provide a door particularly adapted for use upon stock-cars.

It is well known that it often becomes necessary or desirable to unload stock from one car and reload them on another car. This has usually been accomplished by unloading the stock through the ordinary chute or gangway to a stock-yard, placing a second car in position, and reloading.

The principal object of my invention is to provide a stock-car with an end door adapted to serve as a vestibule connection when two cars provided with my device are disposed end to end.

A further object of my invention is to provide a door the opening and closing of which is easily and readily controllable from without the lines of the car.

A further object of my invention is to provide a door which may be used for the ready and convenient unloading of stock at any point where it is found desirable to unload them from the end of the car.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is an end view of a stock-car, showing my improved car-door in a closed position with the horizontal platform disposed to retain the doors so closed. Fig. 2 is an end view of a stock-car, showing the doors open and the platform in position for loading or unloading of stock. Fig. 3 is a side elevation of the end of the car with the door and platform in the position shown in Fig. 2. Fig. 4 is a side elevation of the bracket for supporting the rod, showing the means for locking the rod and the platform in vertical positions.

Like characters of reference designate corresponding parts throughout the several views.

In the preferred embodiment of my invention I mount my improved door upon the end of an ordinary car 1. The door consists of two vertically-disposed sections 2 and 3, hinged to vertical posts 4 and 5 and disposed when closed to meet at a vertical line midway of the car.

Adjacent to the bottoms of sections 2 and 3 is disposed a platform member 6, horizontally hinged to the base-timbers 7 of the car. To facilitate the operation of the platform member 6 from without the lines of the car, a rod 8 is provided, extending transversely across the car and provided with an offset portion 9, adapted to bear against and engage the under side of platform member 6 and be secured thereto by staples 10 or in any approved manner. The extremities of the rod 8, which extend beyond the lines of the car, are provided with crank-arms 11 for the ready manipulation of the rod. For the purpose of locking the rod 8 with the offset portion 9 in a vertical position to hold the platform member 6 against the door-sections 2 and 3 a bracket 12 is provided, through which rod 8 passes. The bracket 12 is provided with a quadrantal opening 13, with a slot 14 extending therefrom. The rod 8 is provided with a lip 15, adapted to engage the slot 14 when the offset portion 9 is in a vertical position and prevent the rotary displacement thereof. To support the platform member 6 in a horizontal posi-

tion, jointed brace-rods 16 are secured to the end thereof and connected with the parts 4 and 5.

The operation of my improved car-door is as follows: When the parts are disposed as shown in Fig. 1 and it being desired to open the doors, the crank-arm 11 is raised, thereby raising the lip 15 from without the slot 14. The rod 8 may now be rotated, carrying with it the platform member 6, until such platform member assumes a horizontal position, in which position it is held by jointed brace-rods 16. The removal of the platform member 6 from contact with door-sections 2 and 3 leaves such door-sections free to open. The door-sections 2 and 3 then form the sides and platform member 6 the bottom of a vestibule adapted for the passage of stock therethrough. When it is desired to close the doors, sections 2 and 3 are swung together on their hinges and crank-arm 11 depressed. This raises offset portion 9 and platform member 6 to engage and retain the sections 2 and 3. The lip 15 automatically drops into slot 14, locking the members in such closed position.

While I have shown and described my improved car-door upon and in connection with a stock-car, it is obvious that it may be applied equally as well to any other car. It is further obvious that other means for operating and retaining the platform member may be substituted and that other minor changes might be made without departing from the spirit of my invention.

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

A car-door comprising two vertically and oppositely hinged door-sections, a section hinged horizontally adjacent to the bottom of the vertical sections and adapted when open to serve as a platform and when closed to engage and retain the vertical sections in a closed state, jointed brace-rods secured to the horizontal section and the car-frame adapted to serve as a support therefor and means for operating and locking the horizontal section consisting of a rod extending transversely of the car and journaled below the horizontal section and provided with an offset portion engaging the said horizontal section, a crank-arm formed upon the end of the rod and disposed without the lines of the car and means for locking the rod with the offset portion in a vertical plane.

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

GEORGE ALMOND.

Witnesses:
A. J. CAIN,
PETER ALLEN.