H. F. STANLEY, Sr.

CAR DOOR.

APPLICATION FILED OCT. 7, 1910.

994,613. Patented June 6, 1911.

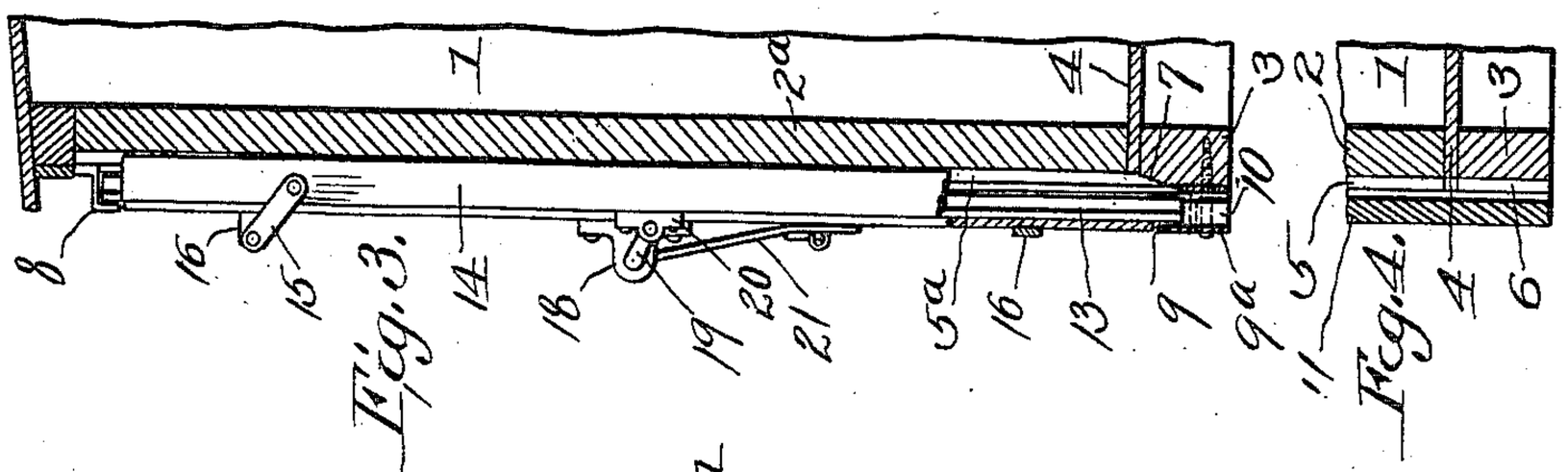


Fig. 3.

Fig. 4.

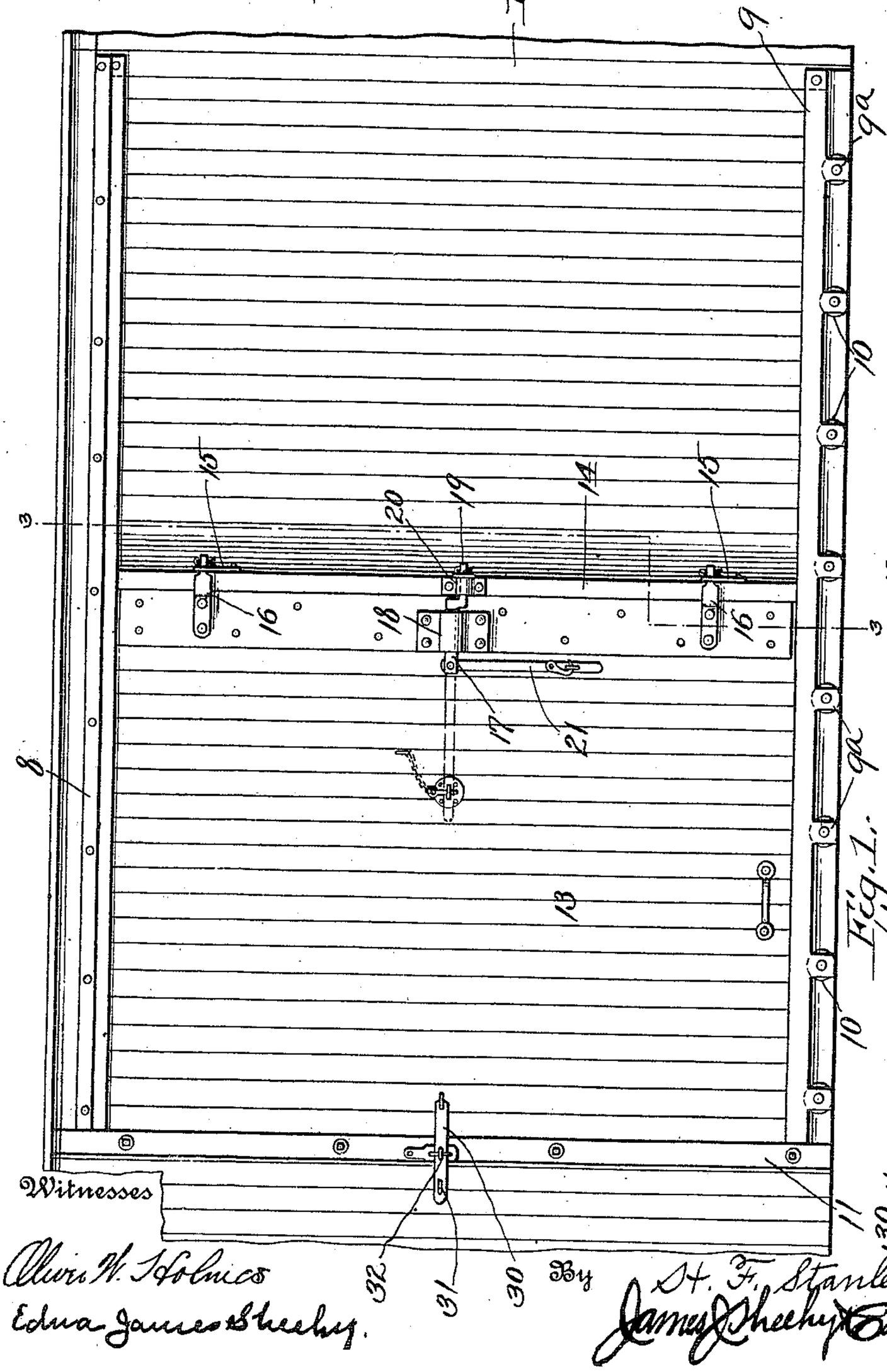


Fig. 1.

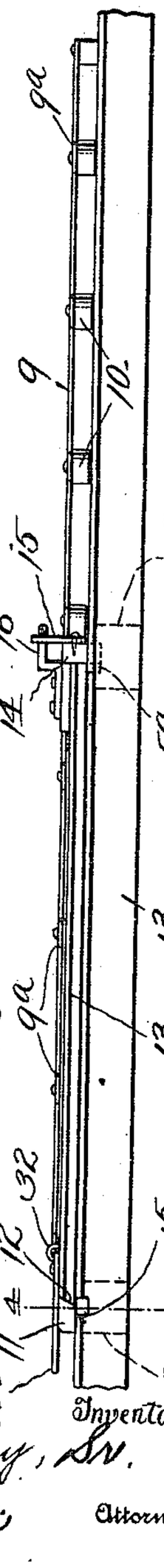


Fig. 2.

Witnesses

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# UNITED STATES PATENT OFFICE.

HENRY F. STANLEY, SR., OF NEW ORLEANS, LOUISIANA.

## CAR-DOOR.

994,613. Specification of Letters Patent. Patented June 6, 1911.

Application filed October 7, 1910. Serial No. 585,861.

*To all whom it may concern:*

Be it known that I, HENRY F. STANLEY, Sr., citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Car-Doors, of which the following is a specification.

My present invention has to do with freight-car doors of the sliding type, and has for one of its objects to provide a simple, practical and easily operated door constructed with a view to effectually preventing rain, sparks or the like gaining access to the interior of a freight car.

Another object is the provision of simple means whereby the door or a window or equivalent device can be fastened in such manner as to afford an opening for ventilation between it and the car body.

My invention will be best understood by reference to the following description when taken in connection with the accompanying illustration of one specific embodiment thereof, while its scope will be more particularly pointed out in the appended claims.

In the drawings which constitute part hereof: Figure 1 is a side elevation showing a sliding door constructed in accordance with my invention as secured in fully closed position. Fig. 2 is an inverted plan of the same. Fig. 3 is a vertical section taken in the plane indicated by the line 3—3 of Fig. 1, looking toward the left, and with the lower portion of the adjustable cleat broken away. Fig. 4 is a detail vertical section, taken in the plane indicated by line 4—4 of Fig. 2 and hereinafter specifically referred to.

Similar numerals designate corresponding parts in all of the views of the drawings, referring to which:

1 is a freight-car body. 2, 2ª are posts comprised in said body and disposed at opposite sides of the door opening therein, and 3 is a sill also comprised in the body and arranged under the floor 4 and the posts 2, as best shown in Fig. 3. The posts 2, 2ª are provided in their outer sides with upright channels 5 5ª, respectively; the said channels extending throughout the height of the posts, and the channel 5ª being preferably wider than the channel 5, Fig. 2. It will also be seen by reference to Figs. 3 and 4 that the sill 3 is provided with a vertically disposed channel or outlet which is in vertical alinement with the post channel 5, and is also provided at 7 with a downwardly and outwardly inclined portion in vertical alinement with the post channel 5ª. The said channel portions 6 and 7 have for their purpose to conduct water downward from the channels 5 and 5ª or, in other words, to permit water to freely escape from the lower open ends of the said channels.

8 is a guide or retaining bar fixed to the body 1 above the door opening therein.

9 is a guide or retaining bar spaced from and connected with the sill 3 of body 1.

10, 10 are anti-friction rollers mounted between the sill 3 and the depending portions 9ª of the bar 9.

11 is a stop fixed to the post 2 and having a beveled edge 12, the innermost portion of which is arranged opposite the vertical center of the post channel 5, and 13 is the door which rests on the rollers 10 and is retained and adapted to slide between the car body, on the one hand, and the bars 8 and 9 on the other. At its rear edge the said door 13 is provided with a cleat 14, movable at right angles to the line in which the door slides. This cleat 14 is of a less width than the post channel 5ª in about the proportion shown in Fig. 2 for an important purpose hereinafter set forth, and is connected through swinging links 15 with brackets 16 fixed on the face of the door. It will also be understood by comparison of Figs. 1 and 3 that a shaft 17 is journaled in a bearing 18 on the face of the door 13, which shaft is provided at its rear end with a crank 19 suitably fastened in a box 20 on the outer side of the cleat 14. Pivoted to the forward end of the shaft 17 is a hand lever 21.

When the door is in the closed position shown, it will be manifest that the forward beveled edge of the door will by coöperating with the beveled stop 11 tend to prevent rain, sparks and the like from passing between the door and stop. If, however, any moisture or sparks pass between the door and the stop, the same will be received in the post channel 5 and will drop therefrom to the ground.

When the door 13 is in the closed position shown and the lever 21 is moved to and fastened in the position shown by full lines, the cleat 14 is caused to partly occupy the post channel 5ª throughout the height of the door, in which position the cleat fastens the door in its fully closed position and at the same time breaks joints between the rear

edge of the door and the car body and effectually prevents rain and sparks from gaining access to the interior of the body. It will be noted here that when the cleat 14 is in the post channel 5ª, as shown, any moisture or sparks that may find their way into the unoccupied portion of the channel can freely drop therefrom to the ground.

When it is desired to unfasten the door, the hand lever is swung upward from the position shown by full lines in Fig. 1 to withdraw the cleat 14 from the channel 5ª, and is then swung horizontally to and suitably fastened, as in the manner shown, against the door. With this done, the door can be freely slid open in the usual manner.

I prefer to provide the door 13 with a long fastening such as shown at the left of Fig. 1, in order that the door may be fastened in a fully closed position or in such position that an opening is afforded between the door and the adjacent post for ventilating purposes. The said fastening is preferably made up of a hasp 30 connected to the door and having two staple-receiving openings 31, a staple 32 on stop 11, and suitable means for holding the hasp on the staple.

It will be gathered from the foregoing that my novel door obviates the necessity of cleating a car door in order to assure the exclusion of rain and sparks from the interior of the car; also, that the door is simple and easily operated and is well adapted to withstand the rough usage and exposure to which car doors are ordinarily subjected.

While I have shown and described one form of my invention, it is to be understood that I am not limited to the details or the form or relative arrangement of parts disclosed, but that modifications may be made therein without departing from the spirit thereof.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:

1. The combination with a car body having a door opening and exterior upright channels, disposed at opposite sides of and adjacent the door opening and open at their lower ends, and also having a stop provided with a beveled inner edge arranged opposite one of the said channels; of a sliding door suitably supported on the side of the body and having a beveled forward edge, a cleat, of a less width than the other channel, disposed at the rear edge of the door and movable into and out of said channel, swinging links connecting the cleat with the door, a shaft journaled on the door and having a crank connected with the cleat, a hand lever pivoted to the shaft, and means for fastening said lever to the door.

2. The combination with a car body having a door opening and exterior upright channels, disposed at opposite sides of and adjacent the door opening and open at their lower ends, and also having a stop provided with a beveled inner edge arranged opposite one of the said channels; of a sliding door suitably supported on the side of the body and having a beveled forward edge, and a cleat, of a less width than the other channel, carried at the rear edge of the door and movable into and out of the said channel.

3. The combination with a car body having a door opening and exterior upright channels, disposed at opposite sides of and adjacent the door opening and open at their lower ends; of a sliding door suitably supported on the side of the body, and means tending to prevent rain and sparks from finding their way past the door when closed and into the said channels.

4. The combination with a car body having a door opening and an exterior upright channel disposed at one side of and adjacent the door opening and open at its lower end and also having an upright stop arranged opposite said opening; of a sliding door suitably supported on the side of the body and movable toward and from said stop.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY F. STANLEY, Sr.

Witnesses:
Sam Barbara,
Sidney Echerle.