C. H. HOWARD.

DOOR HANGER.

APPLICATION FILED FEB. 4, 1910.

1,050,656.

Patented Jan. 14, 1913.

Fig. 1.

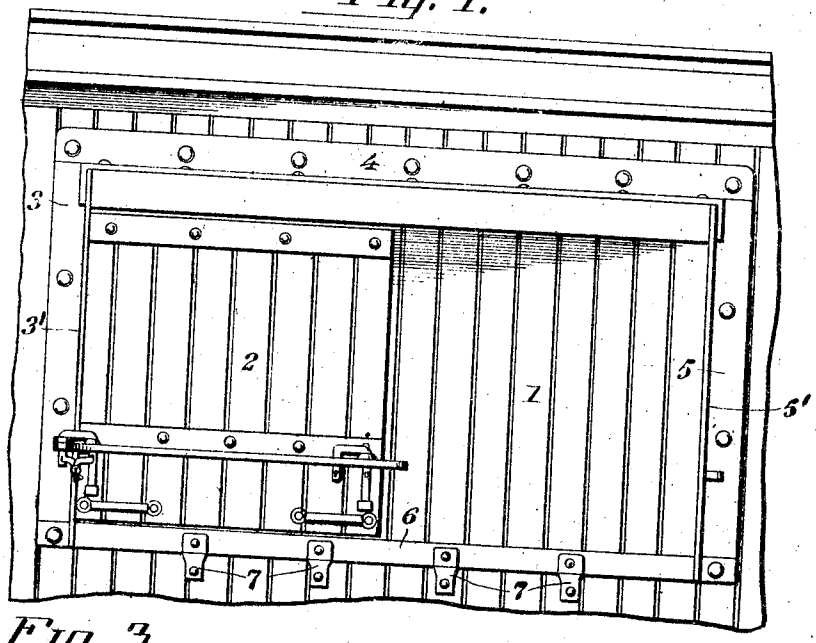


Fig. 3.

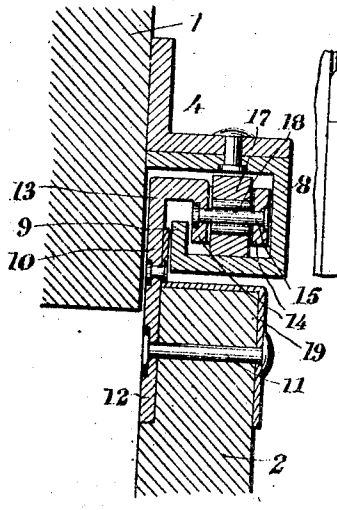


Fig. 2.

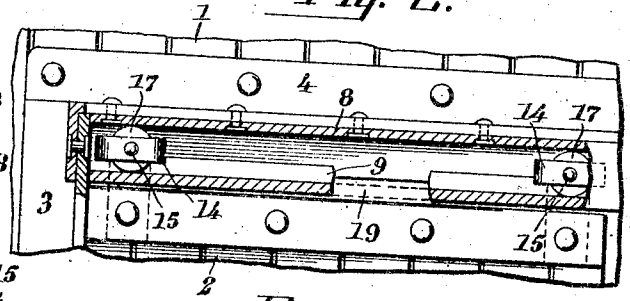
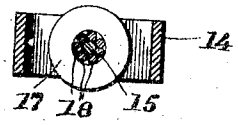


Fig. 4.



Witnesses

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CHARLES H. HOWARD, OF GREENFIELD, ILLINOIS.

DOOR-HANGER.

1,050,656. Specification of Letters Patent. **Patented Jan. 14, 1913.**

Application filed February 4, 1910. Serial No. 542,041.

To all whom it may concern:

Be it known that I, CHARLES H. HOWARD, a citizen of the United States, residing at Greenfield, in the county of Greene and State of Illinois, have invented new and useful Improvements in Door-Hangers, of which the following is a specification.

This invention relates to door hangers for sliding doors such as are usually employed in connection with cars, barns, etc., and the primary object of the invention is to provide a device of this character of a comparatively simple and inexpensive construction and which is attached so as to render the same absolutely rain, dust and spark proof.

With the above, and other objects in view, which will appear as the description progresses, the invention resides in the novel construction and combination of parts, hereinafter fully described and claimed.

In the accompanying drawings there has been illustrated a simple and preferred embodiment of the improvement, and in which drawings,

Figure 1 is a front elevation of a portion of a car, showing my improvement attached thereto. Fig. 2 is a vertical longitudinal sectional view of the upper portion of the door. Fig. 3 is an enlarged transverse sectional view taken through the upper portion of the door and casing. Fig. 4 is a sectional view taken through the anti-frictional roller 17 and its frame.

In the accompanying drawings the numeral 1 designates the side of an ordinary freight car. This side 1 is provided with the usual openings adapted to be closed through the medium of the usual sliding door 2.

The numeral 3 designates a substantially rectangular frame which has one of its vertical ends in line with the outer post of the door opening and which has its horizontal members 4 extending a suitable distance beyond the opening of the car, so as to allow the vertical member 5 directly opposite the member 3 to serve as an abutment for one end of the door 2 when the said door is slid into its open position.

Secured to the upper angular bar 4 and extending the entire length of the frame is a housing 8. This housing is of a substantially rectangular cross sectional formation but has its inner longitudinally extending portion 9 cut away a suitable distance so as to allow for the free movement of the door supporting member 10. The upper portion of the inner face of the door 2 is cut away to provide pockets for the reception of the lower portion of the member 10, as clearly illustrated in the sectional view of the drawings, and this extending portion is securely connected with the said door 2 through the medium of suitable retaining elements designated by the numeral 11. The supporting member 10 comprises a vertical strip 12, which is connected with the door 2 and is further provided with an offset portion 13 extending within the housing 8, and integrally formed upon the said offset portion 13 is a rectangular frame 14. This frame 14 has its longitudinal members provided with suitable openings, the same being adapted for the reception of a shaft 15 and mounted upon the said shaft is a roller 17 which is adapted to bear upon the lower horizontal portion or floor of the housing 8. The roller 17 is provided with an enlarged central opening and positioned between the wall of the said circular opening and the axle 15 are a plurality of roller bearings 18 thus providing for the free sliding of the door. The upper portion of the door 2 may be further provided with a reinforcement 19, of tin or the like, the same being adapted to protect this portion of the door which, as illustrated in the several figures of the drawing, is positioned a slight distance below the housing 8.

From the above description, taken in connection with the accompanying drawings, it will be noted that I have provided an extremely simple, inexpensive and thoroughly effective device for the purpose intended, and while I have illustrated and described the preferred embodiment of the improvement, as it now appears to me, minor details of construction, within the scope of the following claim, may be resorted to if desired.

It will be further noted, that a sliding door mounted as above described cannot be accidentally removed from its frames, thus overcoming the danger of the car door swinging away from its track when rounding curves as is common in the ordinary construction of car doors, and it will be further noted that my device is thoroughly weather proof and effectively prevents the entrance of snow, sleet, rain, dust or sparks to the car.

Having thus described the invention, what I claim as new is:—

In a car door, the combination of a horizontally disposed L-shaped member disposed above the door opening of the car, a housing of rectangular formation supported by said L-shaped member and having a short vertical inner wall spaced from the car body, said housing forming a track, a door supporting member comprising an inverted L-shaped plate secured to the door and disposed between the said short wall of the housing and car body, the L-portion of said plate extending within said housing and formed to provide a frame comprising a pair of depending spaced parallel walls wholly disposed within said housing and spaced from the walls thereof, and rollers mounted within said frame for the purpose set forth.

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

CHARLES H. HOWARD.

Witnesses:

JOHN D. SHEPHARD,

RALPH H. HALL.