(No Model.)

G. HANCOCK.

VESTIBULE CAR.

No. 481,902. Patented Aug. 30, 1892.

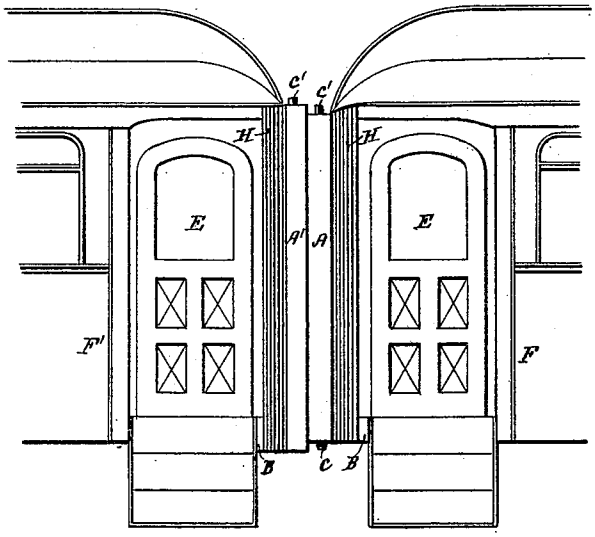

Fig. 1.

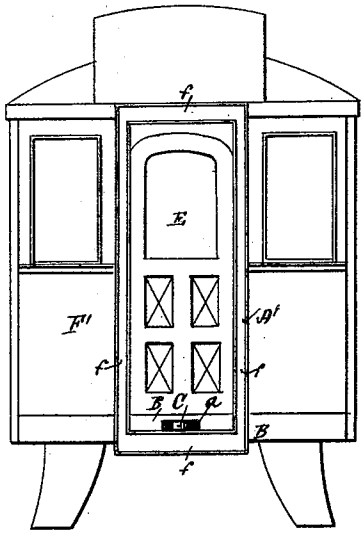

Fig. 2.

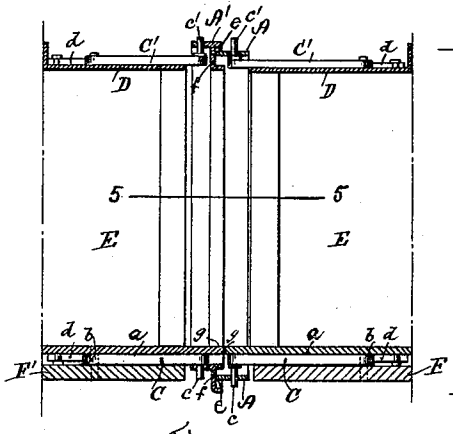

Fig. 3.

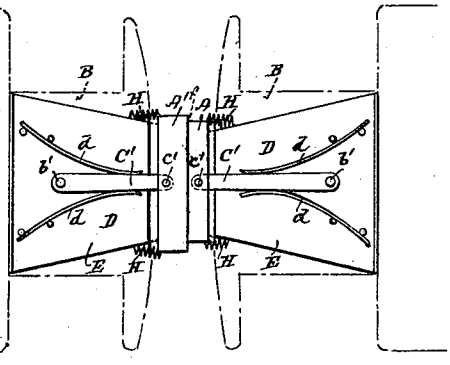

Fig. 4.

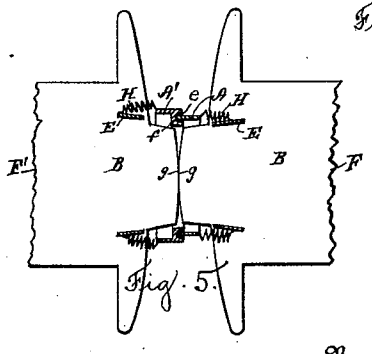

Fig. 5.

Witnesses
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GEORGE HANCOCK, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO HIMSELF AND SHEFFIELD SMITH, OF SAME PLACE.

VESTIBULE-CAR.

SPECIFICATION forming part of Letters Patent No. 481,902, dated August 30, 1892.

Application filed March 10, 1892. Serial No. 424,424. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HANCOCK, a citizen of the United States, residing at Providence, in the State of Rhode Island, have invented a new and useful Improvement in the Construction of Vestibule Railroad-Cars, of which the following is a specification.

The nature of my invention consists in the improved construction and operation of the connecting-frames of the vestibules, as hereinafter fully set forth.

Figure 1 shows the ends of two cars as when coupled together and provided with my improved connecting-frames. Fig. 2 represents an end view of one of the cars and the vestibule provided with the grooved connecting-frames. Fig. 3 represents a detail vertical section of the connected vestibules. Fig. 4 represents a top view of the connected vestibules. Fig. 5 represents a detail horizontal section taken on the line 5 5 of Fig. 3.

In the drawings, A represents a frame of iron, having the outer edges *e* of its four sides lying in the same plane.

In the central recess *a*, made in the platform B of the car F, to which the frame A is attached, is pivoted the bar C at the point *b*, and the forward end of the bar C is provided with the downwardly-extending pin *c*.

Upon an iron plate D, which forms the top of the vestibule E, is pivoted the bar C′ at the point *b′*, the forward end of the bar C′ being provided with the upwardly-turned pin *c′*, and to the side of the pivoted bars C C′ are placed the oppositely-acting springs *d d*, which serve to hold the said bars C C′ in a central position.

The frame A is loosely pivoted to the bars C C′ by means of the pins *c c′*, so that the said frame may have a limited horizontal rocking movement and, if necessary, a limited up-and-down movement upon the pivot-pins *c c′*, and also a sidewise movement against the resilience of the springs *d d*. The frame A is also connected to the vestibule E by means of the flexible fabric H, so that the frame A may have a limited movement in all required directions.

The opposite car F′ is provided with a frame A′, having a grooved face *f*, adapted to receive the edges *e* of the frame A of the car F, as shown in the vertical section, Fig. 3, and in the horizontal section, Fig. 5, the groove at the top and bottom of the frame being preferably wider than at the sides, as shown in Fig. 2, thus allowing for a slight variation in the height of the cars when coupling the same, and the frame A′ is mounted upon a bar C, having a downwardly-extending pin *c*, and upon a bar C′, having an upwardly-extending pin *c′*, and provided with the side springs *d d*, as in the case of the frame A upon the car F.

The bearing-surfaces *e* and *f* of the frames A A′ are arranged in about the transverse plane of the curved ends *g g* of the platforms B of the cars, and as the cars bend around the curves of the road and sway from side to side on the track the said frames will yield and preserve a practically close joint between the vestibules E of the cars F F′.

I claim as my invention—

The combination, with the adjoining cars of a railway-train, of the connecting-frames, the one provided with a continuous edge and the other with a continuous groove adapted to receive the continuous edge of the opposite frame, the said groove being narrow at the sides of the frame and much wider at the top and bottom, the fixedly-pivoted bars arranged to support the upper and lower edges of the frames and provided with the studs extending in opposite directions loosely through the top and bottom portions of the frames, the springs arranged at opposite sides of the pivoted arms to hold the same in a central position, and the flexible material for connecting the frames to the vestibules of their respective cars, substantially as described.

GEORGE HANCOCK.

Witnesses:
SOCRATES SCHOLFIELD,
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