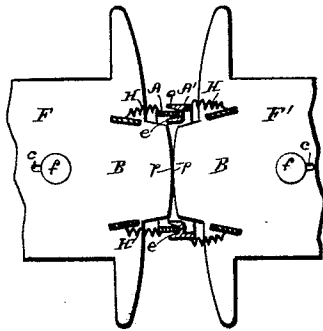
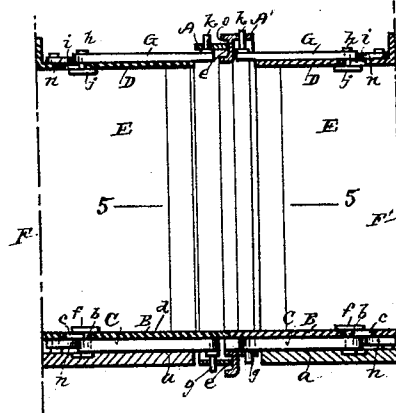
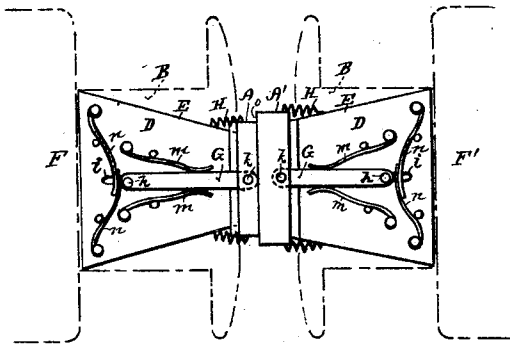
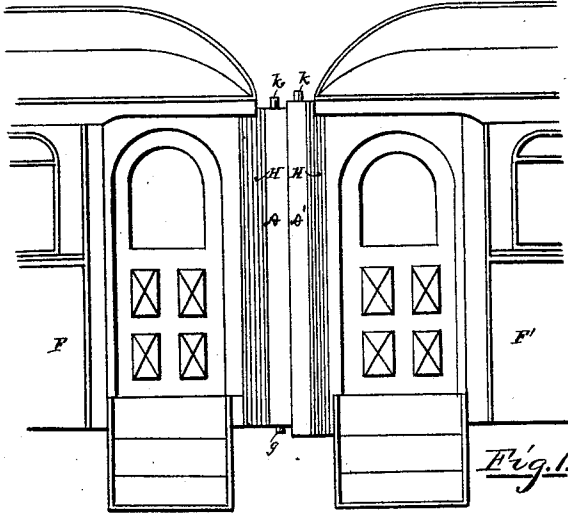
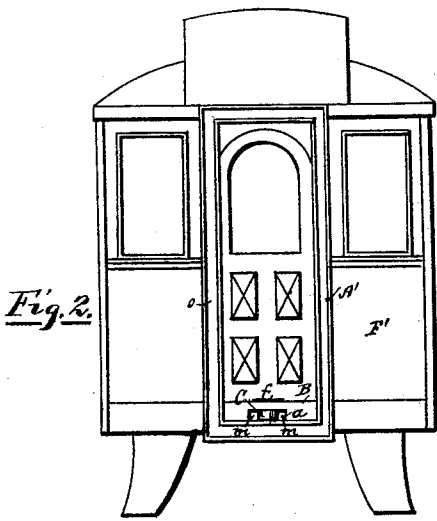


(No Model.)

G. HANCOCK.  
CAR VESTIBULE.

No. 480,695.

Patented Aug. 9, 1892.



Witnesses.

James M. Beaman  
John S. Lynch

Fig. 5.

Inventor.

George Hancock  
per S. Scholfield  
Attorney

# UNITED STATES PATENT OFFICE.

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

## CAR-VESTIBULE.

SPECIFICATION forming part of Letters Patent No. 480,695, dated August 9, 1892.

Application filed March 24, 1892. Serial No. 426,287. (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 special construction and arrangement of the several parts whereby the desired yielding attachment of the connecting-frame with the vestibule is effected.

Figure 1 shows the ends of two cars as when coupled together and provided with yielding connecting-frames. Fig. 2 represents an end view of one of the cars and the vestibule provided with a yielding connecting-frame. 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 in the line 5 5 of Fig. 3.

In the accompanying 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 placed the bar C, the said bar being provided with a pivot-stud *b*, which enters the slot *c* in the floor *d* of the platform B, the said slot being covered by the head *f* of the stud *b*, and the forward end of the bar C is provided with the downwardly-extending pin *g*. Upon an iron plate D, which forms the top of the vestibule E, is placed the bar G, provided with a pivot-stud *h*, which enters the slot *i* in the plate D, the said slot being covered by the head *j* of the stud *h*, and the forward end of the bar G is provided with the upwardly-turned pin *k*, and at the side of the pivoted bars C and G are placed the oppositely-acting springs *m m*, which serve to hold the said bars C and G in a central position, and at the rear end of the bars C and G are placed the springs *n n*, which serve to press the pivot-studs *b* and *h* of the bars C and G forward in the slots *c* and *i*. The frame A is loosely pivoted to the bars C and G by means of the pins *g* and *k*, so that the said frame may have a limited horizontal rocking movement, and, if necessary, a limited up-and-down movement upon the said pivot-pins *g* and *k*, and also a sidewise movement against the resilience of

the springs *m m*, and also a backward movement against the resilience of the springs *n n*. 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 *o*, adapted to receive the edge *e* of the frame A of the car F, as shown in the vertical section, Fig. 5, the groove at the top and bottom of the frame being preferably wider than at the sides, as shown in Fig. 3, 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 pivot-stud *b* and a downwardly-extending pivot-pin *g*, and upon a bar G, having a pivot-stud *h* and an upwardly-extending pivot-pin *k*, and provided with the side springs *m m* and the end springs *n n*, as in the case of the frame A upon the car F.

The bearing-surfaces of the frames A A' are arranged in about the transverse vertical plane of the curved ends *p p* of the platforms B of the cars, and as the cars turn 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 E of the cars F and F'.

I make no broad claim in this specification to a yielding pivoted connecting-frame for the vestibule of a railroad-car, but only to the particular construction and arrangement shown and described.

I claim as my invention—

The combination, with the platform B, provided with the slot *c*, and the top plate D, provided with the slot *i*, the bar C, provided with the pivot-stud *b*, having the head *f* and adapted to move back and forth in the slot *c*, and the bar G, provided with the pivot-stud *h*, having the head *j* and adapted to move back and forth in the slot *i*, of the frame A, pivoted to the bars C and G by means of the pins *g* and *k*, the springs *m m* at the side of the bars C and G, the springs *n* at the rear of the said bars, and the flexible connection H, substantially as described.

GEORGE HANCOCK.

Witnesses:

SOCRATES SCHOLFIELD,  
JOHN S. LYNCH.