

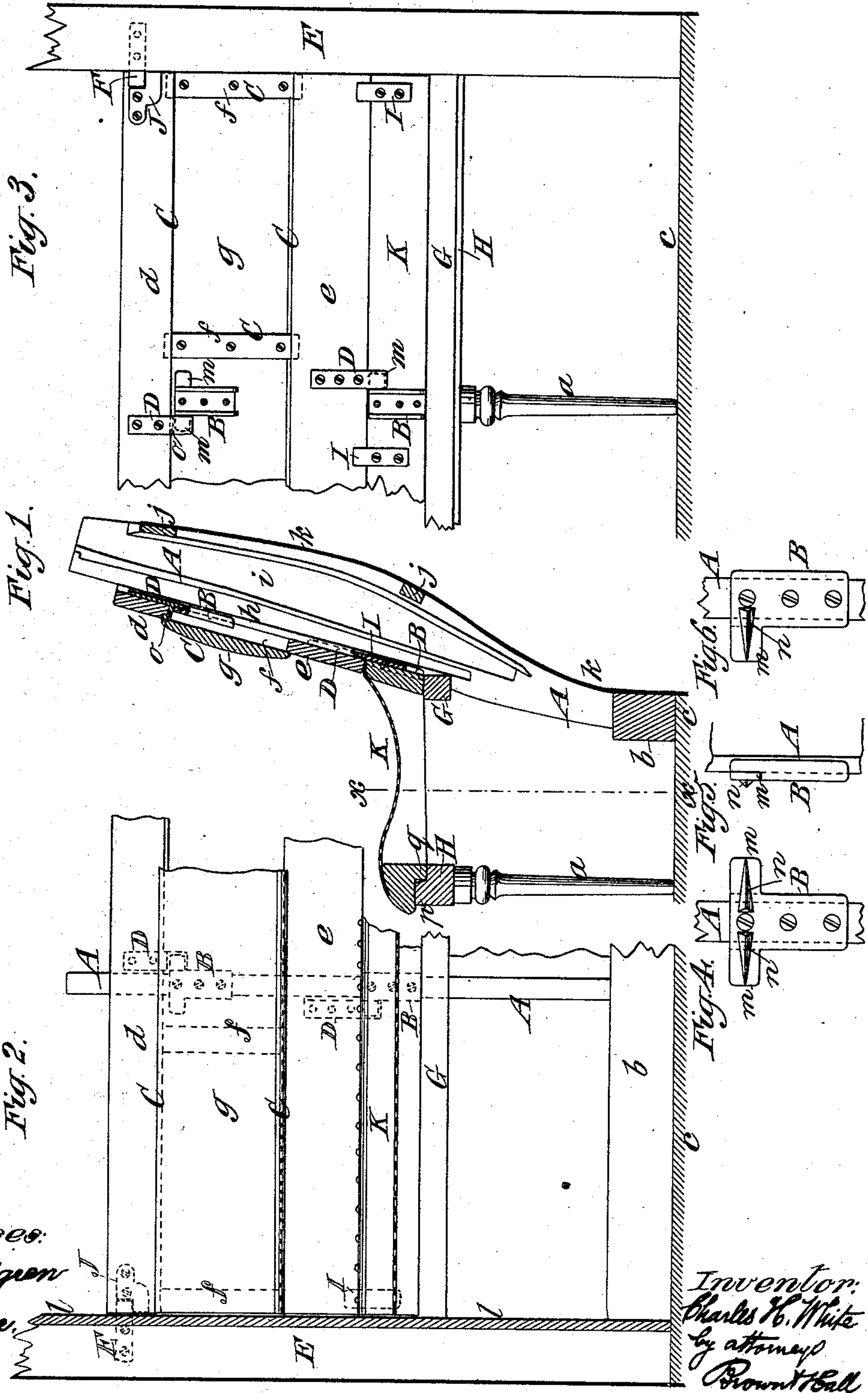
(No Model.)

C. H. WHITE.

PASSENGER CAR.

No. 389,728.

Patented Sept. 18, 1888.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

CHARLES H. WHITE, OF NEW YORK, N. Y.

## PASSENGER-CAR.

SPECIFICATION forming part of Letters Patent No. 389,728, dated September 18, 1888.

Application filed June 8, 1888. Serial No. 276,474. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. WHITE, of the city and county of New York, in the State of New York, have invented a new and useful  
5 Improvement in Passenger-Cars for Railways, of which the following is a specification.

My invention relates to passenger-cars for railways in which the seats are arranged longitudinally and the seat-backs are attached to  
10 the pillars of the sides of the cars. In such cars as heretofore constructed the backs are secured to the pillars by screws driven through the backs and into the pillars, and the seats are also secured to their supports by screws  
15 driven through the seats and into the supports. This, the usual manner of fastening the backs to the pillars and the seats to their supports, is objectionable, because the heads of the screws appear on the outer faces of the  
20 backs and seats and present an unsightly appearance, and frequently catch and tear the garments of persons occupying the seats, and because the pillars are weakened by the screws, and the screws are liable to be broken off by the  
25 changes of form and relative position of parts produced in railway-cars by the excessive strains to which they are subjected when in use.

The object of my invention is to provide simple and effective means for attaching the seats and seat-backs of railway passenger-cars which  
30 shall be free from the objectionable features hereinbefore set forth.

The improvement will be hereinafter fully described with reference to the accompanying drawings, and its novelty pointed out in the claims.

In the drawings, Figure 1 represents a transverse vertical section of a portion of a railway passenger-car embodying my improvement. Fig. 2 represents a longitudinal vertical section of a part of one end of the same car on the line *xx* of Fig. 1. Fig. 3 represents a view—part section, part elevation—of  
40 another part of one end of the same car with the pillars and outer parts of the car removed. Fig. 4 represents a front elevation of a hanger having two arms or lugs; Fig. 5, a side elevation of Fig. 4, and Fig. 6 a front elevation  
50 of a hanger having one arm or lug only.

Like letters of reference indicate corresponding parts in all the figures.

Upon pillars such as are usually employed in the sides of railway passenger-cars I permanently fix hangers, and to the seat-backs I  
55 permanently attach lugs or catches to engage said hangers and thereby secure the backs to the pillars.

A A indicate the pillars; B, the hangers; C, the seat-backs, and D the lugs or catches attached to the seat-backs.

To the corner-posts of the car, at or near the level of the top of the seat-back, I permanently attach lugs, which project laterally close to and outside of the ends of the seat-backs, and  
65 after the seat-back is in place I attach to it, at each end and as near its top as possible, a removable catch or lug, which will catch under the projecting lugs of the corner-posts and prevent these seat-backs from being jolted or forced  
70 upward.

E E indicate the corner-posts, F F the lugs permanently attached thereto, and J J the removable lugs or catches attached to the ends of the seat-back. The lugs J J may be taken  
75 off whenever the back is to be removed.

In order that the car-seat may be easily placed or removed and securely held in position, I provide front and rear supports below the seat for it to rest upon, and fit the rear or  
80 back part of the seat to enter freely beneath the under edge of the seat-back and between that edge and the rear bottom-support and against or near the pillars, and attach permanently to the rear of the seat lugs or catches,  
85 which, when the seat is in place, project upward behind the back and prevent the seat from moving forward. To place or remove the seat, the forward end must be lifted up until the lugs or catches attached to its rear  
90 can readily be drawn out from under the edge of the back.

G indicates the rear bottom support of the seat; H, the front bottom-support; I, the catches or lugs permanently attached to the  
95 rear of the seat, and K the seat.

*a a* represent legs under the front of the seat; *b*, a string-piece mortised to receive tenons on the lower ends of the pillars; *c*, the floor of the car.



The seat-backs C are represented in the drawings as formed of an upper or top rail, *d*, and a lower or bottom rail, *e*, connected at intervals by vertical strips *f*, of even thickness and flush on both sides with the top and bottom rail, into which their ends are strongly tenoned, and a panel, *g*, the edges of which overlap the space between the rails *d* and *e*. The panels *g* are attached and held by screws driven through the vertical strips *f* and into the panel *g*, care being taken that the screws do not project through the face of the panel.

*h* represents the usual groove in the pillar to receive the edge of the blind, and *i* the groove for the edge of the sash; *j j*, longitudinal rails, to which are attached the outside panels, *k*, of the car. The panel *k* does not extend above the upper rail, *j*. The lugs or catches J are represented as L-shaped in order that the screws by which they are fastened to the top rail, *d*, of the seat-back may be driven by a screw-driver from the outside of the car, passing in over the top of the upper rail, *j*, and slanting slightly downward to the slots in the heads of the screws. *l* represents a sectional view of the inner panels of the car end.

The hangers B are represented as stout castings, grooved on their backs to fit snugly the front and adjoining portions of the sides of the pillars, to which they are firmly and permanently attached by screws, as shown in the drawings. Stout arms or lugs *m* project laterally from the hangers B, with which the lugs or catches D engage, as represented in Figs. 1, 2, and 3. Only one lug *m* of a hanger is used; but to obviate the necessity of employing rights and lefts it is sometimes convenient to provide each hanger with two lugs, as illustrated in Fig. 4; or, if preferred, hangers having only one lug *m* may be employed, as represented in Fig. 6.

*n n* are strengthening-ribs to provide against the breaking off of lugs *m* at their junction with the hanger. The lugs or catches D are represented as stout castings firmly and permanently attached by screws to the rails *d* and *e*, thereby forming with the hangers B an upper and a lower line or row of fastenings for firmly securing the backs to the pillars. The lugs or catches D are represented as provided with a projecting portion, *o*, (indicated in Fig. 1,) which is snugly fitted into the lower edges of the rails to which they are attached, to secure a rigid and permanent connection therewith.

To relieve the lugs or catches I from unnecessary or excessive strain, I provide an upward projection, *p*, on the upper front portion of the front bottom-support, H, and a corresponding downward projection, *q*, on the under side of the front part of the seat, to drop in behind projection *p*, as represented in Fig. 1.

The lugs or catches I are represented as strong plates, preferably of metal, permanently at-

tached to the rear of the seats by screws driven through the lugs and into the seats.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a passenger-car for railways, the combination, with pillars having hangers permanently fixed thereon, and corner-posts having laterally-projecting lugs, of a seat-back provided with lugs or catches permanently attached thereto, to engage said hangers and secure the backs to the pillars, and having removable lugs or catches near the upper part of the ends, to catch under the lugs of the corner-posts and hold down the back, substantially as described and set forth.

2. In a passenger-car for railways, the combination, with pillars A, having an upper and a lower line of hangers, B, permanently fixed thereon, of the seat-back C, provided with lugs or catches D, permanently attached thereto, to engage said hangers and secure the backs to the pillars, substantially as herein described and set forth.

3. In a passenger-car for railways, the combination, with pillars A, having an upper and a lower line of hangers, B, permanently fixed thereon, and corner-posts E, having laterally-projecting lugs F, of the seat-back C, provided with lugs or catches D, permanently attached thereto, to engage said hangers and secure the backs to the pillars, and having removable L-shaped lugs or catches J near the upper part of its ends, to catch under the lugs of the corner-posts and hold down the back, substantially as described and set forth.

4. In a passenger-car for railways, the combination, with the pillars, the seat-back attached thereto, and rear and front bottom-supports for the seat, of a seat the rear of which is fitted to enter freely between the under edge of the seat-back and the rear bottom-support and rest against or near the pillars, and catches or lugs permanently attached to the rear of the seat, and which, when the seat is in position for use, project upward behind the back and prevent the seat from moving forward, all substantially as set forth.

5. In a passenger-car for railways, the combination, with the pillars, the seat-back attached thereto, and rear and front bottom-supports, the latter having an upward projection engaging with a downward projection of the seat, partially to prevent the seat from moving forward, of a seat provided with such downward projection and fitted to the supports, the rear of which seat may enter beneath the under edge of the back and rest against or near the pillars, and upward-projecting catches or lugs permanently attached to the rear of the seat, which, when the seat is in position for use, catch behind the back and prevent the seat from moving forward, all substantially as set forth.

6. In a passenger-car for railways, the combination, with the pillars A, having a seat-



back attached thereto, a rear bottom-support, G, and a front bottom-support, H, having an upward projection, *p*, of a seat, K, fitted to the said supports and having a downward  
5 projection, *q*, to engage projection *p* and partially prevent the seat from moving forward, the said seat K being fitted to enter under the lower edge of the back and near to or against the pillars, and catches or lugs I, attached to

the rear of the seat K and projecting upward to catch behind the back and prevent the seat from moving forward, substantially as set forth.

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