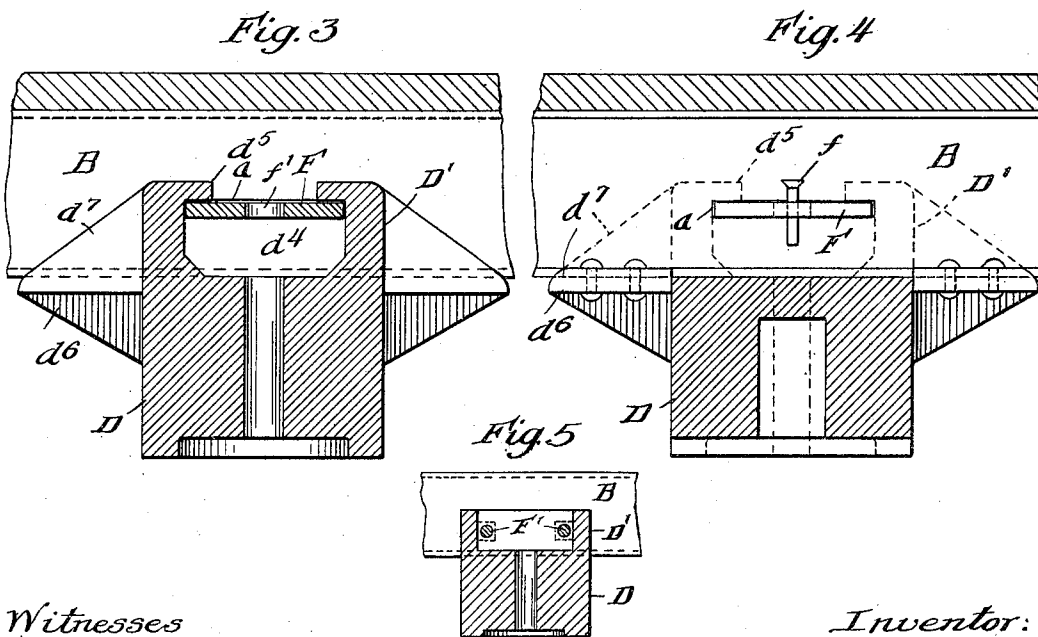
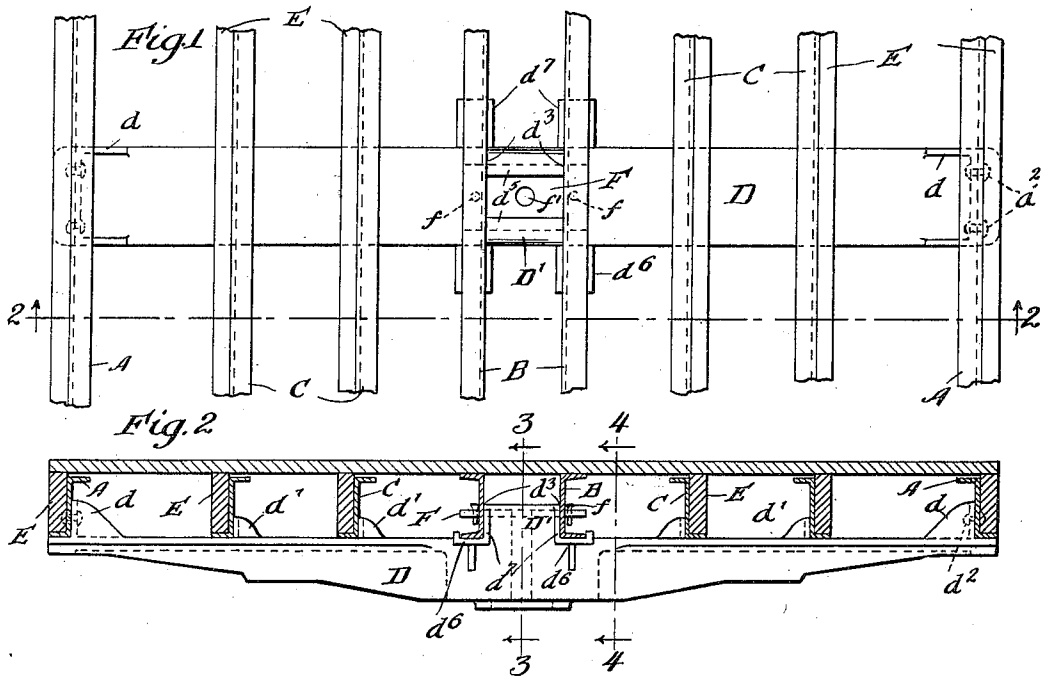


No. 793,721.

PATENTED JULY 4, 1905.

J. J. HENNESSEY.  
RAILWAY CAR FRAME AND BOLSTER.  
APPLICATION FILED MAY 6, 1905.



Witnesses

Wm. Geiger  
P. Abrams.

Inventor:  
John J. Hennessey

By Munday, Evans & Adeock,  
Attorneys

# UNITED STATES PATENT OFFICE.

JOHN J. HENNESSEY, OF MILWAUKEE, WISCONSIN.

## RAILWAY-CAR FRAME AND BOLSTER.

SPECIFICATION forming part of Letters Patent No. 793,721, dated July 4, 1905.

Application filed May 6, 1905. Serial No. 259,152.

*To all whom it may concern:*

Be it known that I, JOHN J. HENNESSEY, a citizen of the United States, residing in Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Railway-Car Frames and Bolsters, of which the following is a specification.

My invention relates to improvements in the frame or sill and bolster construction of railway-cars.

The object of my invention is to provide a car-frame sill and bolster construction of simple form, in which the center sills and body-bolsters may both be continuous and of full strength and properly anchored together and at proper height or level in respect to the floor-frame, and which will be capable of being cheaply manufactured and readily put together in constructing the car.

My invention consists in the means I employ to practically accomplish this object or result, as herein shown and described.

In the accompanying drawings, forming a part of this specification, Figure 1 is a plan view of a car-frame and bolster construction embodying my invention. Fig. 2 is a vertical section on line 2 2 of Fig. 1. Figs. 3 and 4 are enlarged detail vertical sections on lines 3 3 and 4 4 of Fig. 2. Fig. 5 is a vertical section illustrating a modification.

In the drawings, A represents the side sills, B the center sills, and C the intermediate sills, of a car-frame, and D is the body-bolster. The sills may be of any suitable material, but are preferably steel beams of any suitable cross-section, as I-beams, Z-beams, or channels, channel-beams being illustrated in the drawings for the center sills and Z-beams for the intermediate sills and side sills.

E represents floor nailing-strips secured to the side and intermediate sills.

The body-bolster D is preferably of cast metal or steel, and is provided at its ends with upright flanges or shoulders  $d$  to fit against the upright faces of the side sills, and with flanges or shoulders  $d'$  to fit against the upright faces of the intermediate sills, and to which upright flanges the sills are secured by bolts or rivets  $d''$ .

The body-bolster D is provided at its mid-

dle portion with an upwardly-projecting integral block or member  $D'$  between the center sills and having square upright faces or shoulders  $d^3$  for the upright sides of the center sills to fit against. This integral spacing block or projection  $D'$  of the body-bolster is also provided with an opening or way  $d^4$ , extending longitudinally of the bolster to receive the connection or key F, which extends through the block  $D'$  and the upright webs of the center sills and serves to connect the center sills together and to the body-bolster. Cotters or pins  $f$  are preferably inserted through the key F to hold the same in place. The opening or way  $d^4$  for the key or connection F in the block  $D'$  may preferably be formed by providing the block  $D'$  with flanges  $d^5$ , which overhang the edges of the key or connection F. The key F has a central opening  $f'$  for the bolster king-bolt or connection, which also serves to hold the key F in place. The body-bolster D may also preferably be provided with side wings  $d^6$ , having upright flanges  $d^7$  to receive the center sills, and thus diminish the overhang of the center sills in respect to the bolster.

In the modification illustrated in Fig. 5 the connection F, which extends through the block  $D'$  and the upright webs of the center sills, is shown as made in the form of bolts having heads and threaded nuts. In this modification the way or opening in the block  $D'$  for the bolt form of connection F is preferably in the form of a round hole for each bolt, two bolts being preferably employed, one on each side of the king-bolt.

In the construction shown in Figs. 1 to 4 the opening  $a$  in the center sills to receive the key or connection F is in the form of a slot. In the construction illustrated in Fig. 5 the openings  $a$  in the center sills are round holes to receive the bolts  $F'$ .

I claim—

1. In a car-frame, the combination with the center sills having openings through the same, of a body-bolster having an upwardly-projecting integral block at its middle portion with square faces or shoulders for the upright webs or faces of the center sills to fit against, and provided with a passage or way extending

longitudinally of the bolster through said block and a connection extending through the center sills and through said center-sill abutment-block on the bolster, substantially as specified.

2. In a car-frame, the combination with the center sills having slots through the same to receive a connecting-key, of a body-bolster having an upwardly-projecting integral block  
10 for the center sills to fit against provided with a way for the key, and a key extending through said block and said center sills, substantially as specified.

3. In a car-frame, the combination with the  
15 center sills having slots through the same to receive a connecting-key, of a body-bolster having an upwardly-projecting integral block for the center sills to fit against, provided with a way for the key, and a key extending through  
20 said block and said center sills, said key having an opening to receive the king-bolt, substantially as specified.

4. In a car-frame, the combination with the center sills having slots through the same to

receive a connecting-key, of a body-bolster 25 having an upwardly-projecting integral block for the center sills to fit against, provided with a way for the key, and a key extending through said block and said center sills, said key having an opening to receive the king-bolt, said  
30 bolster being also provided with integral side wings to receive and give additional support to the sills, substantially as specified.

5. In a car-frame, the combination with the center sills having openings through the same  
35 to receive a connection, of a body-bolster having an upwardly-projecting integral block for the center sills to fit against and provided with an opening extending longitudinally of the bolster and a connection extending through  
40 said block and said center sills, said bolster being also provided with integral side wings to receive and give additional support to the sills, substantially as specified.

JOHN J. HENNESSEY.

Witnesses:

PETER N. MOORE,  
JAMES E. MEHAN.