

(No Model.)

2 Sheets—Sheet 1.

H. C. WILLIAMSON.
BODY BOLSTER FOR CARS.

No. 580,202.

Patented Apr. 6, 1897.

Fig. 1.

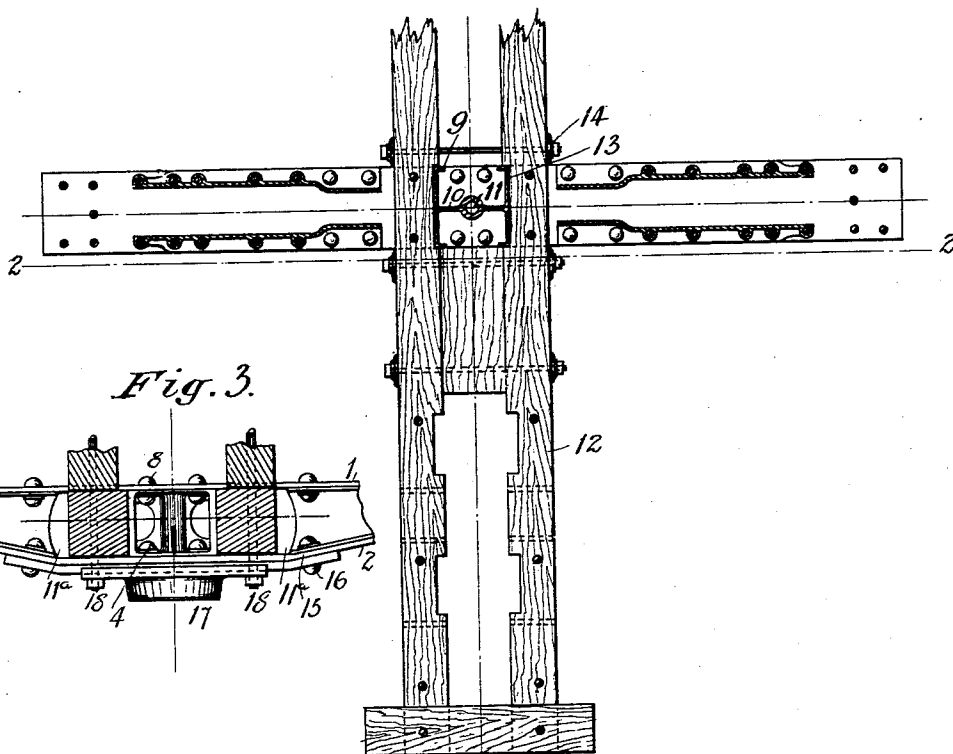


Fig. 3.

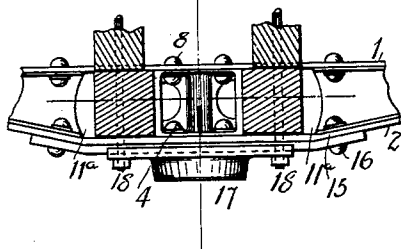
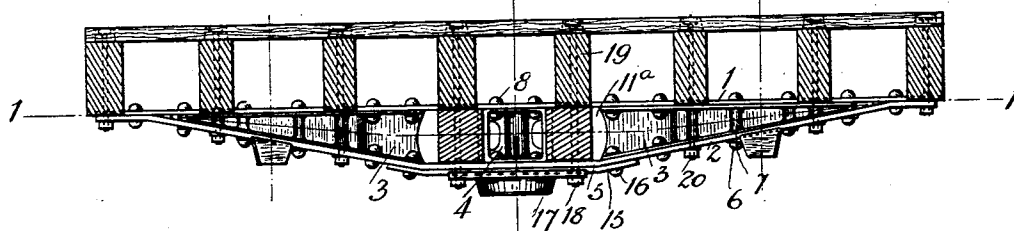


Fig. 2.



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Inventor:

Henry C. Williamson
by Attorney.
Rudolph M. Loz

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Fig. 4.

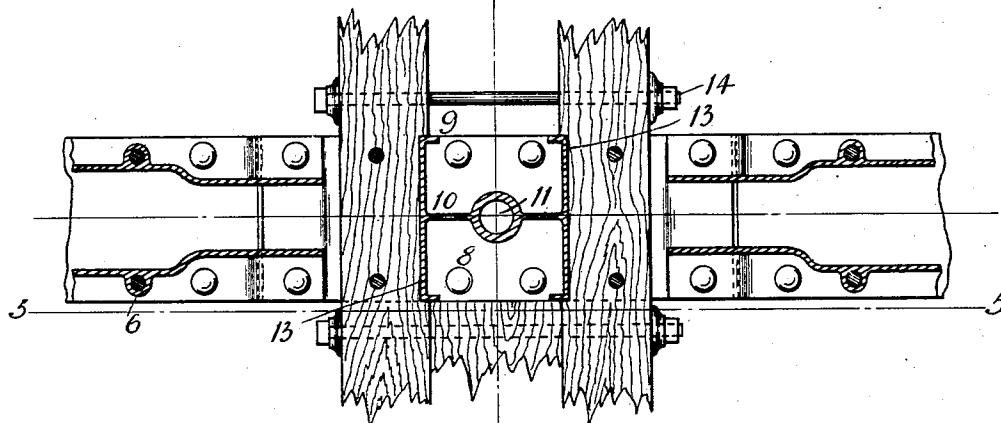
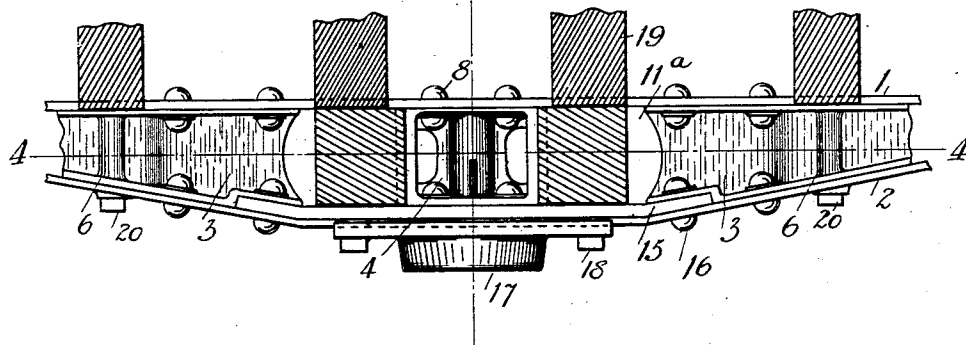


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

HENRY C. WILLIAMSON, OF MICHIGAN CITY, INDIANA.

BODY-BOLSTER FOR CARS.

SPECIFICATION forming part of Letters Patent No. 580,202, dated April 6, 1897.

Application filed December 10, 1896. Serial No. 615,226. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. WILLIAMSON, a citizen of the United States, residing at Michigan City, in the county of La Porte and State of Indiana, have invented certain new and useful Improvements in Body-Bolsters for Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a novel construction in a body-bolster, the object being to provide a cheap, durable, and efficient device of this kind; and it consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a horizontal section of the bolster constructed in accordance with my invention, taken on line 1 1 of Fig. 2. Fig. 2 is a vertical section of the same on the line 2 2 of Fig. 1. Fig. 3 is a similar section on an enlarged scale. Fig. 4 is a horizontal section of a modified form of construction, taken on line 4 4 of Fig. 5. Fig. 5 is a vertical section on the line 5 5 of Fig. 4.

My bolster consists of a tension member 1 and a compression member 2, between which end struts 3 and a middle strut 4 are secured. The outer end portions of said compression member 2 are secured to the ends of said tension member 1 in any suitable manner, and from said end portion said member 2 diverges to the central portion 5 thereof, which is parallel with said member 1. Said end struts 3 are secured between said members 1 and 2 by means of rivets passing through the flanges of said end struts and by rivets 6 in the end-most portions thereof passing through openings in enlarged portions 7 of the webs of said struts. Said end struts extend from a point adjacent to the end portions of said members 1 and 2 to the point at which the middle portion 5 of said member 2 meets the end portion thereof. Said middle strut 4 consists, preferably, of a single casting similar in form to four sides of a box, two of which are in contact with said members 1 and 2, and through which the rivets 8, by means of which said strut is secured between said members 1 and 2, pass. The two outer sides of said strut 4 are pro-

vided with flanges 9, which extend inwardly therefrom. The web 10 of said struts extends between said four sides thereof, preferably in the middle of said strut, the middle portion of said web being enlarged and provided with an opening 11, through which the pivot-pin passes into the truck-bolster. Said middle strut could obviously be made of a plurality of pieces, although I have not shown such construction in the drawings. Said middle strut is of small extent, so as to leave openings 11^a between the outer sides thereof and the inner ends of the end struts 3 of sufficient width to permit the insertion therethrough of the draft-beams 12. Said draft-beams 12 are gained on their inner faces, as at 13, to receive said flanged sides of said middle strut, and are securely held in engagement therewith by means of bolts 14, passing through said draft-beams adjacent to said bolster and on each side thereof. Obviously the portion of the compression member 2 at which said openings 11^a occur are considerably weakened and would be unable to bear the compression strain to which they are generally subjected. To strengthen said compression member, therefore, I provide a plate 15, extending below the same and secured thereto by means of the rivets 16, fastened through the end portions of said plate 15 and through the inner ends of the flanges of said end struts, so that said rivets perform the double office of securing both said end struts and said plate 15 to said compression member 2. The center plate 17, which is mounted below said plate 15, is secured to said bolster by means of the bolts 18, passing through said plate 15, compression member 2, draft-beams 12, tension member 1, and sills 19, thus obviously not only securing said center plate, but at the same time securing said bolster to the car, together with bolts 20, passing through the end portions of said bolster and through said sills 19.

In Figs. 4 and 5 I have shown a slight modification in the construction, which consists in mounting said plate 15 above said compression member 2 and securing its ends in recesses formed in the inner ends of said end struts 3, the flanges of said end struts being offset to accommodate said plate.

I claim as my invention—

1. In a body-bolster, a tension and a compression member, end struts mounted between the end portions of said members, a middle strut mounted midway between the inner ends of said end struts so as to leave openings between said middle and end struts to permit the passage of draft-beams there-through, and draft-beams gained on their inner faces to receive the ends of said middle strut, adapted to pass through said openings, said openings being of sufficient width to permit the passage of the body of said draft-beams so as to leave a space between the outer faces of said draft-beams and the inner ends of said end struts, when said middle strut is in engagement with said draft-beams.

2. In a car the combination with a body-bolster, comprising a tension and a compression member, end struts mounted between

the end portions of said members, a middle strut situated between the middle portions of said members and midway between the inner ends of said end struts, and a plate secured upon the middle portion of said compression member to reinforce the same, of draft-beams adapted to pass through said bolster on each side of said middle strut and within the inner ends of said end struts and engaged by said middle strut.

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

HENRY C. WILLIAMSON.

Witnesses:

E. J. BOILEAU,
RUDOLPH WM. LOTZ.