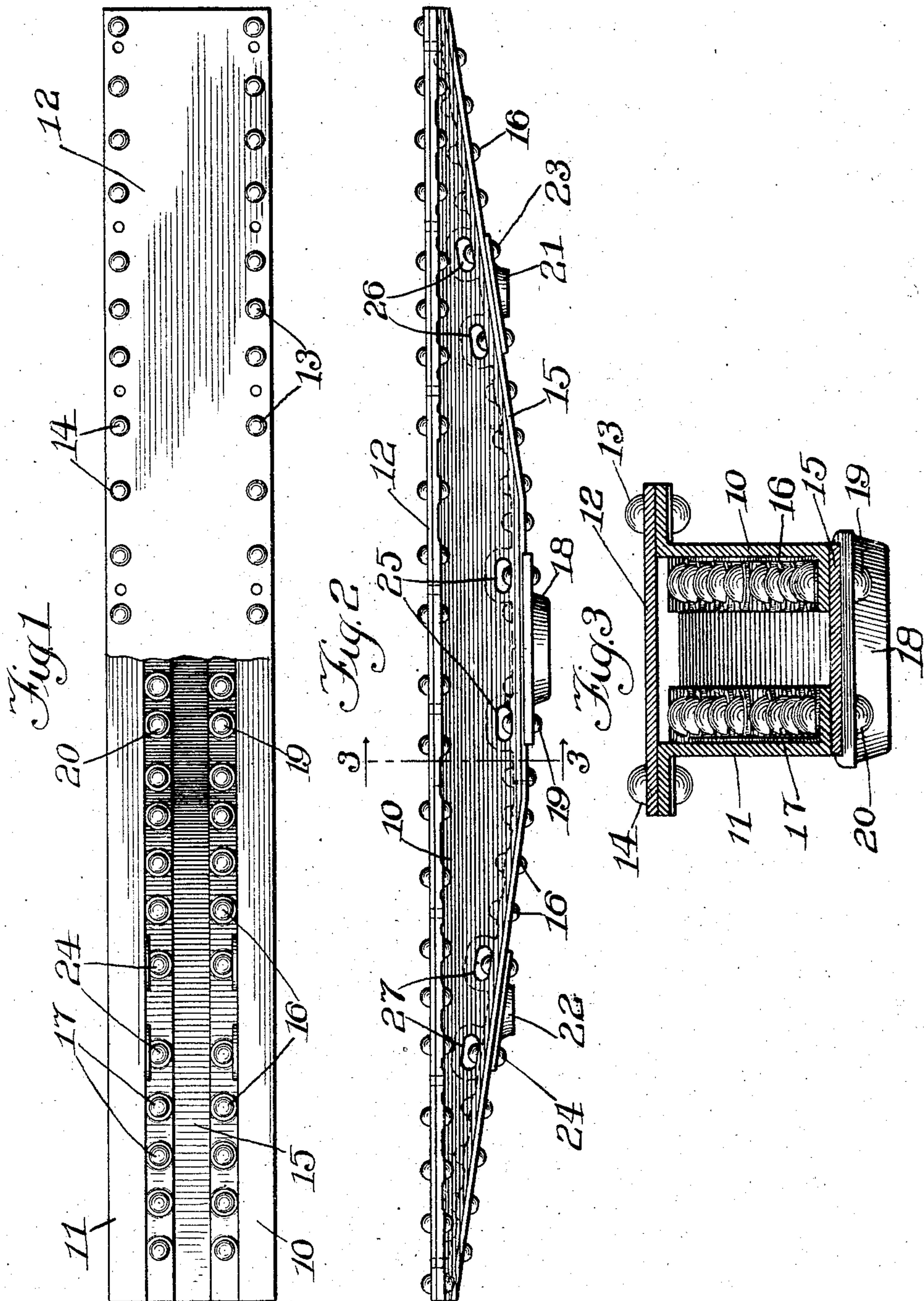


No. 785,344.

PATENTED MAR. 21, 1905.

H. G. WILLIAMSON & H. PRIES.  
BODY BOLSTER FOR RAILWAY CARS.

APPLICATION FILED NOV. 21, 1904.



Witnesses:  
Wm. H. Yale  
Chas. B. Gilson

Inventors  
Henry C. Williamson  
Herman Pries  
by Louis A. Gerson  
att'y



# UNITED STATES PATENT OFFICE.

HENRY C. WILLIAMSON AND HERMAN PRIES, OF MICHIGAN CITY,  
INDIANA.

## BODY-BOLSTER FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 785,344, dated March 21, 1905.

Application filed November 21, 1904. Serial No. 233,690.

*To all whom it may concern:*

Be it known that we, HENRY C. WILLIAMSON and HERMAN PRIES, citizens of the United States, and residents of Michigan City, county of Laporte, and State of Indiana, have invented certain new and useful Improvements in Body-Bolsters for Railway-Cars, of which the following is a specification and which are illustrated in the accompanying drawings, forming a part thereof.

The object of the invention is to provide a bolster having great strength both vertically and horizontally and provided with means for easily effecting repairs; and it is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the bolster with a portion of its top plate broken away. Fig. 2 is a side elevation, and Fig. 3 is a transverse vertical section on the line 3 3 of Fig. 2.

The invention relates to that form of bolster shown in our Letters Patent No. 658,227, of September 18, 1900, the top of the bolster being straight and its bottom being bowed.

The side members of the bolster are Z bars or plates 10 11, preferably having their lower flanges directed inwardly and their upper flanges outwardly and their length being substantially that of the bolster. These side plates are of sufficient width at their central portions to provide for the desired height of the bolster and incline upwardly from a point adjacent to the center plate of the bolster to their ends.

A cover-plate 12 extends from end to end and side to side of the bolster and is riveted to the upper flanges of the side plates 10 11, as indicated at 13 14.

A continuous bottom plate 15 extends from end to end and side to side of the bolster and is riveted to the lower flanges of the side plates 10 and 11, as indicated at 16 17.

The center plate 18, of usual form, is riveted to the bottom plate 15 and to the bottom flanges of the side plates 10 11, as indicated at 19 20. The side bearing-plates 21 22 are applied to the bottom plate 15 and are secured by some of the rivets, as 23 24, which also secure the bottom plate to the side plates 10 11.

The side plates 10 11 are apertured, as shown at 25, 26, and 27, adjacent the rivets securing the center plate 18 and the side bearing-plates 21 22, to facilitate the removal and attachment of these members when repairs become necessary. It will be seen that by cutting off the heads of the rivets 19, 23, or 24 their bodies may be readily removed and new rivets inserted from within, and a block being placed over the head thereof by insertion through the adjacent aperture 25, 26, or 27 the rivet may be upset at its outer end.

The weakening of the plates 10 11 by aperturing them to receive the rivets and at 25, 26, and 27 for the purpose of setting rivets is fully compensated for by reinforcement, the plate being thickened at the margin of each aperture, as shown.

The bolster described possesses much greater strength in vertical plane adjacent its ends than in the bolster shown in our above-named earlier patent, and is also much more rigid in horizontal plane, because of the use of two continuous cover-plates.

We claim as our invention—

1. A body-bolster for railway-cars comprising, in combination, side plates in Z form extending substantially throughout the length of the bolster; a bottom plate secured to the lower flanges of the side plates; and a continuous top plate secured to the upper flanges of the side plates and extending the entire length and entire width of the bolster, the plates being joined by rivets and some of the plates being reinforced around the rivet-holes.

2. A body-bolster for railway-cars comprising, in combination, side plates in Z form extending substantially throughout the length of the bolster; a bottom plate secured to the lower flanges of the side plates and extending the entire length and the entire width of the bolster; and a continuous top plate secured to the upper flanges of the side plates and extending the entire length and entire width of the bolster, the plates being joined by rivets and some of the plates being reinforced around the rivet-holes.

3. A body-bolster for railway-cars comprising, in combination, side plates having apertures for the insertion of rivets and a heading-tool, and continuous top and bottom plates  
5 secured to the side plates.
4. A body-bolster for railway-cars comprising, in combination, side plates in Z form extending substantially throughout the length of the bolster and being provided with apertures for the insertion of rivets and a heading-  
10 tool; a bottom plate secured to the lower flanges of the side plates; and a continuous top plate secured to the upper flanges of the side plates and extending the entire length and  
15 entire width of the bolster.
5. A body-bolster for railway-cars comprising,

in combination, side plates in Z-form extending substantially throughout the length of the bolster and being provided with apertures for the insertion of rivets and a heading-  
20 tool; a bottom plate secured to the lower flanges of the side plates and extending the entire length and the entire width of the bolster; and a continuous top plate secured to the upper flanges of the side plates and extending the entire length and entire width of  
25 the bolster.

HENRY C. WILLIAMSON.  
HERMAN PRIES.

Witnesses:

SAMUEL J. TAYLOR,  
CHARLES PORTER.