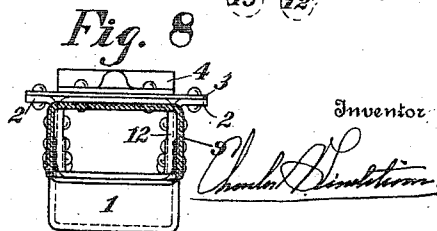
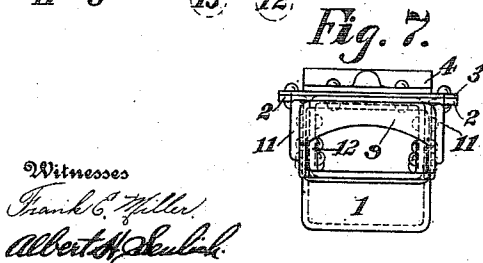
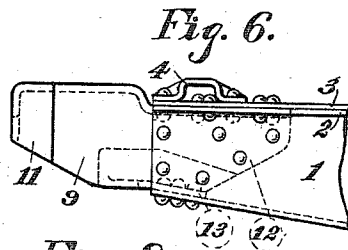
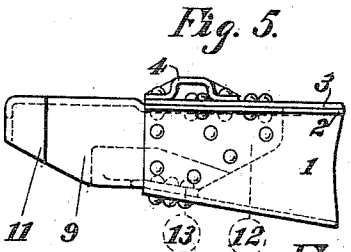
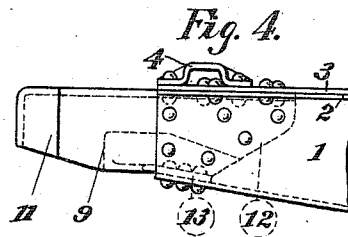
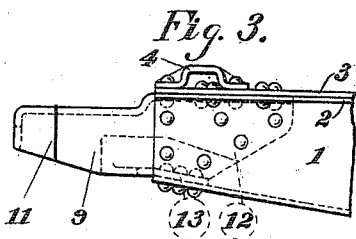
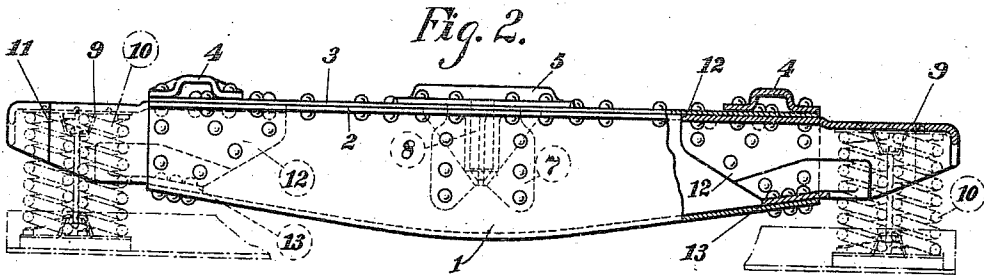
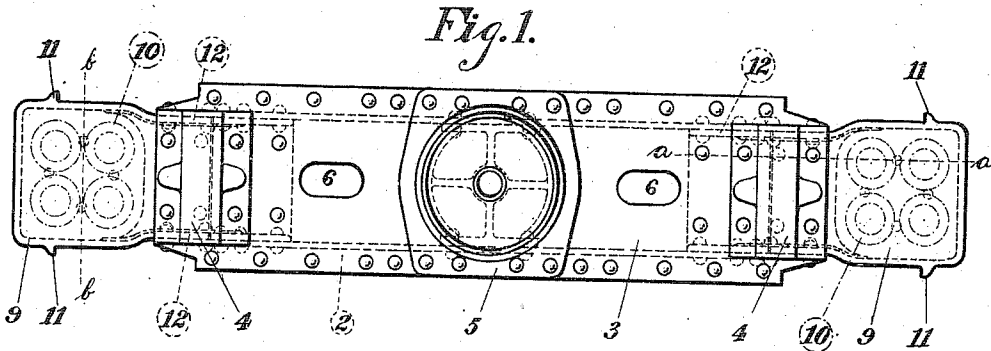


C. A. LINDSTRÖM.
BOLSTER.
APPLICATION FILED NOV. 17, 1909.

985,913.

Patented Mar. 7, 1911.



UNITED STATES PATENT OFFICE.

CHARLES A. LINDSTRÖM, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO PRESSED STEEL CAR COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

BOLSTER.

985,913.

Specification of Letters Patent.

Patented Mar. 7, 1911.

Application filed November 17, 1909. Serial No. 528,587.

To all whom it may concern:

Be it known that I, CHARLES A. LINDSTRÖM, a citizen of the United States, residing at Pittsburg, Northside, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Bolsters, of which the following is a specification.

My invention relates to bolsters for trucks for railway cars, and more especially to that class of metallic bolsters which are built up of steel plates, pressed to shape and then riveted together.

An advantage of the present invention is to provide a bolster which can be used in place of a cast steel bolster, where hitherto, owing to the peculiar construction of the trucks, it has frequently been impossible to use a pressed steel bolster of sufficient strength of the usual type, and so to a certain extent obtain the advantages of both a cast steel and pressed steel bolster.

Another advantage of the present invention is to provide a bolster which can be readily applied to different heights of cars with only minor changes, as for instance, a bolster of a certain capacity may have the central portion, which is made of pressed steel, uniform in size and material for various heights of cars, the only changes necessary being an alteration in the ends to suit the required conditions, thus adapting the bolster for interchange with bolsters already in use, so that cars having other forms of bolsters may be repaired with my bolster.

The invention consists in a bolster, the central portion of which is made of rolled or pressed steel and the end portions of cast material. The outline of the central portion is somewhat in the form of a trough with a cover plate, the adjacent members being provided with outwardly projecting flanges or portions which are secured together. To the extremities of the trough portion, ends in the form of castings are secured, forming extensions of the bolster and providing seats for the springs and the usual column guides.

In the accompanying drawings illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a plan view of a truck bolster constructed in accordance with my invention; Fig. 2 is a side elevation of the same, one end of the bolster being shown as a sec-

tion on line *a-a*, Fig. 1; Figs. 3, 4, 5 and 6 show modifications of the end castings; Fig. 7 is an end elevation of the bolster, and Fig. 8 is a section through one of the end castings on line *b-b*, Fig. 1.

The main body of the bolster consists of a trough-shape member 1, preferably deeper at its center than at its ends, and preferably formed of a single plate of steel pressed to shape, although this is not essential as it may be built up of two side members provided with inwardly projecting flanges on the lower edges and the bottom plate riveted to said flanges. In either event, however, a trough-shape member is formed. The upper edges of this member are provided with longitudinal outwardly projecting flanges 2. The upper member is a simple flat plate 3 which is riveted to the flanges 2 so as to close the top of the trough-shape member 1.

Side bearings 4 are riveted to the top member and the center plate 5 is also riveted to said top member, and said top member is provided with handholes 6 by means of which ready access may be had to the interior of the bolster for inserting and removing the rivets by which the side bearings and end castings are secured to the bolster body.

5 indicates a reinforcing bracket, preferably a malleable casting provided with a vertical opening 8 for the reception of the king pin. This bracket contacts with the top plate 3 and is riveted to the sides of the trough-shape member 1 by means of flanges 7.

To each end of the body portion of the bolster a casting 9 is riveted. This casting forms a seat for the springs 10 and is provided with column guides 11 and also extensions for attachment to the ends of the body portion of the bolster. These extensions are shaped in such a manner as to fit and be secured to the top, sides and bottom of the bolster body, as follows: The top horizontal portion 11 fits in and is riveted to the underside of the top member 3; the vertical side portions 12 fit inside and are riveted to the sides of the trough member, and the lower sloping portion 13 fits the upper side of the lower trough member 1 and is riveted thereto.

To accommodate springs 10, the portion of the casting constituting the spring seat is made hollow for the reception of the ends of

the springs, and is shown in the drawings as being of greater width than the portion engaging with the bolster body, but, if necessary, this condition may be reversed and the portion engaging the bolster made wider than the end forming the spring seat.

In Fig. 2, the spring seat portion of the end casting is shown slightly below the level of the top of the bolster, and in Fig. 3 still farther below the level of the top of the bolster. In Fig. 4 it is shown on about the same level as the top of the bolster whereas in Figs. 5 and 6, the spring seat portion of the end casting is shown in two different planes, both of them above the level of the top of the bolster.

It will readily be seen that this range of adaptability, due to the ability to apply different forms of end castings, results in the advantage that this bolster can be readily applied to different heights of cars, the only change necessary being in the end castings.

Many minor changes in the construction and arrangement of my invention can be made and substituted for those herein shown without in the least departing from the nature and principle of my invention, as for instance, extension of the castings may be made to fit the outer surfaces of the top, sides and bottom of the bolster body, and in that manner secured thereto.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:—

1. A car bolster comprising a trough-shape body member with top plate, and end extensions secured to the body member and top plate.

2. A car bolster, comprising a trough-shape body member with top plate, and end extensions secured to the body member and top plate to form spring seats.

3. A car bolster, comprising a trough-shape body member with top plate, and end extensions secured to the body member and top plate, the extensions having recesses for the reception of the ends of the springs.

4. A car bolster, comprising a trough-shape body member with top plate, and end extensions projecting inside of the body member and top plate and secured thereto to form spring seats.

5. A car bolster, comprising a trough-shape body member with top plate, and end extensions projecting inside of the body member and secured thereto.

6. A car bolster, comprising a trough-shape body member and spring seat extensions projecting inside the trough-shape member.

7. A car bolster comprising a trough-shape body member and spring seat extensions projecting inside the trough-shape member and secured thereto.

8. A car bolster, comprising a trough-shape body member and end extensions secured inside the ends of the body member.

9. A car bolster, comprising a trough-shape body member, and end extensions, secured inside the ends of the body member to form spring seats.

10. A box-girder-like bolster, having its body composed of a lower trough-like portion deepest at its center and tapering thence toward its ends, and a top portion, these two portions having longitudinal outward projections secured together, and end extensions forming spring seats, secured inside the end portions of the body member.

11. A box-girder-like bolster, having its body composed of a lower member deepest at its center and tapering thence toward its ends, and having its upper longitudinal edges flanged or projected outwardly, and a top member also having its lower edges provided with outward lateral flanges or projections, the flanges of the two members being secured together, and end extensions secured inside the end portions of the body member, and projecting beyond the ends of the body member to form spring seats.

12. A bolster formed substantially as a box-girder and comprising two members riveted together, and end extensions secured inside the ends of the box-girder member to form spring seats.

13. A pressed-steel-bolster, composed of a trough-like bottom member deepest at its center and tapering thence toward its ends, and having longitudinal outwardly projecting flanges along the sides of its upper edges, and a top member having complementary lateral projections secured to such flanges, and end extensions secured inside the ends of the bottom and top members to form spring seats.

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

CHARLES A. LINDSTRÖM.

Witnesses:

HARRY A. KNIGHT,

G. C. LAMBE.