DRAFTSMAN,

No. 825,023. PATENTED JULY 3, 1906.

E. I. DODDS.

CAR TRUCK.

APPLICATION FILED JULY 24, 1905.

2 SHEETS—SHEET 1.

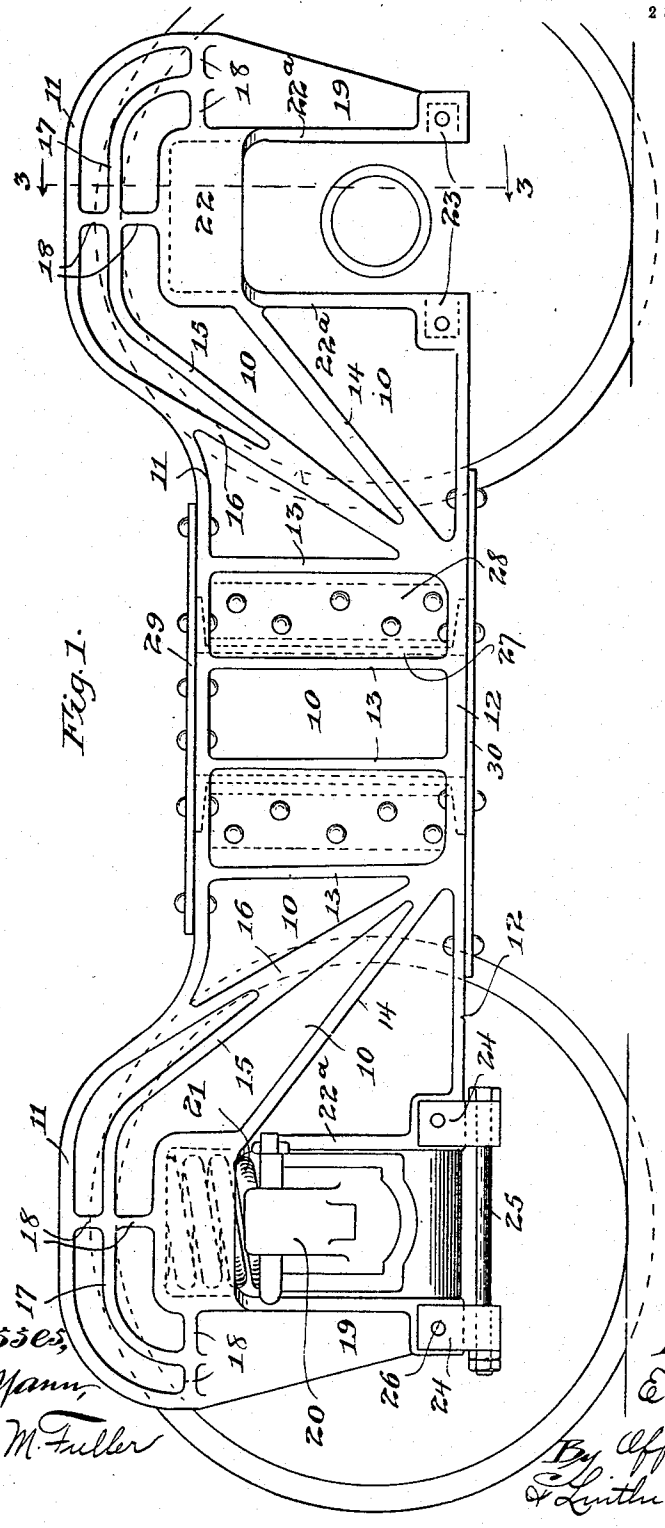


Fig. 1.

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RAILWAY FILING SERVICE
DRAFTSMAN.

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2 SHEETS—SHEET 2.

Fig. 3.

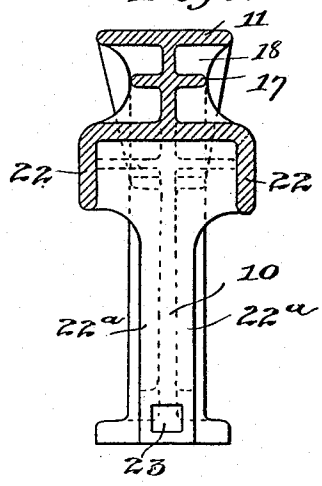


Fig. 2.

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UNITED STATES PATENT OFFICE.

ETHAN I. DODDS, OF PULLMAN, ILLINOIS, ASSIGNOR TO THE PULLMAN COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

CAR-TRUCK.

No. 825,023. Specification of Letters Patent. Patented July 3, 1906.

Application filed July 24, 1905. Serial No. 271,000.

To all whom it may concern:

Be it known that I, ETHAN I. DODDS, a citizen of the United States, residing at Pullman, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Car-Trucks, of which the following is a specification.

This invention relates to car-trucks of the pedestal type, and is more especially directed to the construction of the side frame and to the transoms and means and manner of fastening them in place.

In order to save weight and metal in the side frame and at the same time produce a structure of great strength, I have devised the one particularly described below and illustrated in the accompanying drawings, which is chiefly characterized by a main plate or web portion with integral ribs or flanges extending from both sides. These ribs or flanges are so disposed as to properly take the strains without the use of any surplus material. I also provide the lower pedestal portions with yokes united by bolts, which prevent the axles from leaving the side frame in case the car becomes overturned and which also shield the main portion of the frame from blows or shocks due to accidents or otherwise. If these protecting yokes or clips and their bolts become damaged, they can be readily and cheaply replaced.

Referring to the accompanying drawings, wherein I have shown a car embodying my invention, Figure 1 illustrates a side elevation of my improved truck. Fig. 2 represents a plan view thereof, and Fig. 3 shows a section on the line 3 3 of Fig. 1.

The main plate portion or web 10 of the side frame is provided at its upper edge with compression ribs or flanges 11, extending in opposite directions from the main web, as clearly shown in Fig. 3. At the lower edge of the main web 10 I provide a tension rib or flange 12, similar to the compression-flange 11 above, and connecting the two flanges are vertical ribs 13 on each side of the plate or web 10. On both sides of the main web, extending from the lower portion of the outer vertical ribs 13 to the parts of the side frame over the journal-boxes, are inclined tension-ribs 14, 15, and 16, also on both sides of the main web. The portion of the frame over the journal-boxes is supplied with a rib 17 in addition to the rib 11, already described, said rib being virtually an extension of rib 15, both of the ribs 11 and 17 at the end of the frame turning downward, as is illustrated in Fig. 1. These two ribs are joined together at intervals by vertical ribs 18, which also connect them to the combined cap and pedestal 22, formed with downwardly-extending side flanges 22^a, as is illustrated in Fig. 3. Between the journal-boxes 20 and the combined caps and pedestals 22 I insert the usual springs 21. The depending end portions 19 of the side frame are supplied at their lower ends with yokes 24, secured in place by bolts 26, and connecting these yokes with similar ones on the adjacent portions of the central part of the side frame are bolts 25. These yokes and bolts act not only as devices for shielding the truck from blows and other injuries, but also constitute means for binding the end portions of the side frame to the main central portion, thus strengthening the structure. The bolts 26 pass through recesses 23 in the interior part of the pedestal portions of the frame, as is illustrated in Figs. 1 and 3. By these recesses I save somewhat in weight and material, at the same time retaining a strong construction.

The transom comprises two channel-beams 27, which are secured to the main web of the side frames by means of angle-plates 28. Riveted to the upper flanges of the transom-channels and to the upper flanges of the side frame is a plate 29 of the shape illustrated in Fig. 2. A similar plate 30 is secured to the lower flanges of the same parts.

It is clear that a car-truck such as that above described has no superfluous metal, but that by the proper disposition of the flanges and ribs I secure a light strong structure abundantly reinforced against all the strains to which it is subject in use. It is also apparent that the side frame can be readily separated from the transoms, if desired.

Obviously various modifications may be made in such a construction without departing from the essence of my invention.

This patent is intended to embrace only so much of the disclosure made herein as is covered by the claims.

I claim—

1. A side frame for a pedestal-truck having a main plate portion between the pedestals, and a plurality of integral ribs extend-

ing from the lower part of said plate portion over each pedestal, substantially as described.

2. A side frame for a pedestal-truck having a main plate portion between the pedestals, and a plurality of integral ribs on each side of said plate portion extending from the lower part thereof over each pedestal, substantially as described.

3. A side frame for a pedestal-truck having a main plate portion between the pedestals, a plurality of integral ribs extending from the lower part of said plate portion over each pedestal, said ribs being connected together by one or more additional integral ribs, substantially as described.

4. A side frame for a pedestal-truck having a main plate portion between the pedestals, a plurality of integral ribs on each side of said plate portion extending from the lower part thereof over each pedestal, said ribs being connected together by one or more additional integral ribs, substantially as described.

5. A side frame for a pedestal-truck having a main plate portion between the pedestals with an integral flange along its lower edge and an integral rib extending from said flange over each pedestal, substantially as described.

6. A side frame for a pedestal-truck having a main plate portion between the pedestals with an integral flange along its lower edge, and a plurality of integral ribs extending from said flange over each pedestal, said ribs being connected together by one or more additional integral ribs, substantially as described.

7. A side frame for a pedestal-truck having a main plate portion between the pedestals with an integral flange along its lower edge, an integral rib extending from said flange over each pedestal, said plate portion having an integral top flange connecting said ribs, substantially as described.

8. A side frame for a pedestal-truck having a main plate portion between the pedestals with integral flanges along its lower and upper edges and vertical ribs joining said flanges, an integral rib extending from the junction of said lower flange and adjacent endmost vertical rib over each pedestal, substantially as described.

9. A side frame for a pedestal-truck having a main plate portion between the pedestals with integral top and bottom flanges, and vertical ribs joining said flanges, an integral rib extending from the junction of said bottom flange and adjacent endmost vertical rib over each pedestal, and an integral rib connecting each of said junctions with its adjacent spring-cap, substantially as described.

10. A side frame for a pedestal-truck having a main plate portion between the pedestals with an integral lower flange and integral ribs connecting said flange with each spring-cap, substantially as described.

11. The combination of a side frame for a pedestal-truck, with yokes connected to each pedestal portion, and a bolt connecting said yokes, substantially as described.

12. In a car-truck, the combination of a side frame having a top and bottom flange, transom channel-beams, angle-plates connecting the transom-beams to the side frame, a plate riveted to the top flange of the side frame and to the top flanges of the transom-beams, and another plate riveted to the bottom flange of the side plate and to the bottom flanges of the transom-beams, substantially as described.

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