

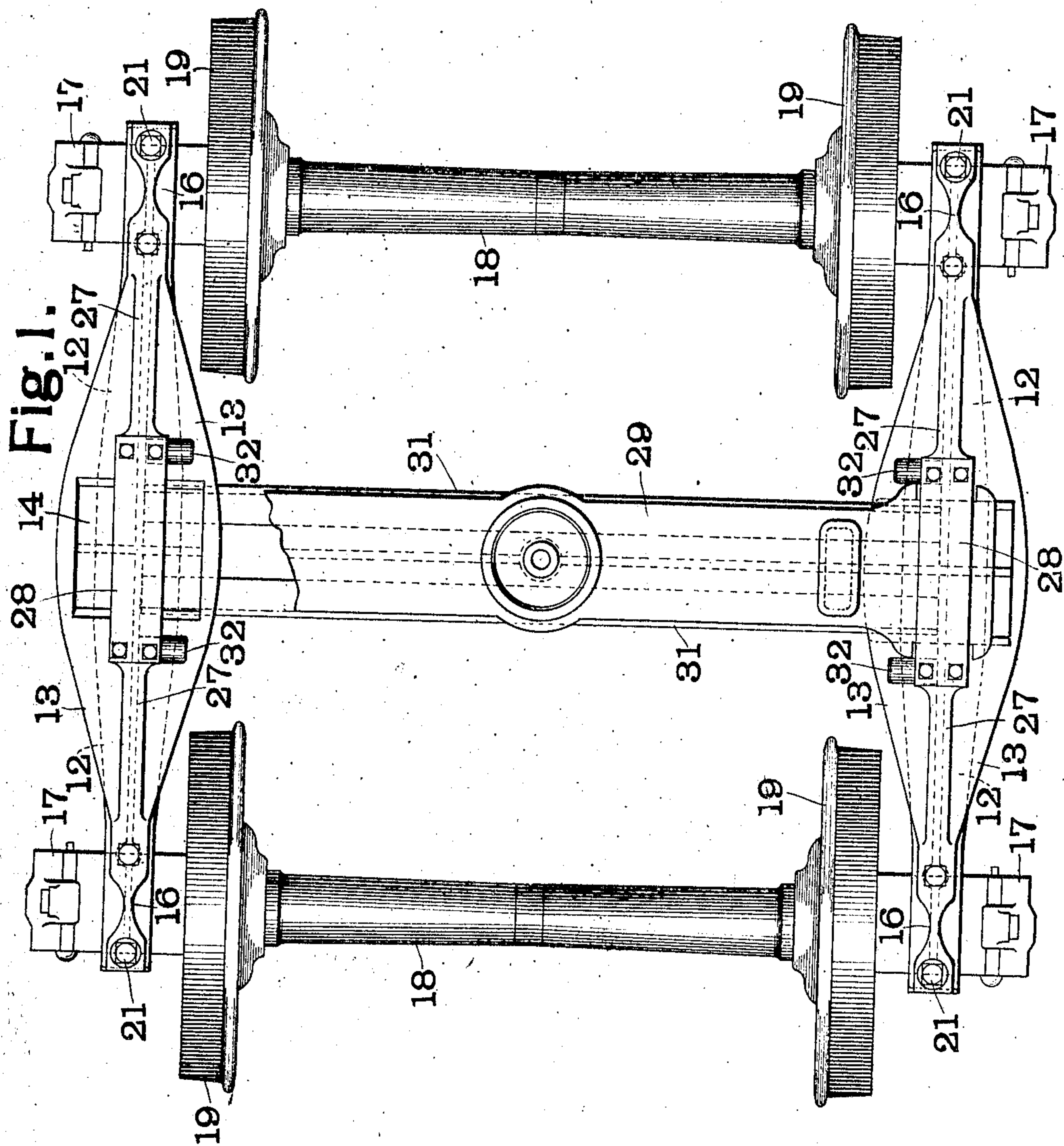
No. 871,466.

PATENTED NOV. 19, 1907.

H. W. WOLFF.
CAR TRUCK.

APPLICATION FILED JUNE 26, 1907.

2 SHEETS—SHEET 1.



WITNESSES:

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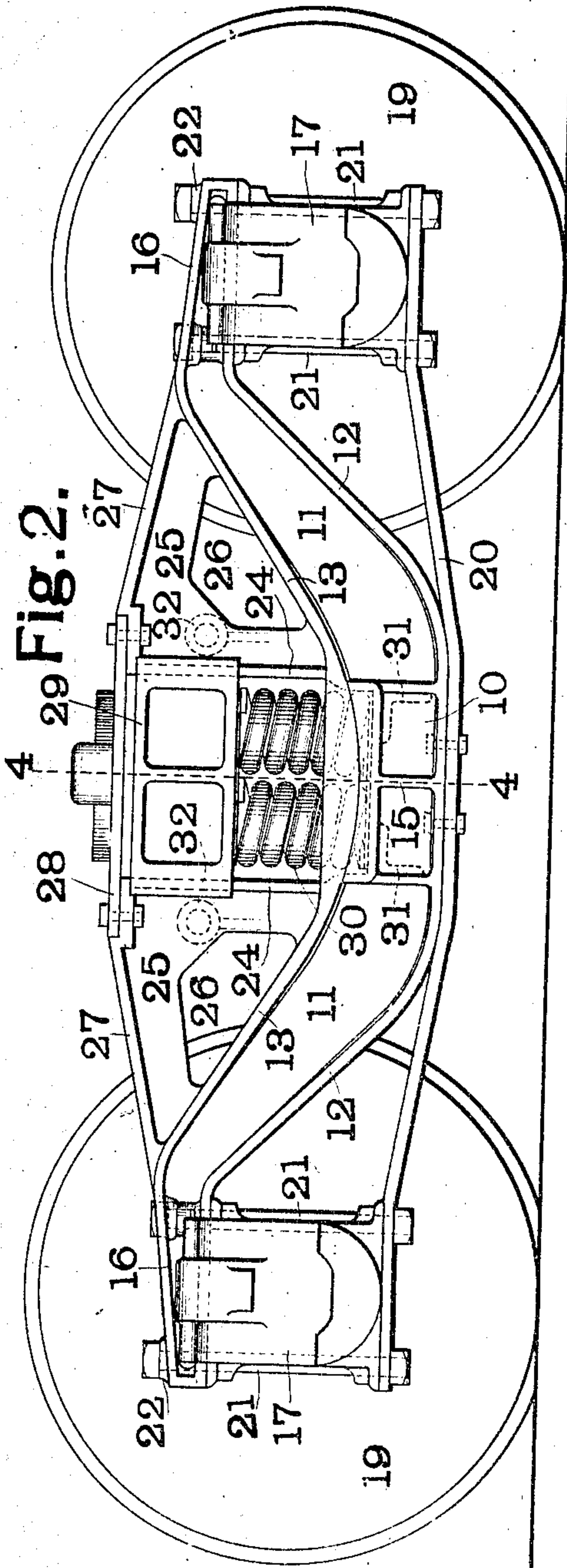


Fig. 2.

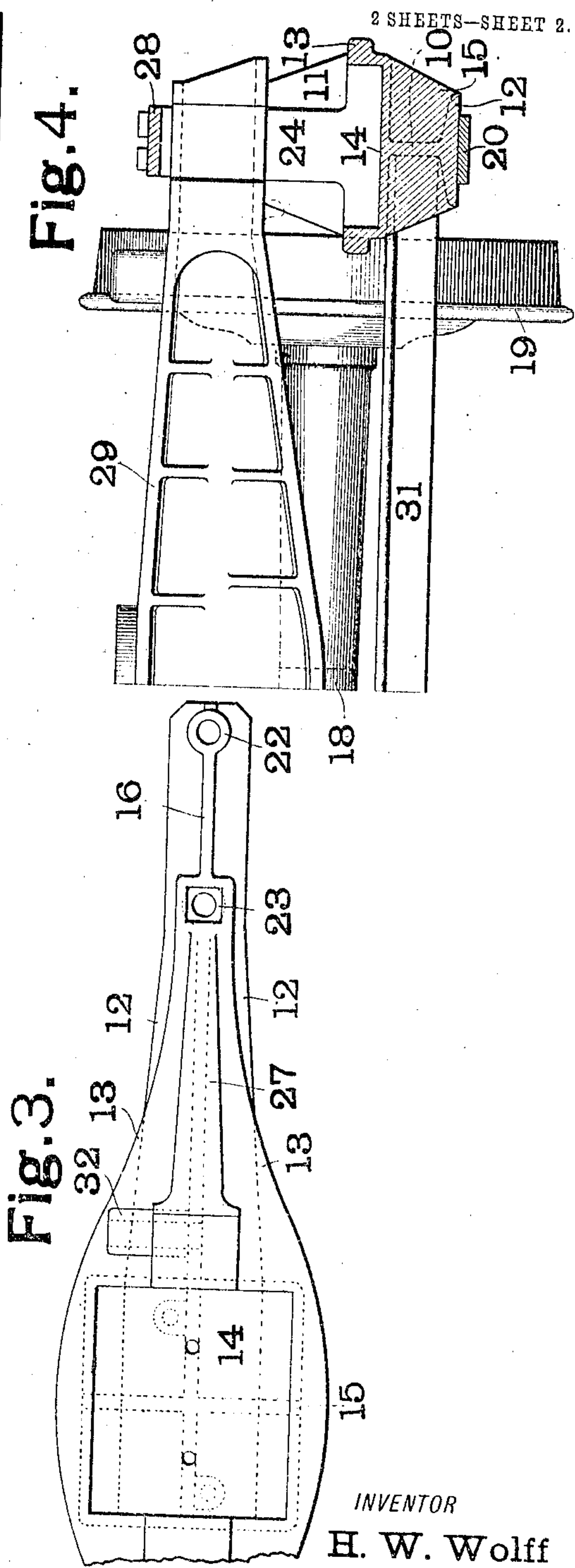


Fig. 3.

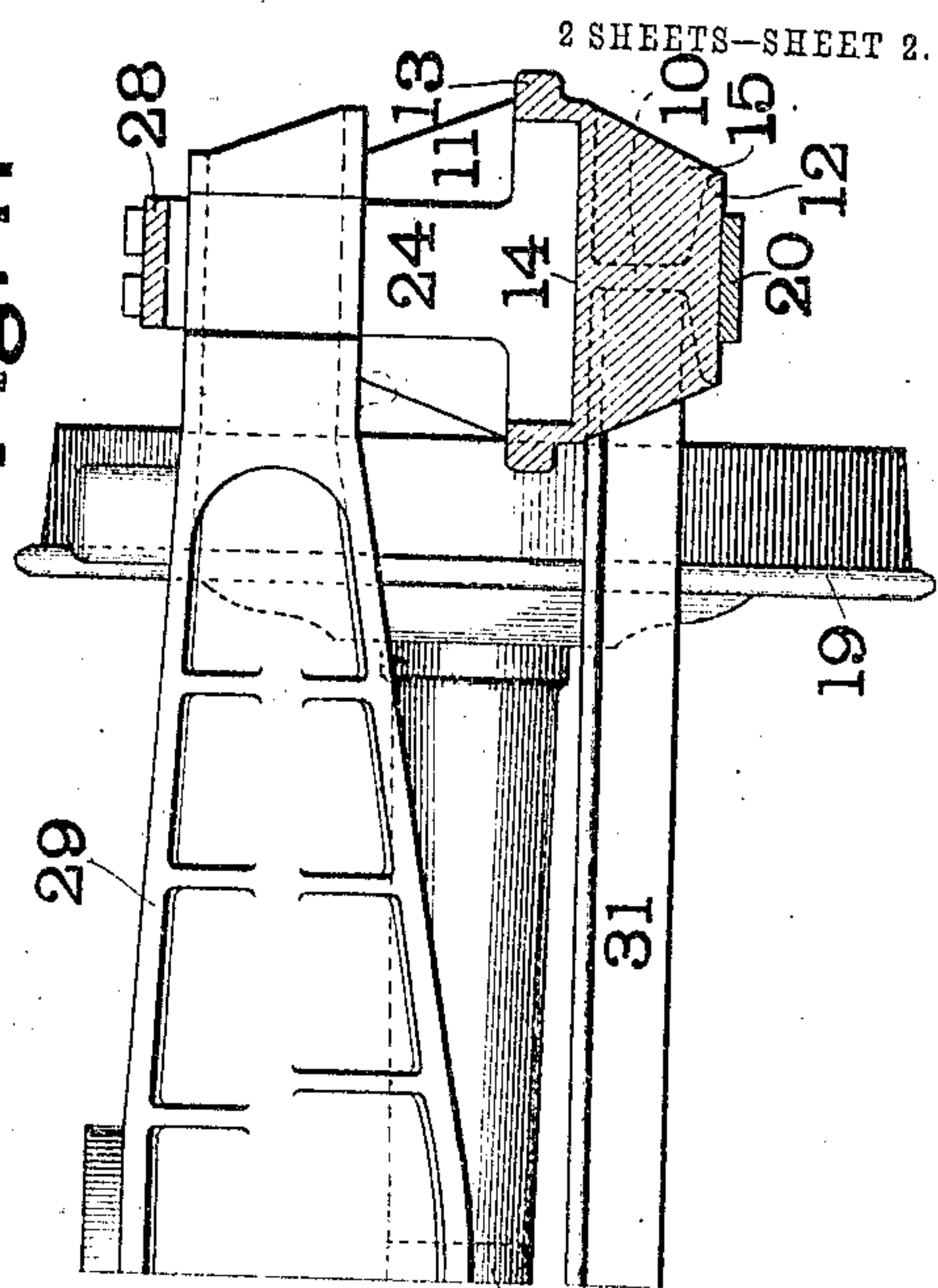


Fig. 4.

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2 SHEETS—SHEET 2.

UNITED STATES PATENT OFFICE.

HERBERT W. WOLFF, OF ST. LOUIS, MISSOURI, ASSIGNOR TO WOLFF TRUCK FRAME COMPANY, OF AUGUSTA, MAINE, A CORPORATION OF MAINE.

CAR-TRUCK.

No. 871,466.

Specification of Letters Patent.

Patented Nov. 19, 1907.

Application filed June 26, 1907. Serial No. 380,880.

To all whom it may concern:

Be it known that I, HERBERT W. WOLFF, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a certain new and useful Car-Truck, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to trucks for railway cars, and more particularly to that class of truck in which the side frame consists of a single piece of cast metal, preferably cast steel.

The object of my invention is to so distribute the metal in the side frame that the greatest possible strength will be secured with the least amount of metal.

In the accompanying drawings, which illustrate one form of car truck made in accordance with my invention, together with a slight modification thereof, Figure 1 is a top plan view, Fig. 2 is a side elevation, Fig. 3 is a top plan view of a portion of one of the side frames, showing a slight modification and Fig. 4 is a section on the line 4-4 of Fig. 2 the springs being omitted.

Like marks of reference refer to similar parts in the several views of the drawings.

10 is the bottom member of the side frame. Inclined upwardly from each end of the bottom member 10 and formed integral therewith is a tie beam 11. Each of the tie beams 11 is provided with a bottom T-flange 12 and a top T-flange 13. These flanges, as well as the central web of the tie beams, are tapered from the lower to the upper end of the tie beam. The top flange 13 extends from the top of the bottom member 10 and is both expanded laterally and thickened at this point. A depressed spring seat 14 is formed in the bottom member 10 extending through the expanded and thickened flange 13 and having its bottom below said flange. Strengthening ribs 15 preferably support the bottom of the spring pocket 14.

Formed integral with the upper ends of the tie beams 11 are oil box extensions 16. These oil box extensions 16 are tapered outwardly from their point of juncture with the tie beams 11. The oil box extensions 16 rest

on oil boxes 17 in which are journaled the axles 18 carrying the wheels 19. The oil boxes 17 are secured in position between the oil box extensions 16 and the inverted arch bar 20 by means of bolts 21. In order that these bolts 21 may be of the same length, I provide the inclined tops of the oil box extensions 16 with a raised seat 22 and a depressed seat 23. The upper T-flange 13 of the tie beams 11 extends to the upper edge of the oil box extension 16, as best shown in Fig. 2, and may either extend entirely along the oil box extension or may terminate at the depressed bolt head seat 23, as shown in Fig. 3.

24 are the truck columns, which are formed integral with and extend upwardly over the ends of the bottom member 10 of the side frame. These truck columns 24 are connected by means of a web 25 with the extremities of the tie beam 11. Openings 26 are formed through these webs to allow of the inspection of the brake hangers and brake beams. The upper edge of the webs 25 are provided with T-flanges 27. These T-flanges, together with the adjacent portion of the web, form strut members between the outer ends of the tie beams and the upper ends of the truck columns. It will be noted that these T-flanges 27 form a substantially straight line with the upper edges of the oil box extensions 16 and thus the strain transmitted by these oil box extensions is delivered directly to a removable compression member 28 set into the upper ends of the truck columns 24.

29 is the bolster, which is held in position by means of the compression members 28 and rests upon springs 30, the lower ends of which are contained in the spring seats 14. The side frames may also be connected by means of angle irons 31.

32 are brake hangers, which are formed integral with the webs 25.

The construction of the side frame of my truck is such that the metal is distributed in the most advantageous manner so that the side frame, while comparatively light, is extremely strong and rigid. At the same time sufficient clearance is secured between the track and the side frame and ample means are provided for the proper inspection of the brake hangers and brake beams.

Having fully described my invention, what

I claim as new and desire to secure by Letters Patent of the United States is:

1. In a car truck, the combination with the bottom member and truck column of a side frame, of tie beams formed integral with and inclined upwardly from said bottom member, a T-flange on the upper edge of said tie beams and extending over said bottom member, a spring seat formed in said bottom member and depressed below said T-flange, and strut members connecting the outer ends of said tie beams and the upper ends of said truck columns.

2. In a car truck, the combination with the bottom member and truck column of a side frame, of tie beams formed integral with and inclined upwardly from said bottom member, oil box extensions formed integral with said tie beams and inclined outwardly from their juncture therewith, a T-flange on the upper edge of said tie beams and extending over said bottom member, a spring seat formed in said bottom member and depressed below said T-flange, and strut members extending from the upper ends of said truck columns to the juncture of said tie beams and oil box extensions.

3. In a car truck, the combination with the bottom member and truck columns of a side frame, of tie beams formed integral with and inclined upwardly from the said bottom member, oil box extensions formed integral with said tie beams, a T-flange on the upper edge of said tie beams and extending over the said bottom member to the upper edge of said oil box extensions, a spring seat formed in said bottom member and depressed below the said T-flange, and strut members connecting the upper ends of the said truck columns with the juncture of said tie beams and oil box extensions.

4. In a car truck, the combination with the bottom member and truck columns of a side frame, of tie beams formed integral with and inclined upwardly from said bottom

member, a T-flange on the upper edge of said tie beam and extending over said bottom member, said T-flange being expanded and thickened at its central part over the said bottom member, a spring seat formed in said bottom member and depressed below the expanded and thickened portion of said T-flange, and strut members connecting the upper ends of said truck columns with said tie beams.

5. In a car truck, the combination with the bottom member and truck columns of a side frame, of tie beams formed integral with and inclined upwardly from said bottom member, oil box extensions formed integral with said tie beams and inclined downwardly and outwardly from their juncture therewith, a T-flange on the upper edge of said tie beams and extending to the upper edge of the said oil box extensions, and strut members extending between said tie beams and truck columns, the upper edges of said strut members lying in a substantially straight line with the upper edges of said oil box extensions.

6. In a car truck, the combination with the bottom member and truck columns of a side frame, of tie beams formed integral with and inclined upwardly from said bottom member, oil box extensions formed integral with said tie beams and inclined outwardly and downwardly therefrom, strut members extending between the upper ends of said truck columns and the juncture of said tie beams and oil box extensions, and a removable compression member between said truck columns.

In testimony whereof, I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses.

HERBERT W. WOLFF. [L. s.]

Witnesses:

W. A. ALEXANDER,
ELIZABETH BAILEY.