

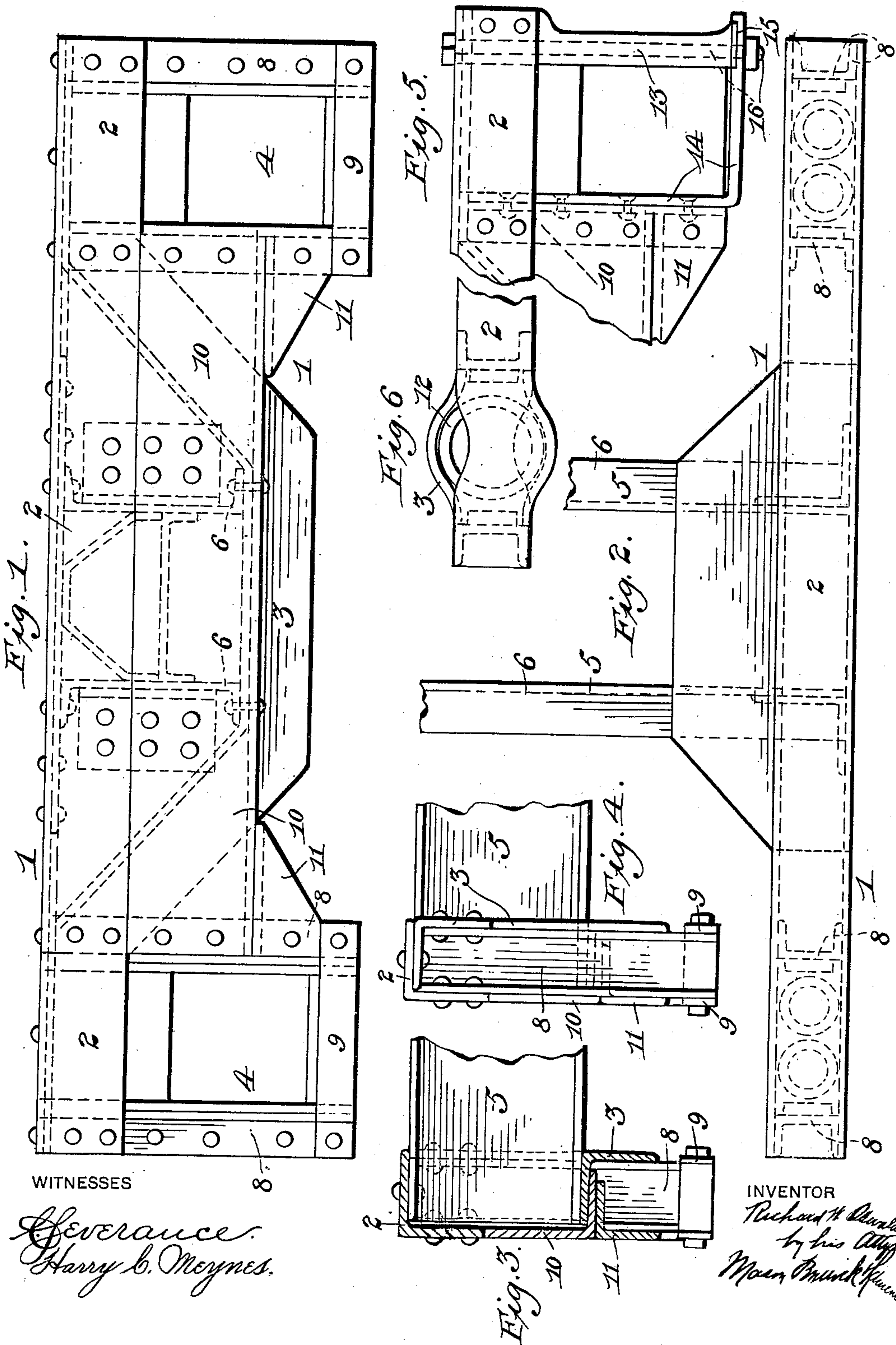
No. 640,692.

Patented Jan. 2, 1900.

R. W. OSWALD.
CAR TRUCK.

(Application filed Mar. 29, 1899. Renewed Dec. 12, 1899.)

(No Model.)



UNITED STATES PATENT OFFICE.

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ONE-HALF TO EDWARD B. TUSTIN, OF SAME PLACE.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 640,692, dated January 2, 1900.

Application filed March 29, 1899. Renewed December 12, 1899. Serial No. 740,111. (No model.)

To all whom it may concern:

Be it known that I, RICHARD W. OSWALD, a citizen of the United States, residing at Bloomsburg, in the county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Car-Trucks; 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 improvements in car-trucks, and more particularly to trucks which are constructed out of angle bars or irons which are rolled in the usual manner.

It consists in a car-truck having sides formed of upper and lower members, the upper member being preferably straight, while the lower member is depressed centrally, the transom or bolster connecting the sides of the truck comprising channel-beams riveted to the said sides and means for bracing the parts with respect to each other.

It also consists in certain other novel constructions, combinations, and arrangements of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a side elevation of a car-truck constructed in accordance with my invention. Fig. 2 represents a top plan view of one side and a portion of the bolster of the said truck. Fig. 3 represents a central vertical section through the under side of the said truck. Fig. 4 represents an end elevation of one of the sides. Fig. 5 represents a fragmentary detail view of a portion of the said truck, showing one of the pedestals formed with a removable post; and Fig. 6 represents a detail view illustrating the manner of bending the members of the truck sides to receive a single truck-spring.

1 in the drawings represents a truck; 2, an upper member of one of the sides; 3, the lower member thereof; 4 4, pedestals.

I contemplate forming my improved car-truck for the most part of angle-iron, which can be purchased in the market, it being a merchantable article and rolled in the usual manner. The sides of the truck are formed of upper and lower angle beams or bars form-

ing the upper and lower members 2 and 3, the said beams being arranged with their horizontal flanges extending toward each other and overlapping at the ends of the said sides, while their vertical legs are arranged upon the opposite sides of the structure. The upper bar or member 2 is preferably made straight from end to end, while the lower member is depressed centrally from points just within each of the pedestals 4. The bolster 5 of the truck is preferably formed of two channel-beams, as 6 6, which are interposed between the horizontal flanges of the upper and lower beams 2 and 3, the webs of the said channel-irons being arranged vertically and their flanges extending outwardly. A brace-plate, as 7, is preferably interposed between the flange of the upper iron 2 and the flanges of the channel-beams 6 6, the parts being securely riveted together. The ends of the upper and lower angle-irons 2 and 3 are formed between their vertical flanges with recesses which open downwardly, the said recesses being adapted to receive the springs which support the car-truck upon the journal-boxes. The pedestals 4 4 are preferably formed by vertically-arranged channel bars or irons, as 8 8, which are bolted in place between the vertical flanges of the upper and lower members 2 and 3. These channel-irons 8 are arranged with their flanges extending outwardly, and are connected at their lower ends by means of brace-bars, as 9. The structure is further braced and strengthened by means of side brace-plates, as 10, which are preferably angle-irons having their vertical flanges deeper than their horizontal ones. The vertical flanges of these brace-plates 10 engage the lower edge of the upper member 2, while their lower horizontal flanges extend beneath the horizontal flanges of the lower members 3, to which they are securely bolted or riveted. Additional brace-plates, as 11, made of angle-irons may be arranged beneath the ends of the brace-plates 10 and secured to the inner channel-iron of each of the pedestals 4. The webs of the bolster channel-irons 6 are preferably secured by means of angle brace-plates to the vertical flanges of the upper members 2 and the brace-plates 10, thus forming a strong and complete article.

The sides of the truck, when constructed as above described, are well adapted to receive two springs at their ends for supporting the truck upon the journal-boxes. If, however, it is desired to employ a single large spring, the upper and lower bars 2 and 3 are preferably bent at their ends, as illustrated in Fig. 6 of the drawings, to accommodate said single spring, as at 12.

It is often advisable to construct the pedestals of the truck so that the wheels may be removed without lifting the car-body from the truck, and for this purpose I vary the construction of the sides of the truck, as illustrated in Fig. 5. Instead of extending the outside channel-bar all the way down I employ a removable post, as 13, to hold the journal-boxes in place. A strip or plate of metal, as 14, is bolted to the inner member of the pedestal, its lower end being bent at right angles and extended toward the ends of the truck. These extended end portions are preferably provided with recesses, as 15, to receive the lower ends of the posts 13, and a vertically-arranged bolt, as 16, is passed through the ends of the truck sides and the posts 13 to hold them in place. It will be seen that by removing the bolt 16 and slightly springing the end of the bent plate 14 downwardly the post 13 may be removed and the journal-boxes taken out.

It will be apparent that various other slight changes in the construction might be made without departing from the spirit of my invention.

A truck constructed in accordance with my invention is inexpensive and yet very strong, and may be made out of ordinary angle-iron.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A car-truck comprising sides formed of upper and lower angle-bars, said angle-bars being arranged with their horizontal flanges overlapping at their ends, their vertical flanges being arranged upon each side of the structure, a bolster connecting the said sides and being interposed between the central depressed portion of the lower angle-bar and the horizontal flange of the upper angle-bar, pedestals formed at the ends of the said sides comprising vertically-arranged channel-bars, and means for bracing the parts with respect to each other, substantially as described.

2. An angle-bar truck comprising sides formed of upper and lower members, the lower member being depressed centrally and the ends of the said upper and lower members being secured together with their horizontal flanges overlapping and their vertical flanges forming downwardly-opening recesses, vertical channel-bars mounted in the said recesses for forming the pedestals, plates for bracing the upper and lower members, the said plates being preferably formed of angle-irons and having their flanges engaging the lower edge

of the upper member of the side, while the lower horizontal flange engages the horizontal flange of the lower member of the said side, and means for further bracing the parts with respect to each other, substantially as described.

3. An angle-bar truck comprising sides formed of upper and lower angle members, the lower member being depressed centrally, while the upper member is straight, the ends of the upper and lower members being brought together with their horizontal flanges overlapping, channel-bars secured between the vertical flanges of the said members to form pedestals, a bolster connecting the sides of the truck, comprising channel-bars interposed between the horizontal flanges of the upper and lower members, a brace-plate interposed between the said bolster and the upper member, side brace-plates having their vertical flanges engaging the lower edges of the upper member and their horizontal flanges supporting the horizontal flanges of the upper members and the side brace-plates, and braces interposed between the side brace-plates and the pedestal channel-bars, substantially as described.

4. An angle-bar truck comprising sides formed of upper and lower members having their flanges overlapping at their ends to form downwardly-opening recesses, vertical channel-bars secured in the said recesses to form pedestals, the upper and lower members being bent outwardly near their ends to form a large recess to receive the upper ends of a single spring, and means for bracing the parts together, substantially as described.

5. An angle-bar truck comprising sides formed of upper and lower members, the said members being bolted together at their ends with their horizontal flanges overlapping and their vertical flanges extending downwardly, pedestals secured between the said vertical flanges, the said pedestals having a removable post, bent plates for bracing the lower end of the said removable post, and a bolt for securing the parts together, the construction being such that by removing the bolt, the post may be readily taken out and the journal-boxes removed, substantially as described.

6. An angle-iron car-truck comprising sides formed of angle-iron suspension and tension members, the tension member being depressed centrally, side angle brace-plates having their horizontal flanges extending inwardly and supporting the central portion of the suspension member, for bracing the parts with respect to each other, and bolsters for connecting the sides of the truck, said bolsters being bolted or riveted to the members of the sides and the said brace, substantially as described.

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

RICHARD W. OSWALD.

Witnesses:

S. F. PEACOCK,
R. L. ORANGE.