

No. 831,655.

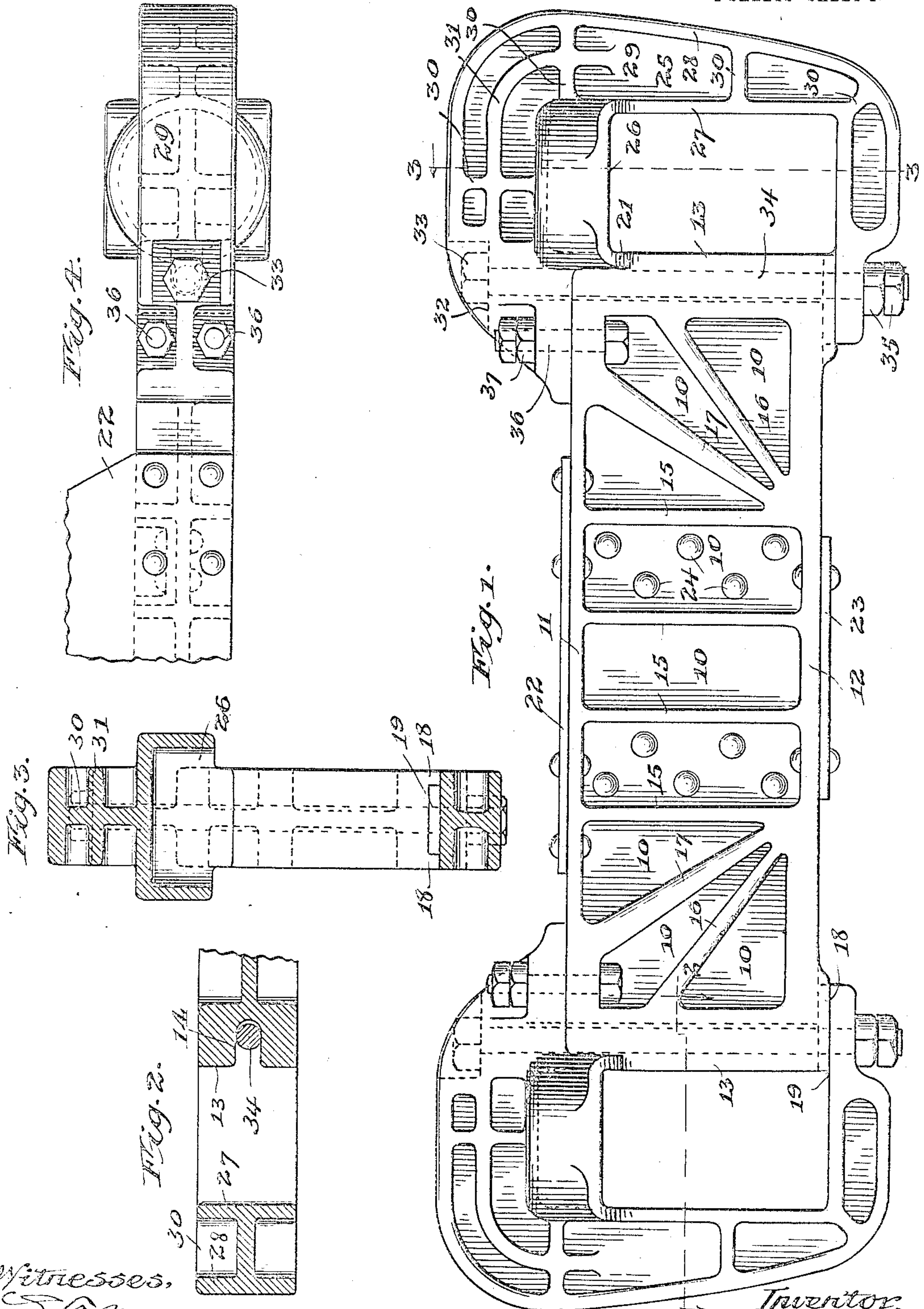
PATENTED SEPT. 25, 1906.

E. I. DODDS.

CAST METAL SIDE FRAME FOR CAR TRUCKS.

APPLICATION FILED OCT. 30, 1905.

2 SHEETS—SHEET 1.



Witnesses,
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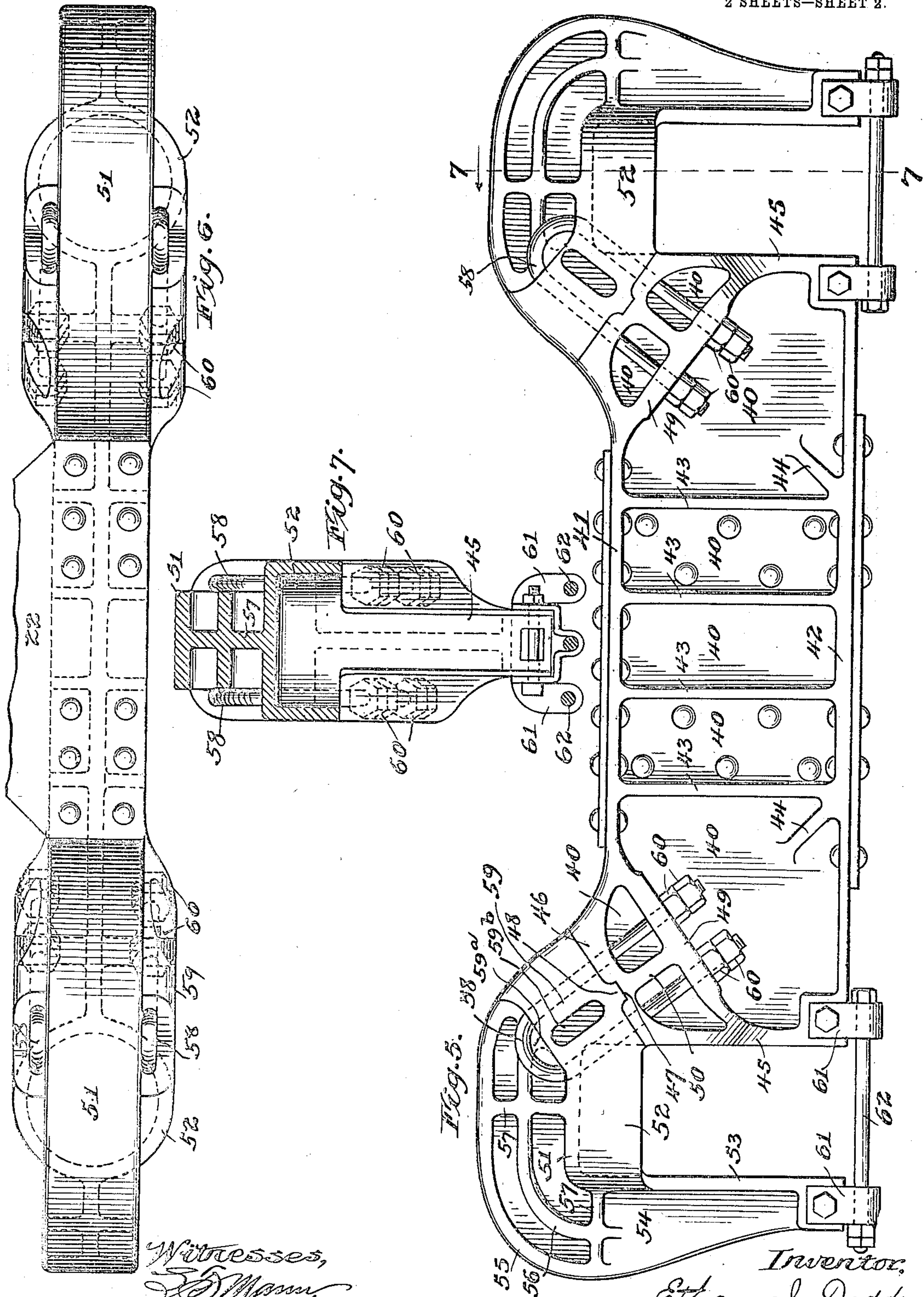
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UNITED STATES PATENT OFFICE.

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

CAST-METAL SIDE FRAME FOR CAR-TRUCKS.

No. 831,655.

Specification of Letters Patent.

Patented Sept. 25, 1906.

Application filed October 30, 1905. Serial No. 285,156.

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 Cast-Metal Side Frames for Car-Trucks, of which the following is a specification.

A side frame for a car-truck with detachable pedestal portions so constructed that by disconnecting the pedestal portions from the main body of the side the axles and journal-boxes may be removed therefrom without jacking or lifting up the truck or the car forms the subject-matter of my present invention.

Another feature of my improved side frame is the facility with which the same may be repaired in case its ends become damaged, and, furthermore, since my new form of truck side is made up of a number of parts it may be more easily handled when the truck is being assembled than one which has all the parts integral.

In the accompanying drawings I have illustrated two embodiments of my invention, like reference characters on all the figures referring to the same parts throughout.

Figure 1 is an elevation of a side frame for a car-truck embodying my invention. Fig. 2 is a horizontal section of a portion thereof on the line 2 2 of Fig. 1. Fig. 3 is a vertical section through the right-hand pedestal portion on line 3 3 of Fig. 1. Fig. 4 is a partial plan view of the side frame shown in Fig. 1. Fig. 5 is an elevation of a modified form of my invention. Fig. 6 is a plan view of the same, and Fig. 7 is a section on line 7 7 of Fig. 5.

The side frame illustrated in Figs. 1 to 4, inclusive, comprises a main plate or web portion 10, having integral top and bottom flanges 11 and 12, respectively, extended outwardly from both sides of the plate portion 10, each end of the latter being provided with flanges or enlargements 13, recessed at 14 from top to bottom on their end faces. Integral vertical ribs 15 unite the top and bottom flanges 11 and 12 on both sides of plate or web 10, and inclined integral flanges 16 and 17 on each side of the plate connect the junctions of lower flange 12 and the outermost ribs 15 to the end enlargements 13 and top flanges 11, respectively.

At the ends of its lower edge flange 12 is equipped with integral downwardly-extended lips 18, between which fit tongues 19 of the end pedestal members described hereinafter. Each end enlargement 13 is provided with a shoulder or seat 20, on which rests a small lug 21 integral with the upper part of the above-mentioned pedestal member. A top tie-plate 22 may be riveted to the top flanges 11 of the sides to connect the latter, and a similar bottom plate 23 for the same purpose may be riveted to the lower flanges 12, while rivets 24 fasten the transoms (not shown) to the side frames. At each end the main plate or web portion 10 is provided with a U-shaped pedestal member 25, the limbs of each of which rest upon the top and bottom surfaces of flanges 11 and 12, respectively, each pedestal member being supplied with a hollow spring-cap 26 and with inner and outer marginal flanges 27 and 28, respectively, extended outwardly from each side of its web portion 29 and connected at intervals by ribs 30. The pedestal member 25 is also supplied with an additional strengthening-rib 31 on each side substantially parallel to the outer flange 28. The upper inner portion of each pedestal member 25 has a horizontal shoulder 32, upon which rests the head 33 of a bolt 34, passing through apertures in the limbs of the U-shaped member 25 and through the recess 14, nuts 35 at its lower end securely holding the parts together. This bolt clamps the pedestal member to the plate portion 10, while two bolts 36 passing through holes in the upper flange 11 and in the end portion of the pedestal member with its nuts 37 resting against shoulders 38, provided for that purpose, securely hold the member to the body portion 10 of the side frame. It will be apparent that bolts 34 clamp the pedestal members firmly to the main portion 10, while the bolts 36 prevent its longitudinal movement on the same part.

The three parts of the frame of the shape shown in the drawings may be cast and bolted together, as illustrated. By removing the bolts the end pedestal members may be disconnected, so that the axles and their journal-boxes can be readily and expeditiously removed from the side frame without lifting the main plate portion 10.

In Figs. 5, 6, and 7 I have illustrated a

modification, which consists of a plate or web 40, having integral top and bottom flanges 41 and 42, respectively, extended outwardly from both of its surfaces and united by integral vertical ribs 43, short inclined ribs 44 connecting the plate portion 40 with the junctions of the lower flange 42 and the end vertical ribs 43. End flanges 45, which form guides for the journal-boxes, are provided at the ends of the plate portion 40, the upper corners of the latter being inclined at substantially forty-five degrees and supplied on both sides with a flange 46, notched at 47 to receive the tongues 48 of the pedestal portions described below. Parallel to the marginal flanges 46 are ribs 49, connected to the latter by ribs 50 on both sides of plate 40, ribs 49 joining the end and top flanges. Each end pedestal portion 51 has an integral hollow spring-cap 52, a vertical flange 53 forming the outside guide of the journal-box and a main web portion 54 supplied along its top and part way down its side with a marginal flange 55 on both sides and a parallel intermediate flange 56 spaced a short distance therefrom and connected thereto and to the spring-cap portion by ribs 57. The inner end of each pedestal member is inclined so as to rest upon flange 46 with the tongue 48 fitted in the groove 47, thereby positioning the parts and holding them in place while being bolted together, the pedestal members being held to the main portion 40 of the side frame by U-shaped bolts 58 passing through apertures in the broad flange 59 of the pedestal portion and apertures in the flanges 46 and 49 of the plate 40, nuts 60 on the ends of the bolts holding the parts firmly together. It should also be noted that each flange 59, of which there is one on each side of the pedestal member, has a rounded projection 59^a, adapted to fit the curvature of bolt 58 and form a seat therefor, and that each flange 59 is recessed at 59^b, leaving a thin web between the two opposite recesses.

The lower ends of the pedestals are equipped with yokes 61, bolted thereto, which sustain one or more bolts 62, the function of which is to retain the journal-boxes and axles in place if the car becomes upset.

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 for a car-truck including a central plate having a flange and a pedestal member detachably secured to said flange by one or more bolts passing through said pedestal member and flange only, substantially as described.

2. A side for a car-truck including a plate having one or more flanges integral therewith adjacent to its top edge, and a pedestal member detachably secured to said flanges by one or more bolts passing through said

pedestal member and flanges only, substantially as described.

3. A side for a car-truck including a main member and a pedestal member detachably secured thereto, one of said members having a tongue and the other a notch or recess adapted to receive said tongue whereby said pedestal member is positioned, substantially as described.

4. A side for a car-truck including a main member having a recess in its surface, a detachable pedestal member, and a bolt adapted to lie in said recess and fasten said pedestal member to said main member, substantially as described.

5. A side for a car-truck comprising a plate the ends of which form the sides of pedestals, said ends being provided with recesses extending inwardly from their end surfaces, members forming the tops and other sides of the pedestals, and bolts lying in said recesses detachably connecting said members to said plate, substantially as described.

6. A side for a car-truck comprising a plate the ends of which form the sides of pedestals, said ends being provided with recesses extending inwardly from their end surfaces, said plate also having a top flange, members forming the tops and other sides of the pedestals, and bolts lying in said recesses detachably connecting said members to said plate, and bolts detachably securing said members to said top flange, substantially as described.

7. A side for a car-truck comprising a plate or web portion having top and bottom flanges integral therewith and diagonal ribs joining said flanges and integral therewith, pedestal members, and bolts detachably connecting said pedestal members to said plate portion passing through said pedestal members and said top flange only, substantially as described.

8. A side for a car-truck comprising a plate or web portion having integral top and bottom flanges extending from both sides thereof, and integral ribs connecting said top and bottom flanges, the ends of said plate or web portion forming the sides of pedestals, and members forming the tops, other sides, and bottoms of the pedestals detachably connected to said plate or web portion, each of said members having integral inner and outer marginal flanges, substantially as described.

9. A side for a car-truck comprising a plate having spaced lips at the ends of its lower edge and seats on its ends, and pedestal members bolted to said plate each having a tongue to fit between said lips at one end and a projection to rest upon the adjacent seat, substantially as described.

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