E. C. COVERT.

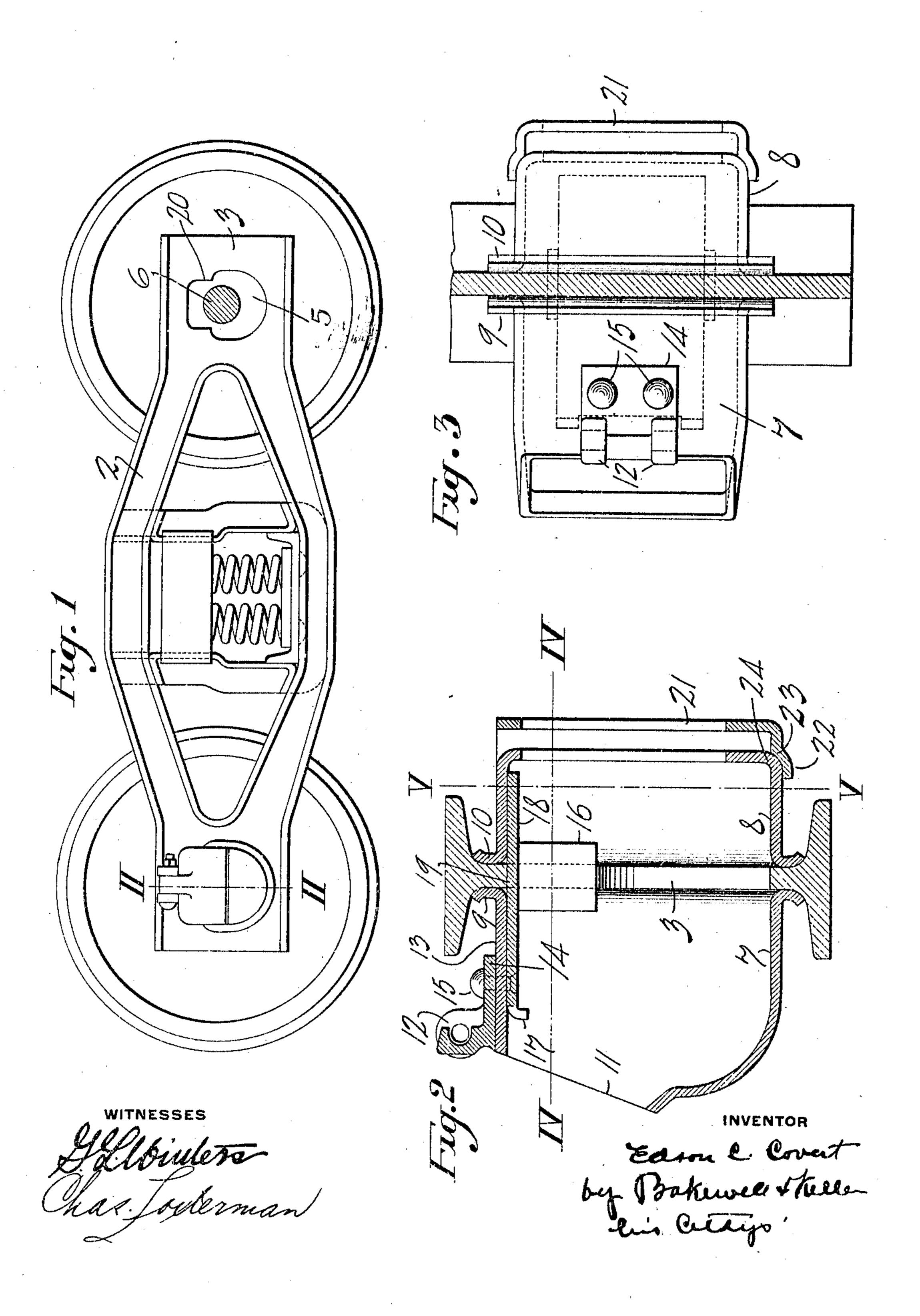
TRUCK SIDE FRAME.

APPLICATION FILED AUG. 20, 1910.

993,576.

Patented May 30, 1911.

2 SHEETS-SHEET 1.



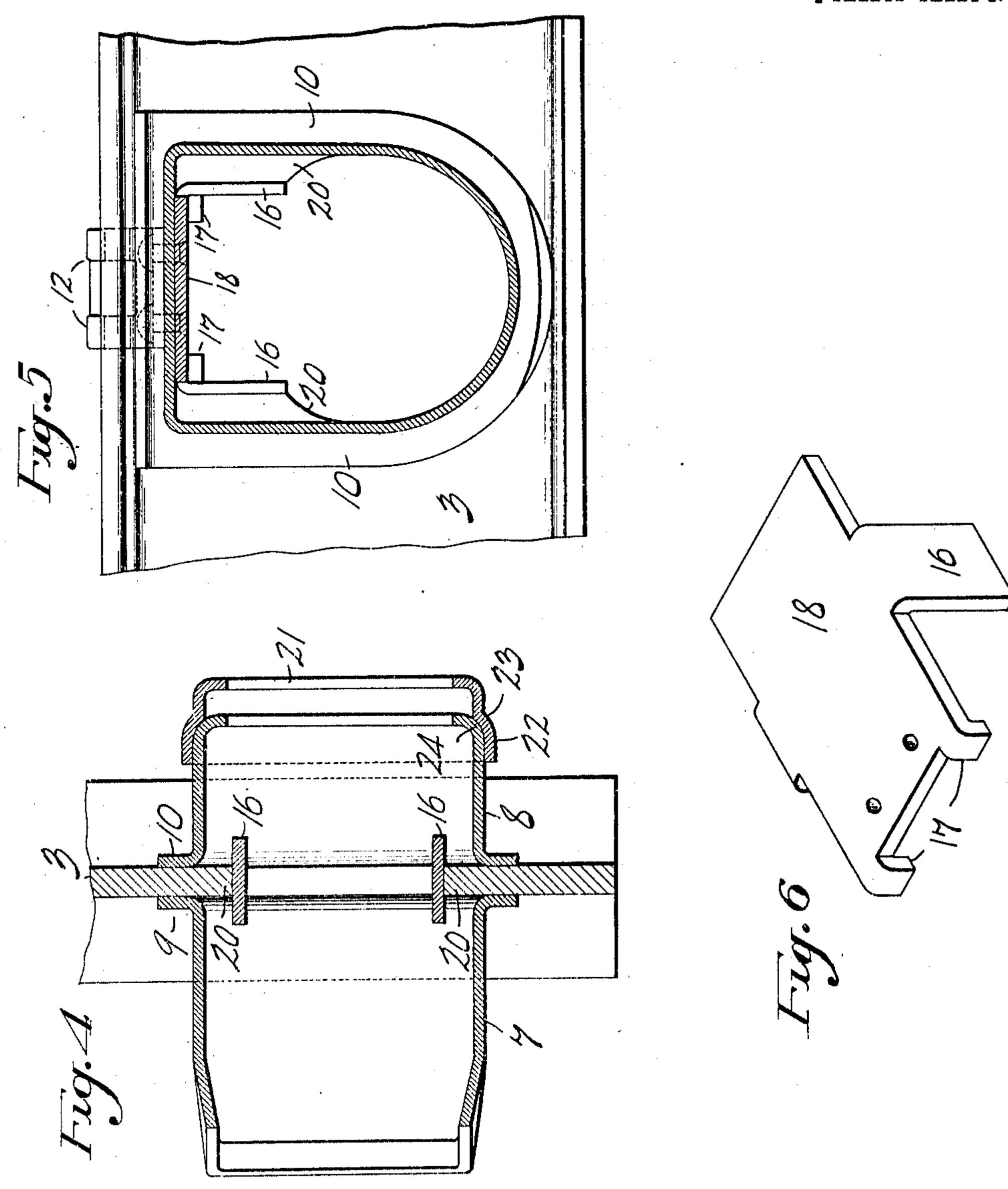
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## UNITED STATES PATENT OFFICE.

EDSON C. COVERT, OF NEW KENSINGTON, PENNSYLVANIA.

TRUCK SIDE FRAME.

993,576. Specification of Letters Patent. Patented May 30, 1911.

Application filed August 20, 1910. Serial No. 578,193.

To all whom it may concern:

Be it known that I, Edson C. Coverr, of and State of Pennsylvania, have invented a 5 new and useful Improvement in Truck Side Frames, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form part of this specification.

This invention relates to side frames for car trucks, and it aims to provide a cheap and simple improved construction therefor.

The invention is directed to the construction and connection of the journal boxes, and 15 has particular reference to the type of journal box and frame construction set forth in my application filed July 28th, 1910, Serial No. 574,343.

I will now describe my invention so that 20 others skilled in the art to which it appertains may understand and construct the same.

Figure 1 is a side elevation of a truck side frame embodying my invention; Fig. 2 is a 25 vertical transverse section on the line 2-2 of Fig. 1; Fig. 3 is a top plan view, showing the frame member partly in section; Fig. 4 is a horizontal section taken on the line 4-4 of Fig. 2; Fig. 5 is a transverse 30 section taken on the line 5-5 of Fig. 4; and Fig. 6 is a perspective view of the lug plate to be hereinafter referred to.

In the drawings the numeral 2 represents a truck frame, as shown in one piece, al-35 though a frame of fabricated or built up construction may be used. This frame may be of any desired form or size, as this does not form part of my present invention. The end portion of the frame is provided with a 40 vertical web like portion 3, which, if desired, may be provided with the upper and lower flanges 4. This vertical member 3 is provided with the opening 5, which receives the journal 6 of the car wheel.

As set forth in my application Serial No. 574,343, above mentioned, the journal box or casing proper is shown in the form of two sections 7 and 8; having flanges respectively 9 and 10 which lie in facial abutment with, 50 and are secured, preferably by welding, to the member 3 as shown in Figs. 2 and 4. Each section 7 and 8 preferably comprises a single pressed sheet metal shell like portion; the section 7 having the usual forward opening 11, which may be covered by any suitable form of journal box lid, and cover hinge

lugs 12. These hinge lugs 12 may be riveted to the upper portion 13 of the box in the New Kensington, county of Westmoreland, manner clearly shown in Figs. 2, 3 and 5; the hinge lug having the flange portion 14 60 through which the securing rivets 15 pass. The stop lugs for the bearing plate and wedge plate are indicated respectively by the numerals 16 and 17; the lug 16 being disposed at the sides of the box and the lug 17 65 at the forward end of the box in the usual manner. These lugs 16 and 17 are carried by the plate portion 18, which lies inwardly against the upper face of the box and the face 19 of the member 3 of the frame, and 70 may be held in position by means of the hinge lug rivets 15, as shown in Figs. 2 and 5.

> As shown in Figs. 1, 4 and 5, the frame member 3 is provided with the inwardly 75 projecting portions 20 against which the lug 16 abuts and to which they may be secured, preferably by welding. Those portions 20, contacting with the lug 16, serve to greatly reinforce the lugs and operate for direct 80 transmission of the stresses delivered thereon, to the vertical member 3 of the frame. It will also be noticed by referring to Fig. 2 that vertical stresses delivered to the lug plate 18 will in turn be transmitted substan- 85 tially directly to the vertical member 3 of the frame and not indirectly through the journal box sections 7 and 8 in such manner as to place shearing stresses thereon, by reason of the fact that the face 19 of the 90 member 3 lies substantially flush with the inner face of the upper portion of the box sections.

The numeral 21 indicates a suitable dust guard plate having the flange portion 22, 95 which is shouldered as at 23 so as to receive in abutment the edge 24 of the section 8. This section 21 is, through the flange 23, preferably welded to the section 8.

It will be apparent that many changes 100 may be made in the construction shown without departing from my invention.

While I have spoken of the several parts as being secured together by welding, which may be done electrically or otherwise, it will 105 be apparent to the skilled mechanic that other fastening means may be employed for this purpose. Where the employment of the particular journal box construction shown, is desired with cast structures, where welding 110 is not feasible, said separate fastening means may be employed.

The advantages of my invention will be readily appreciated by those skilled in the art. The construction is such as to enable the ready removal and replacement of the 5 lug plate should it become worn, without disturbing the rest of the box portions.

Having thus described my invention, what I claim and desire to secure by Letters Pat-

ent is,—

10 1. A truck side frame having a vertical member, a separately formed journal box integrally secured thereto, and a separately formed lug plate carried by the box.

2. A truck side frame having a vertical 15 member, a separately formed vertically divided two-part journal box secured thereto. and a lug plate carried by the box.

3. A truck side frame having a vertical member, a separately formed journal box se-20 cured thereto and comprising a two-part casing mounted on opposite sides of the vertical member, and a separately formed lug plate carried by the box.

4. A truck side frame having a vertical 25 member, a wrought metal journal box, weldsecured thereto, and a separately formed lug

plate carried by the box.

5. A truck side frame having a vertical member, apertured for the passage of the 30 journal, a separately formed journal box

secured to the vertical member, a lug portion carried by the vertical member and projecting inwardly in the box, and a lug plate carried by the box and having a lug disposed so as to lie in abutment with the lug 3 of the vertical member.

6. A truck side frame having a vertical portion apertured for the passage of the journal, a separately formed two-part journal box oppositely disposed on each side of 40 the vertical portion, a lug portion carried by the vertical member and projecting inwardly of the box, and a lug plate carried by the box portion and having a lug so disposed as to lie in abutment with the lug portion 45 of the vertical member.

7. A truck side frame having a vertical portion apertured for the passage of the journal, a separately formed journal box secured thereto, a lug portion carried by the 50 vertical member and projecting inwardly of the box, and a lug plate carried by the box and having a lug secured to the lug por-

tion of the vertical member.

In testimony whereof, I have hereunto set 55 my hand. EDSON C. COVERT.

Witnesses:

M. A. BARET, M. A. KELLER.