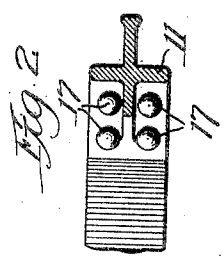
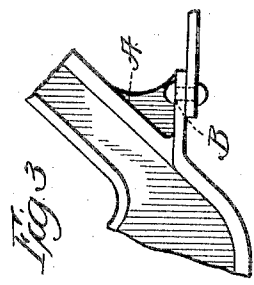
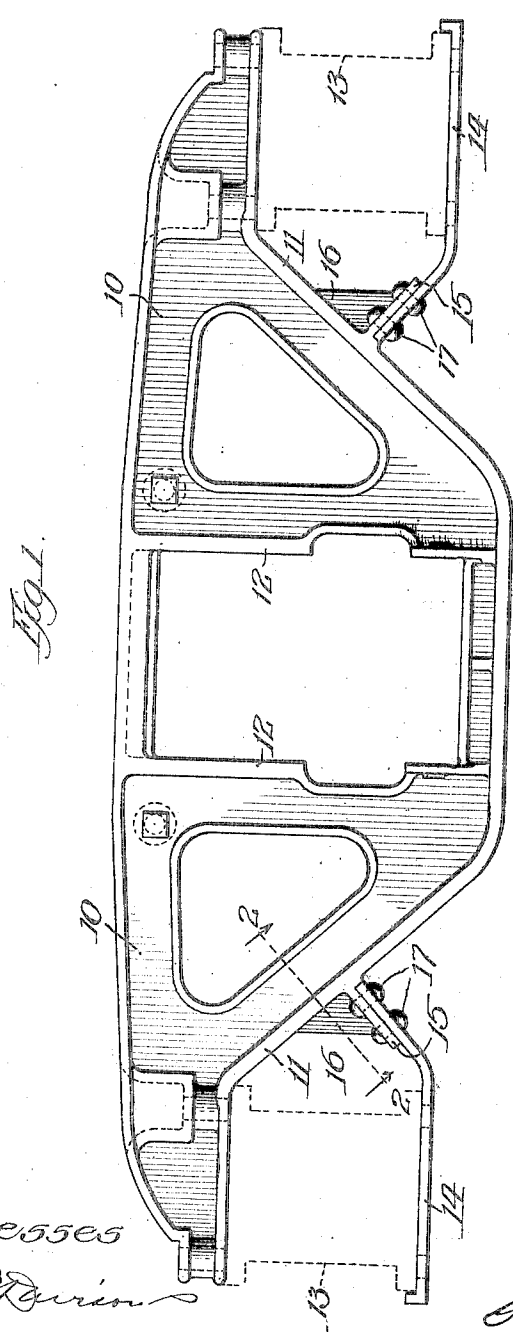


J. A. LAMONT.
 SIDE FRAME AND TIE BAR FOR CAR TRUCKS.
 APPLICATION FILED JUNE 30, 1911.

1,009,979.

Patented Nov. 28, 1911.



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UNITED STATES PATENT OFFICE.

JOHN A. LAMONT, OF GRANITE CITY, ILLINOIS, ASSIGNOR TO AMERICAN STEEL FOUNDRIES, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

SIDE FRAME AND TIE-BAR FOR CAR-TRUCKS.

1,009,979.

Specification of Letters Patent.

Patented Nov. 28, 1911.

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To all whom it may concern:

Be it known that I, JOHN A. LAMONT, a citizen of the United States, residing at Granite City, in the county of Madison and State of Illinois, have invented certain new and useful Improvements in Side Frames and Tie-Bars for Car-Trucks, of which the following is a specification.

My invention relates to car trucks and has particular reference to a side frame and novel tie bar for use in connection therewith.

In the use of car trucks it is customary to employ a side frame composed of upper and lower arch bars, columns and a tie bar, the arch bars at their ends resting on a journal box, the tie bar fitting underneath the journal box. Journal box bolts are then employed to secure the structure in place. In many instances a one piece tie bar is employed,—that is, a bar extending from one journal box to the other and being secured to the lower arch bar of the side frame. However, in many instances short tie bars are employed, these being secured to a portion of the side frame by means of a bracket. However, the attaching bracket has heretofore been projected at an acute angle from the lower arch bar. In such a construction riveting of the tie bar is not only difficult but must be performed by special machinery and but two rivets may be used.

In the present construction the attaching bracket has been projected at right angles from the lower arch bar, the attaching end of the tie bar being bent slightly into line therewith. In this way the rivets used in attaching the tie bar to the bracket may be applied by any ordinary riveting appliance. Furthermore, four rivets may be used.

My invention will be more readily understood by reference to the accompanying drawings, wherein—

Figure 1 is a side elevation of a side frame and tie bar such as contemplated by me; Fig. 2 is a section on the line 2, 2 of Fig. 1; and Fig. 3 is a fragmentary view of the bar attaching means as heretofore employed.

Referring more particularly to the draw-

ings, it is seen that in the preferred embodiment of my invention I construct a side frame of one piece of cast metal, the side frame comprising top arch bar 10, bottom arch bar 11 and columns 12. The ends of the side frame in practice rest upon journal boxes 13, and tie bars 14 connect the lower portions of the journal boxes with the side frame. Brackets 15, preferably integral with the side frame, serve as a point of attachment for the tie bars. These brackets extend at right angles to the lower arch bar and are preferably strengthened by a web 16. Four rivets 17 are employed in attaching the tie bar to the bracket. It will be seen that as the rivets extend in a direction parallel to that of the lower arch bar, they may be inserted and driven with ease, whereas in the construction shown in Fig. 3 the distance between the points A and B is so slight that a rivet is inserted with difficulty and but two rivets may be used. Furthermore, a special riveter must be employed for the reason that the lower arch bar extends directly over the rivet holes.

It is believed that there is disclosed herein a construction providing for the maximum strength with a minimum weight of material. Furthermore, the riveting operation may be performed with the greatest facility.

What I claim is:

1. A car truck side frame comprising, in combination, upper and lower arch bars and columns, said lower arch bar having brackets projecting therefrom at substantially a right angle, tie bars, and means for attaching said tie bars to said brackets, substantially as described.

2. A car truck side frame comprising, in combination, upper and lower arch bars and columns, tie bars, attaching brackets for said tie bars, said brackets being formed integral with said lower arch bar and projecting therefrom at substantially a right angle, substantially as described.

3. A one piece side frame for car trucks comprising, in combination, upper and lower arch bars and columns, said lower arch bar having brackets projecting therefrom at substantially a right angle, tie bars, and means

for attaching said tie bars to said brackets, substantially as described.

4. A one piece side frame for car trucks comprising, in combination, upper and lower arch bars and columns, said lower arch bar
5 having brackets projecting therefrom at substantially a right angle, tie bars, and

four rivets connecting said tie bars to said brackets, substantially as described.

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