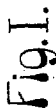


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977,204.

Patented Nov. 29, 1910.



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a. g. m. Cauley
E. B. Kim-

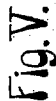


Fig. IV.

Fig. III.

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UNITED STATES PATENT OFFICE.

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TRUCK-FRAME.

977,204.

Specification of Letters Patent.

Patented Nov. 29, 1910.

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To all whom it may concern:

Be it known that I, WILLIAM D. LOWRY, a citizen of the United States of America, residing in the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Truck-Frames, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a truck frame, and has for its object the production of a very strong truck frame which may be manufactured at a low cost.

Figure I is a side elevation, partly in section, of a car truck equipped with my improved frame. Fig. II is a plan view, partly in section, of a portion of the truck. Fig. III is a section taken on line III—III, Fig. II. Fig. IV is a section taken on line IV—IV, Fig. I. Fig. V is a perspective view of a bolster guide.

In the accompanying drawings:—A designates a tension member, preferably in the form of a rolled channel beam, having its flanges 1 upturned. The ends of the tension member rest on journal boxes 2 which are connected by the usual tie bar 3. The compression member B is preferably formed by a casting having channel shaped end portions which interlock with the ends of the tension member. The webs 4 at the ends of the compression member are preferably seated on the webs of the tension member A, as seen in Fig. III. Interlocking the channel shaped members as shown insures a very strong connection at the ends of the compression and tension members, and enables the frame to withstand the severe hammer blows caused by longitudinal movements of the bolster. Bolts 5 connecting the journal boxes to the tie bar 3 also pass through the compression and tension members.

The middle portion of the compression member is provided with depending columns 6 that extend between the flanges of the tension member and form the side walls of a bolster receiving opening 7.

8 designates substantially L-shape bolster guides, connected to the columns by rivets 9, and having their lower horizontal ends arranged between the flanges of the tension member. Each bolster guide has a lug 9' at its upper end which extends into a column

6 and rests on a seat 10. The bolster 11 is provided with guide lugs 12, which cooperate with the upper portion of the bolster guides.

A filler block 13, mounted on the lower horizontal portions of the bolster guides, projects some distance above the flanges of the tension member and constitutes a support for a spring seat 14. Springs 15 are interposed between the bolster 11 and the spring seat 14. The spring seat 14, filler block 13, bolster guides 8, tension member A, and tie bar 3 are all connected by bolts 16.

In the structure just described, the bolster guides serve as tension members, the load being transmitted to these guides through the medium of the spring seat 14 and filler block 13. One advantage of this structure is that it relieves the main tension member A of the function of supporting the entire weight of the car at its middle portion, and causes a large portion of this load to be transmitted through the bolster guides to the upper portion of the compression member.

The main object in forming the bolster guides with enlarged upper portions is to enable the bolster to be removed when its guide lugs are out of alinement with said enlarged portions. Another advantage of these bolster guides is that their enlarged portion reinforces the columns at points where the bolster is constantly delivering severe hammer blows to the truck frame. Furthermore, the enlarged upper portions of the guides frictionally engage the slidable bolster and may become worn in service and reduced in thickness to a certain extent without materially affecting the strength of the truck frame.

I claim:—

1. A truck frame, having a bolster receiving opening, a spring seat in the lower portion of said opening, and bolster guides mounted on the side walls of said opening, the lower portion of said bolster guides being arranged under the spring seat.

2. A truck frame having a bolster receiving opening, a spring seat in the lower portion of said opening, and a bolster guide mounted in said opening, the lower portion of said bolster guide being arranged under the spring seat.

3. A truck frame, having a bolster receiv-

ing opening, a spring seat in the lower portion of said opening, and rigid bolster guides forming a support for said spring seat.

4. A truck frame, having a compression member provided with a bolster receiving opening, a tension member below said compression member, means for connecting the compression member to the tension member, and bolster guides arranged in said opening and secured to the compression member, the lower portion of the bolster guides being interposed between the spring seat and tension member.
5. A truck frame having a compression member provided with a bolster receiving opening, a tension member below said compression member, means for connecting the compression member to the tension member, and bolster guides arranged in said opening and secured to the compression member, the lower portion of the bolster guides being interlocked with the tension member.
6. A truck frame having a compression member provided with a bolster receiving opening, a tension member having upturned flanges, and a bolster guide secured to the

side walls of said opening, the lower portion of the bolster guide being arranged between the flanges of the tension member.

7. A truck frame having a bolster receiving opening, and bolster guides mounted on the side walls of said opening, the upper portion of each of said bolster guides being enlarged for the purpose described.

8. A truck frame having a bolster receiving opening, and a bolster guide arranged in said opening, the upper portion of said bolster guide being enlarged for the purpose described.

9. A truck frame having a bolster receiving opening, bolster guides mounted on the side walls of said opening and extending to a point adjacent to the lower end of said walls, the upper portion of said bolster guides being enlarged.

10. A truck frame having a substantially L-shape bolster guide provided with an enlarged upper portion.

WILLIAM D. LOWRY.

In the presence of—

E. B. LINN,

A. J. McCAULEY.