C. S. SHALLENBERGER.

CAR TRUCK.

APPLICATION FILED OCT. 29, 1908.

939,870.

Patented Nov. 9, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

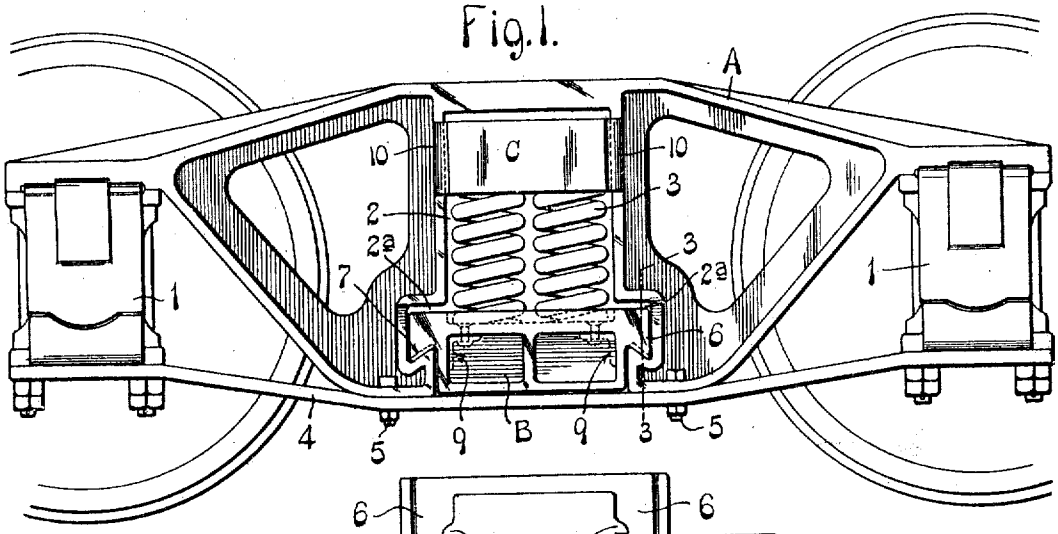
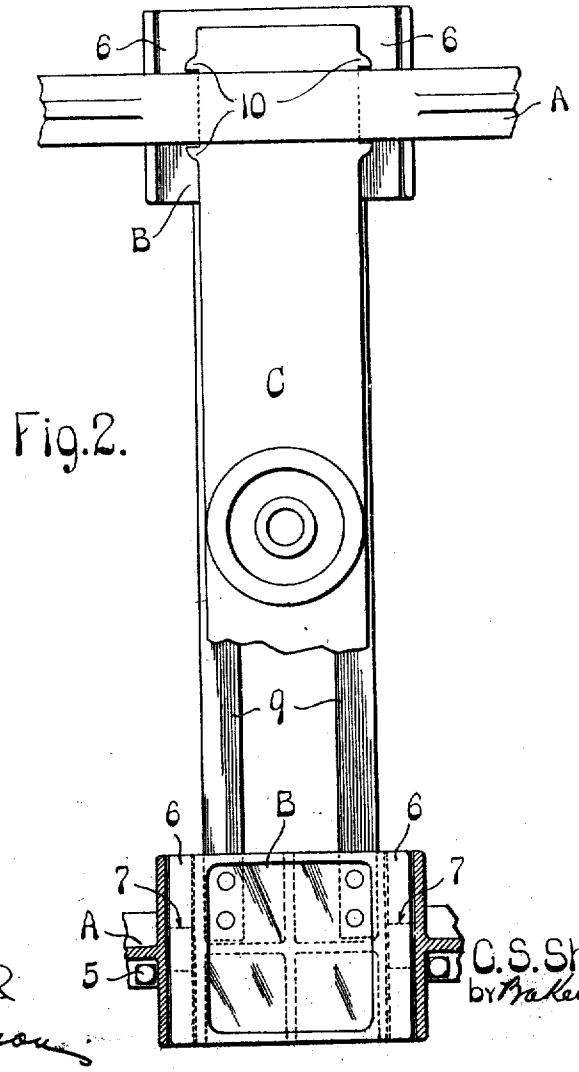


Fig. 2.



Witnesses

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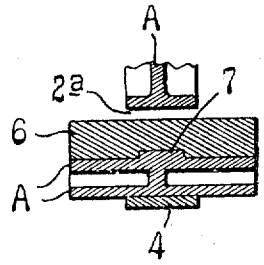


Fig. 3.

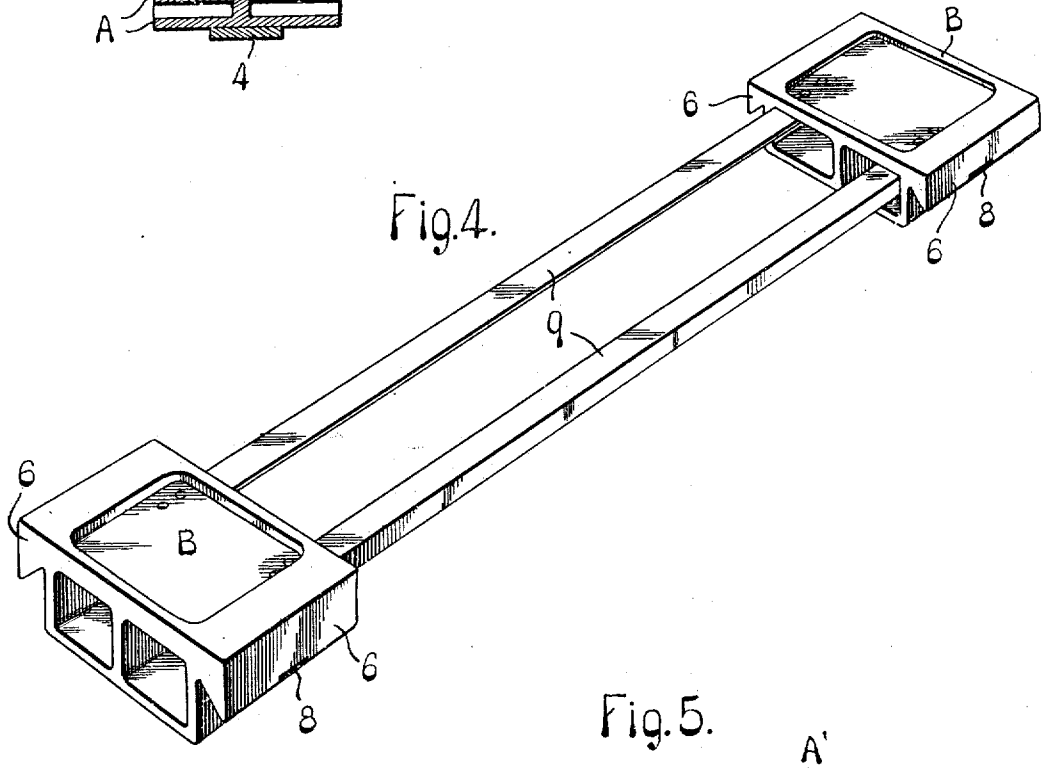
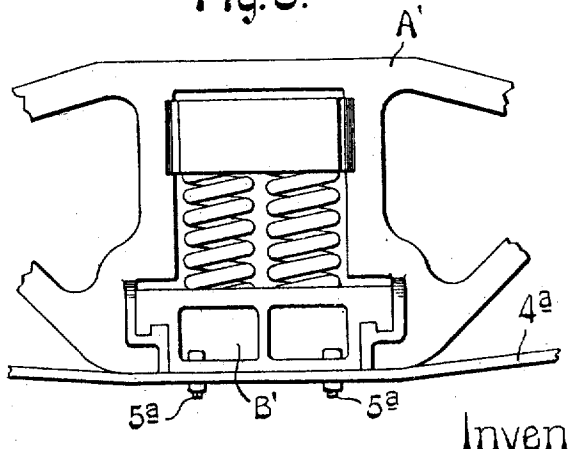


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES S. SHALLENBERGER, OF ST. LOUIS, MISSOURI, ASSIGNOR TO CHARLES McLURE CLARK, OF ST. LOUIS, MISSOURI.

CAR-TRUCK.

939,870. Specification of Letters Patent. Patented Nov. 9, 1909.

Application filed October 29, 1908. Serial No. 460,102.

To all whom it may concern:

Be it known that I, CHARLES S. SHALLENBERGER, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Car-Trucks, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevational view of a car truck embodying the features of my invention; Fig. 2 is a plan view, partly broken away; Fig. 3 is a vertical sectional view taken on the line 3—3 of Fig. 1; Fig. 4 is a perspective view of the removable tension members; and Fig. 5 illustrates a modified form of the truck shown in Fig. 1.

This invention relates to new and useful improvements in car trucks.

In the preferred form of my invention the car truck is provided with side frames each having a bolster-receiving opening, the bottom of each of said openings being normally closed by a removable member which supports the bolster.

Referring to the drawings, A indicates side frames, the ends of which rest on journal boxes 1, each of said side frames being preferably in the form of a casting provided with a bolster-receiving opening 2. The lower portion of each opening 2 is normally closed by a removable tension member B which constitutes a support for the bolster C, springs 3 being interposed between the bolster and the member B. A tie bar 4, which connects the journal boxes, extends across the bottom of each side frame and constitutes an auxiliary tension member, said tie bar being secured to the side frame by means of bolts 5.

The tension members B are provided with wings 6 having inclined bottom faces which extend into recesses 2^a and engage correspondingly inclined faces on the side frame castings A. The horizontal and vertical faces of the members B are preferably spaced a slight distance away from the side frame so that the entire load supported by the bolster will be transmitted from the members B to the side frames, through the inclined faces.

In the truck herein shown the load tends to force the side walls of the bolster-receiving opening away from the member B, but from the foregoing description it will be readily understood that these side walls are prevented from spreading by the inclined wings 6 which tend to draw them together. The truck frames are preferably provided with lugs 7 which project into recesses 8 in the inclined faces of the wings 6 and prevent the tension members B from shifting laterally.

9 indicates bars, preferably angle bars, which extend across the truck and connect the members B together.

To remove the bolster from the truck, the first step is to remove the springs 3. The members B can then be raised out of engagement with the lugs 7 and removed. After the members B have been removed, the bolster is dropped into the enlarged lower portion of the opening 2, which is of sufficient width to allow the bolster guide lugs 10 to pass through freely.

Fig. 5 illustrates a modified form in which the member B′ is provided with lugs having horizontal and vertical faces which interlock with the side frame A′, said tension member being secured to a tie bar 4^a by means of bolts 5^a.

The tension blocks which, together with the tie bars, hold the lower ends of the open jaws of the bolster opening together, and which interlock by a semi-dovetail connection with said jaws, by forming spring seats for the bolster springs, make a very simple and cheap truck construction. To reduce weight, these blocks may be cast hollow, and the connecting members between them are in the form of commercially rolled angles. This connection may, of course, be integral; or, instead of connecting the blocks directly together, the side frames may be connected directly. Rivets or bolts may be used if desired to secure the tension blocks to their seats between the bolster jaws.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A side frame for trucks having bolster jaws open at the bottom, and a tension bar located within and spanning said opening; substantially as described.

2. A side frame for trucks having bolster

jaws open at the bottom, and a tension block located within and spanning said opening; substantially as described.

3. A side frame for car trucks having a bolster-receiving opening in its under side, and a removable tension member located within and extending across said opening; substantially as described.

4. A side frame for car trucks in the form of a casting having a bolster-receiving opening in its under side, and a removable tension member located within and extending across said opening; substantially as described.

5. A side frame for car trucks having a bolster-receiving opening in its under side, and a removable tension member located wholly within said opening; substantially as described.

6. A side frame for car trucks comprising a casting having a recess in its under side which constitutes a bolster-receiving opening, and a removable tension member located within and extending across said recess; substantially as described.

7. A side frame for car trucks comprising a casting having a recess in its under side which constitutes a bolster-receiving opening, and a removable member located within and extending across the bottom of said recess; substantially as described.

8. A side frame for car trucks comprising a casting having a recess in its under side which constitutes a bolster-receiving opening, and a removable tension member located within and extending across said recess, said tension member being interlocked with said casting; substantially as described.

9. A side frame for car trucks comprising a casting having a recess in its under side which constitutes a bolster-receiving opening, and a removable tension member located in said recess; substantially as described.

10. A side frame for car trucks comprising a casting having a recess in its under side which constitutes a bolster-receiving opening, and a removable tension member interlocked with the side walls of said recess; substantially as described.

11. A side frame for car trucks comprising a casting having a recess in its under side, and a removable tension member located wholly within and extending across said recess; substantially as described.

12. A side frame for car trucks comprising a casting having a bolster-receiving opening in the form of a recess in its under side, and a removable tension member located within the recess, and secured to said casting on opposite sides of said recess; substantially as described.

13. In a car truck, side frames each having a recess in its under side, a removable tension member located within and extending across each of said recesses, a bolster mounted in said recesses, and springs interposed between said bolster and tension member; substantially as described.

14. In a car truck, side frames in the form of castings, each having a recess in its under side, removable tension members, and a bolster supported by said removable tension members, each of said tension members being provided with inclined faces which rest on one of the side frames; substantially as described.

15. In a car truck, side frames in the form of castings, each having a recess in its under side, removable tension members, and a bolster supported by said removable tension members, each of said tension members being provided with inclined faces which coöperate with a side frame and tend to force the side walls of its bolster-receiving recess toward the center of the side frame; substantially as described.

16. In a car truck, side frames each having a recess in its under side, the lower portion of said recesses being enlarged, a removable tension member mounted in the lower portion of each of said recesses, a bolster mounted in said recesses, and springs interposed between said bolster and tension members; substantially as described.

17. A car truck comprising cast side frames, each having a recess in its under side, a removable tension member extending across each of said recesses, means for connecting said tension members to each other, springs arranged in each of said recesses, and a bolster supported by said springs; substantially as described.

18. A truck side frame comprising a casting having a recess at its center, primarily open at the bottom, and adapted to receive the springs and the end of the bolster, and a removable tension member wholly located within said recess below the bolster; substantially as described.

19. A cast truck side frame having bolster jaws open at the bottom, and a plurality of tension members for closing said opening; one of which tension members is located wholly within the opening between the bolster jaws.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this twenty fourth day of October 1908.

CHARLES S. SHALLENBERGER.

Witnesses:
A. J. McCAULEY,
GEORGE BAKEWELL.