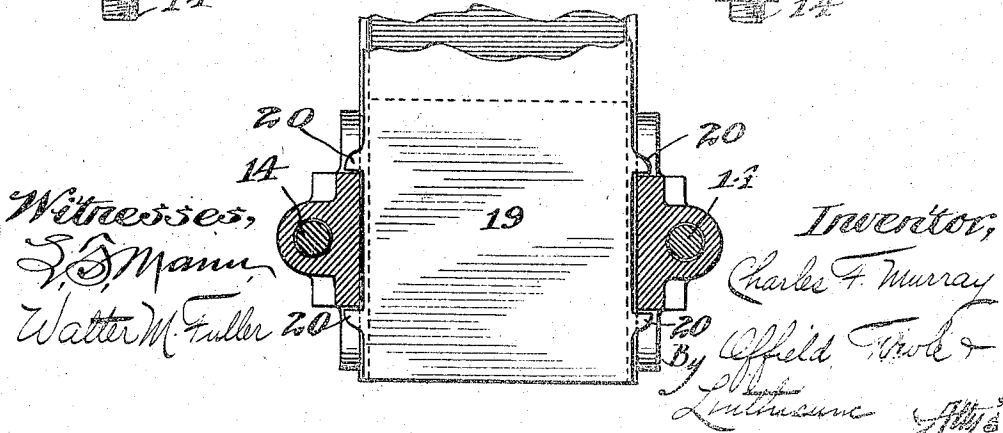
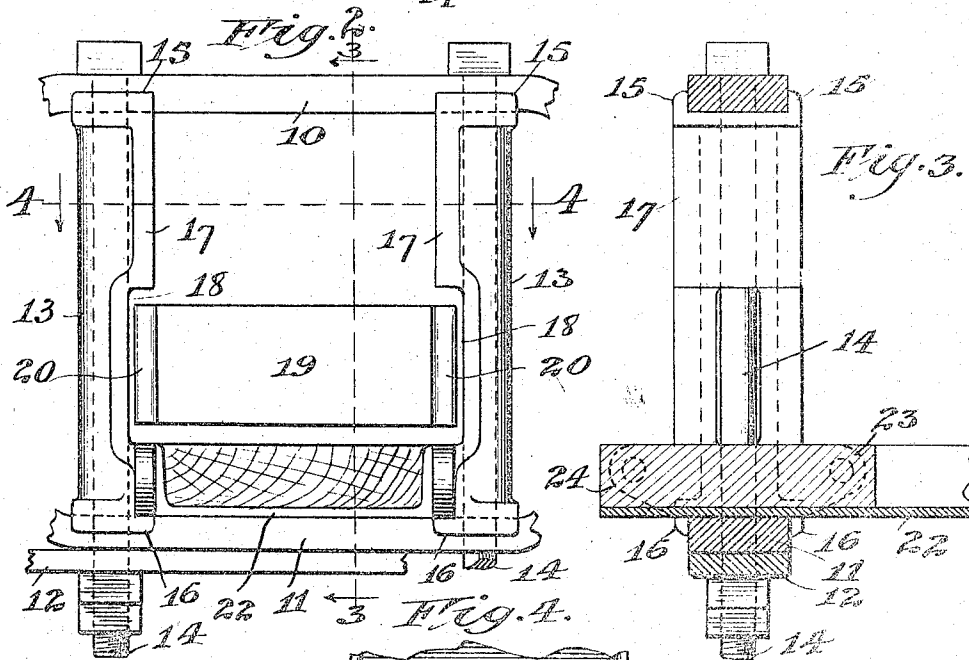
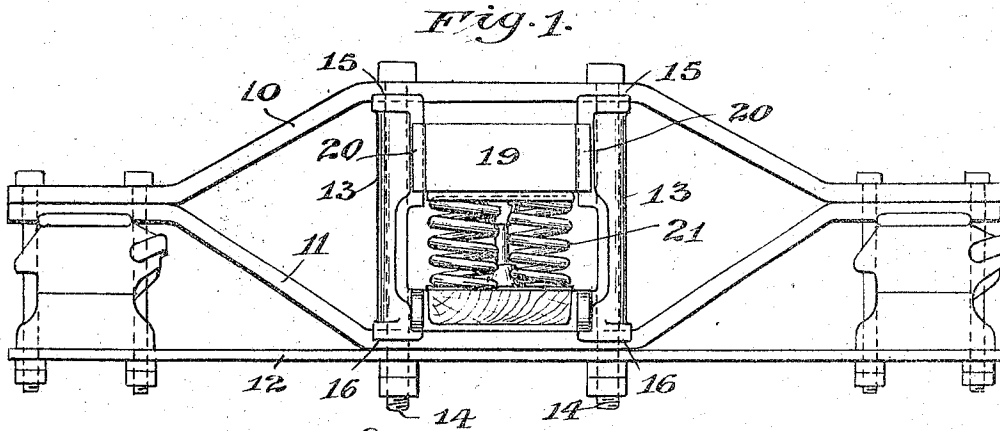


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RAILWAY CAR TRUCK.
APPLICATION FILED NOV. 9, 1907.

942,096.

Patented Dec. 7, 1909.

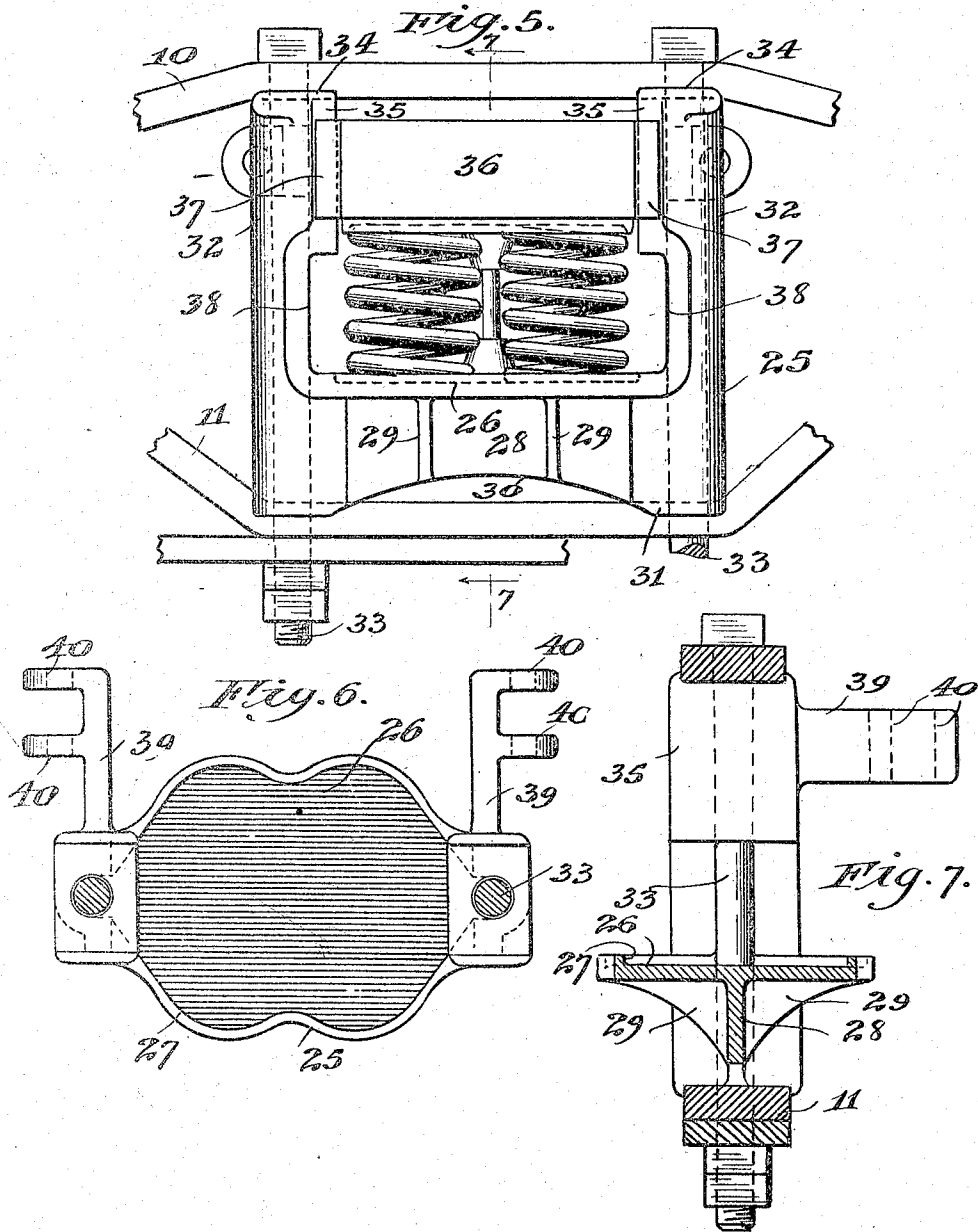
2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE

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RAILWAY-CAR TRUCK.

942,096.

Specification of Letters Patent.

Patented Dec. 7, 1909.

Application filed November 9, 1907. Serial No. 401,491.

To all whom it may concern:

Be it known that I, CHARLES F. MURRAY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Railway-Car Trucks, of which the following is a specification.

The object of my invention is the provision of means for use in an ordinary diamond car truck side frame which will facilitate the removal or withdrawal of the truck bolster. To obtain this result I employ one or more column castings between the upper and lower arch bars with which guiding lugs on the bolster cooperate to limit and restrict lengthwise shifting of the bolster. The lower portions of the columns are recessed to provide an enlarged opening through which the bolster may be withdrawn and freed from the truck after the supporting springs have been taken out and the bolster lowered from its usual and ordinary position.

On the accompanying drawings I have illustrated two desirable embodiments of my invention.

On said drawings, which form a part of this specification,—Figure 1 is a side elevation of a portion of a car truck side frame embodying my invention; Fig. 2 is an enlarged view of the central portion of the side frame shown in Fig. 1; Fig. 3 is a vertical section on line 3—3 of Fig. 2, the bolster and springs being omitted; Fig. 4 is a horizontal section on line 4—4 of Fig. 2 as viewed in the direction indicated by the arrows; Fig. 5 is a view similar to Fig. 2 illustrating a modified embodiment of my invention; Fig. 6 is a plan view of the column casting and shows the column bolts in section; and Fig. 7 is a vertical central section on line 7—7 of Fig. 5, the bolster and springs being omitted.

Referring first to Figs. 1 to 4, inclusive, it should be noticed that the side frame has the usual upper arch bar 10, the ordinary inverted or lower arch bar 11, and the customary tie bar 12. Interposed between the upper and lower arch bars are a pair of column castings 13 each of which is longitudinally apertured for the reception of a column bolt 14 and has at its upper and lower ends spaced lugs or fingers 15 and 16 adapted to overlie the edges of the arch bars to maintain the parts in proper position. Each column casting at its upper portion has a bolster-guiding part 17 beneath which the

casting is recessed at 18 to facilitate the removal of the bolster 19 which has guiding lugs 20 normally co-acting with the parts 17 to prevent or limit lengthwise or longitudinal movement of the bolster. The enlarged central opening of the side frame, due to the presence of the oppositely disposed recesses 18, is of greater width than the over all lateral dimension of the bolster and its guiding lugs 20, so that when the supporting springs 21 are removed and the bolster lowered to the position indicated in Fig. 2 so that the lugs 20 are opposite the recesses 18, the bolster may be readily withdrawn lengthwise through the side frame, as is obvious. In order to hold the spring plank 22 in place, each of the column castings 13 at its lower end is supplied with inwardly and outwardly extended ears 23 and 24, respectively, to which the upstanding flanges of the channel spring plank may be riveted or otherwise secured.

Instead of having two separate column castings, as I have illustrated in Figs. 1 to 4 inclusive, the two columns may be cast integral with an intermediate spring seat, as I have clearly shown in Figs. 5 to 7, inclusive. The side frame has the usual top and inverted arch bars 10 and 11, and between their central portions is interposed a casting designated as a whole 25. It has a central spring seat 26 bounded by a small curved upstanding marginal flange 27 and supported by means of a depending web 28 projected downwardly from its under surface and supplied with lateral integral braces or brackets 29. The bottom edge of web 28 is of curved shape, as indicated at 30, and the casting at its two bottom ends has ribs or fingers 31 overlapping the edges of the inverted arch bar 11. Arising from the opposite ends of this casting are the pair of spaced-apart column portions 32 which with the base of the casting are longitudinally apertured for the accommodation and reception of the column bolts 33. The upper end of each column 32 has similar ribs or flanges 34 overlying the opposite edges of the arch bar 10. The top portion of each column part at 35 constitutes means for guiding the bolster 36 in its vertical movements by means of guiding ribs 37 which overlap the sides of the column. Above the spring seat and below the parts 35 the upstanding columns are

recessed at 38 to permit the ready removal of the bolster lengthwise through the enlarged opening after the springs have been taken out and the bolster lowered, as is obvious. Each of the columns 32 near its upper end is equipped with an integral inwardly-extended bracket 39 supplied with a pair of apertured ears 40 on which may be hung any suitable form of brake hanger.

It will be obvious that in each of the embodiments of my invention described herein and illustrated on the drawing the bolster opening is sufficiently enlarged near its lower portion to permit the bolster and its guiding lugs to pass through the opening, thereby permitting lengthwise withdrawal of the bolster through the side frame.

Although I have described the various side frames with some degree of particularity, it will be noticed that my invention is not limited to the precise structural details shown and described, and that various minor mechanical changes may be made in the side frame constructions herein set forth without departure from the spirit and essence of my invention.

I claim:

1. In a railway car truck side frame, the combination of an upper arch bar, a separate

inverted arch bar, and one or more independent columns between said arch bars, each of said columns having a recess on one face to permit removal of the bolster and also having integral therewith a brake hanger support, substantially as described.

2. As an article of manufacture, a column casting adapted for use between the upper and inverted arch bars of a car truck side frame, having a recess on one face to permit removal of the truck bolster and having a brake hanger support integral therewith, substantially as described.

3. As an article of manufacture, a combined spring seat and column casting adapted for use between the upper and inverted arch bars of a car truck side frame, said casting having a central seat to accommodate springs and at its opposite ends a pair of upwardly-extended columns, the lower portions of the adjacent faces of which are recessed to permit withdrawal of the bolster, each of said columns having a brake hanger support integral therewith, substantially as described.

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