

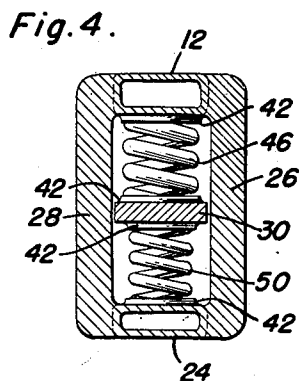
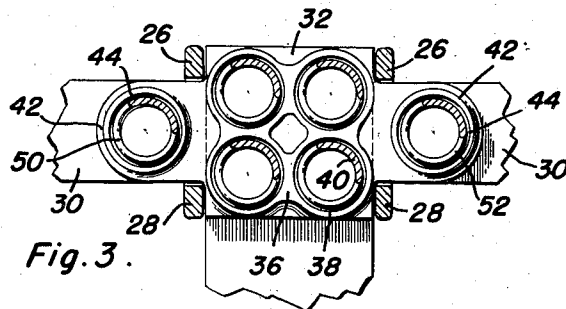
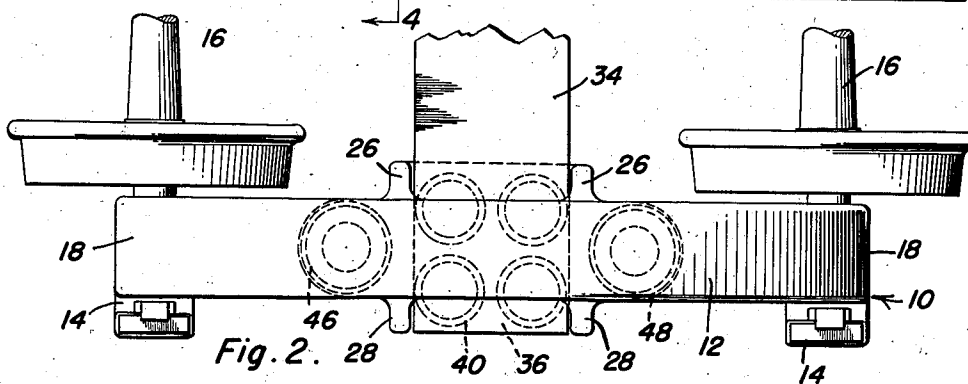
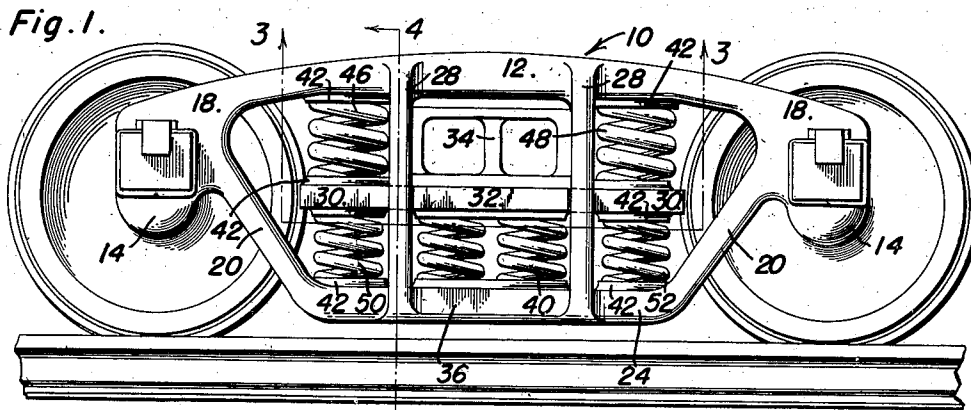
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2,461,382

RAILROAD CAR TRUCK BOLSTER SUSPENSION

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RAILROAD CAR TRUCK BOLSTER
SUSPENSION

George T. R. Hunter, St. Louis, Mo.

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2 Claims. (Cl. 105-197)

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This invention relates to new and useful improvements in railroad car truck side frame and the primary object of the present invention is to provide a truck side frame for railroad cars including novel and improved means for reducing the upward thrust of a truck side frame to prevent derailing of a railroad car.

Another important object of the present invention is to provide a railroad car truck side frame including novel and improved means for guiding the upward and downward movement of a railroad car bolster.

A further object of the present invention is to provide a spring mounted bolster support plate including novel and improved spring seats for engaging the ends of a plurality of springs to prevent disengagement of the springs relative therefrom.

A still further aim of the present invention is to provide a railroad car truck side frame that is simple and practical in construction, strong and reliable in use, small and compact in structure, relatively inexpensive to manufacture, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a side elevational view of a railroad car truck side frame constructed in accordance with the present invention;

Figure 2 is a fragmentary top plan view of the present railroad car truck side frame and showing the car axles and bolster broken away and shown in section;

Figure 3 is a longitudinal horizontal sectional view taken substantially on the plane of section line 3-3 of Figure 1; and

Figure 4 is a transverse vertical sectional view taken substantially on the plane of section line 4-4 of Figure 1.

Referring now to the drawings in detail, wherein for the purpose of illustration, there is disclosed a preferred embodiment of the present invention, the numeral 10 represents the present railroad car truck side frame generally, comprising an upper cord or member 12 that is supported on the journal boxes 14 of a pair of railroad car axles 16 in the usual manner. Integrally formed with the ends 18 of the upper cord 12 are the upper ends 20 of a pair of outwardly and upwardly

inclined side arms 22 of a lower cord or member 24.

Rigidly secured to the inner faces of the members 12 and 24, is a pair of spaced parallel, vertical, inner bolster guide bars or ribs 26 which oppose a pair of rigid, spaced parallel, vertical outer bolster guide bars or ribs 28 that are fixed to the outer faces of the members 12 and 24.

Slidably mounted for upward and downward movement between the members 12 and 24, is a substantially rectangular support plate 30 having an enlarged substantially square central portion 32 that supports the railroad car bolster 34.

Fixed to the opposed faces of the portion 30 and the member 24, are spring supporting plates 36 having a plurality of spaced, annular and concaved seats 38 that frictionally engage the end portions of a plurality of main coil springs 40 to resiliently restrict the downward movement of the bolster 34.

Also fixed to the opposing faces of the support plate 30 and the members 12 and 24, are further groups of spring supporting plates 42 having annular concaved recesses 44 that frictionally engage the ends of upper coil springs 46 and 48 and lower coil springs 50 and 52 disposed on opposite sides of the bolster 34 as shown best in Figure 1 of the drawings.

In practical use of the device, the springs 46 and 48 will restrict and cushion the upward movement of the support plate 30 and the springs 50, 52 and 40 will restrict and cushion the downward movement of the plate 30 resulting from movement of the bolster as the train car moves on its tracks.

The said upper springs 46 and 48 cooperate with the springs 40, 50 and 52 to restrict tipping movement of the support plate 30.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the construction, operation and advantages of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. In a railroad car truck side frame including an upper member and a lower member, a pair of

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spaced parallel substantially vertical inner guide bars fixed to the inner faces of said members, and a further pair of spaced parallel substantially vertical outer guide bars fixed to the outer faces of said members; a bolster support comprising, a bolster supporting member slidably mounted between all of said guide bars, resilient means disposed between the lower member and the bolster supporting member for cushioning the downward movement of said bolster supporting member, integral extensions projecting from said bolster supporting member, further resilient means positioned between the extensions and the lower member for cushioning the downward sliding movement of said bolster supporting member, and still further resilient means disposed between the extensions and said upper member for cushioning the upward sliding movement of said bolster supporting member, said guide bars limiting certain relative movement of said bolster supporting member and a bolster supported thereon, said further resilient means and said still further resilient means cooperating to restrict tipping of said bolster supporting member.

2. A railroad car truck side frame comprising an upper member and a lower member having joined forward ends and rear ends, a pair of spaced parallel substantially vertical inner guide bars fixed to the inner faces of said members adjacent the joined ends thereof, a further pair of spaced parallel substantially vertical outer guide bars fixed to the outer faces of said mem-

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bers adjacent the joined ends thereof, a substantially rectangular bolster supporting member extending transversely between the pairs of guide bars and slidable therebetween, said bolster supporting member including a pair of longitudinal extensions including a forward extension disposed between said guide bars and the forward joined ends of said members and a rear extension disposed between said guide bars and the joined rear ends of said members, resilient means disposed between said bolster supporting member and said lower member for cushioning the downward movement of said bolster supporting member, further resilient means disposed between said extensions and said lower member coacting with said first-mentioned resilient means to cushion the downward movement of said bolster supporting member, and still further resilient means disposed between said extensions and said upper member for cushioning the upward movement of said bolster supporting member.

GEORGE T. R. HUNTER.

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