

No. 710,637.

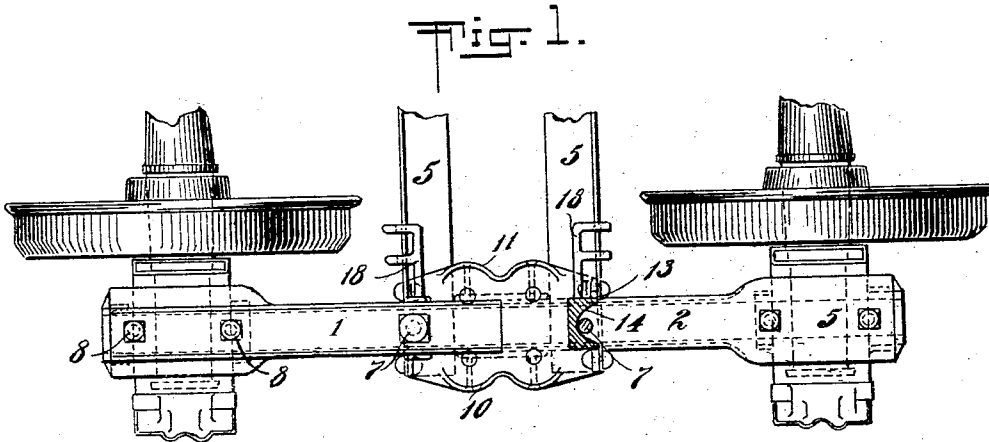
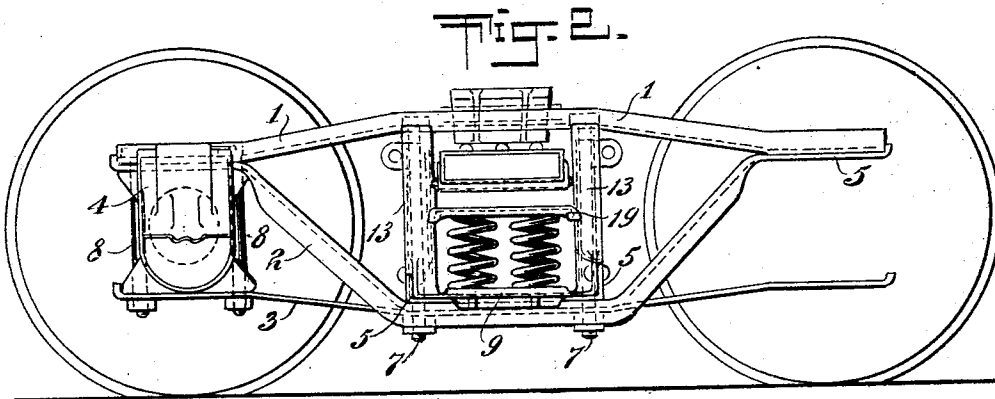
Patented Oct. 7, 1902.

C. VANDERBILT.
CAR TRUCK.

(Application filed Apr. 18, 1902.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:
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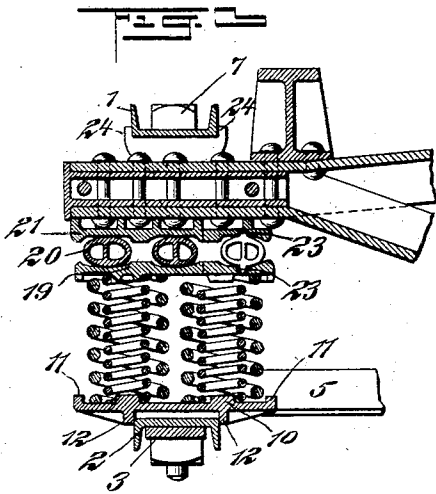
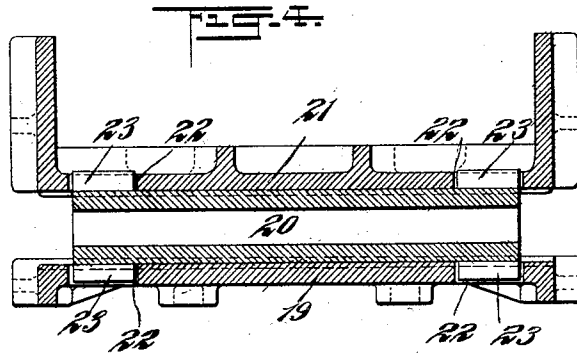
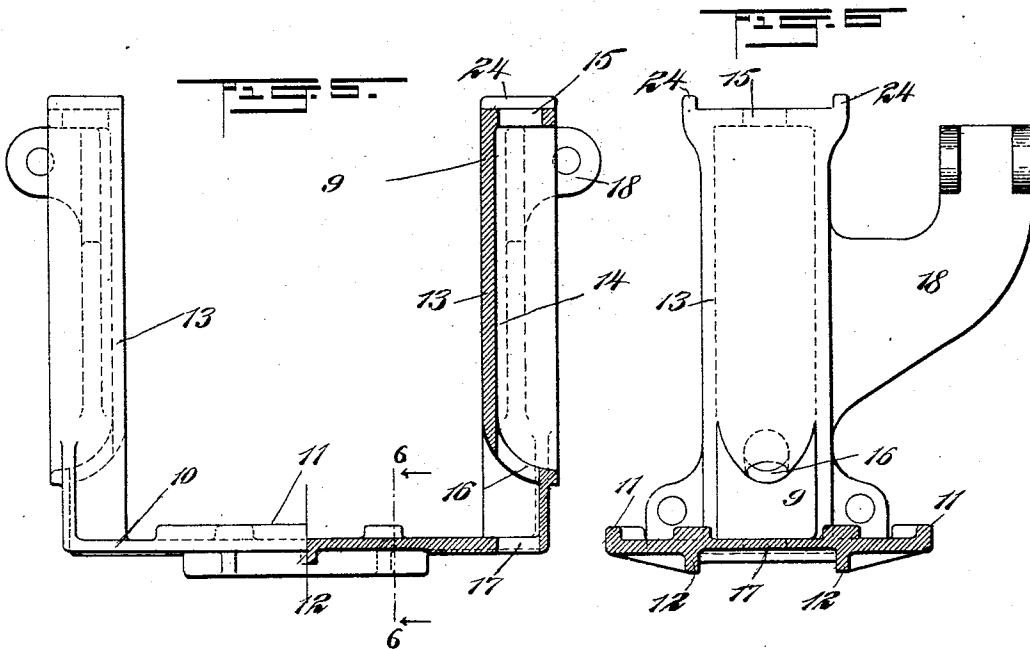
C. VANDERBILT.

CAR TRUCK.

(Application filed Apr. 18, 1902.)

(No Model.)

2 Sheets—Sheet 2.



WITNESSES:
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UNITED STATES PATENT OFFICE.

CORNELIUS VANDERBILT, OF NEW YORK, N. Y.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 710,637, dated October 7, 1902.

Application filed April 18, 1902. Serial No. 103,532. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS VANDERBILT, a citizen of the United States, and a resident of the borough of Manhattan, city and State of New York, have invented certain new and useful Improvements in Car-Trucks, of which the following is a specification.

My invention relates to improvements in car-trucks, and comprises an improved form of side frame characterized by combined strength and lightness and improved forms of spring-seats and bolster-supports, all as hereinafter specifically set forth and claimed.

In the drawings which accompany this specification similar reference-numerals indicate corresponding parts in the different views, of which—

Figure 1 is a plan view, partly in section, showing the side frame and spring-seat. Fig. 2 is a side elevation. Fig. 3 is an enlarged transverse section. Figs. 4, 5, and 6 are sectional detail views greatly enlarged, Fig. 4 showing one of the bolster-supporting rollers and its bearing-plates, and Figs. 5 and 6 showing the spring-seat. Fig. 6 is a section on line 6 6 of Fig. 5.

The side frame is a truss comprising a compression member 1 and two tension members 2 and 3. The spring-seat 9 and transverse angle-beams 5 5 are secured between the middle portions of the parts 1 and 2 by the bolts 7, and the axle-pedestals 4 are secured between the ends of the parts 2 and 3 by the bolts 8, which also pass through the ends of the part 1. The upper member 1 is preferably a rolled-metal channel, which is bent to the desired shape and is placed so that its flanges extend upwardly. The member 2 is also a rolled-metal channel, being placed with its flanges extending downwardly. This arrangement of the channels 1 and 2 back to back enables them to be fitted together neatly at their ends and also provides flat surfaces for the engagement of the spring-seat and transverse angle-beams therewith. The transverse angle-beams 5 5 rest upon the flat upper surface of the tension members 2. The spring-seat rests upon the horizontal flanges of the angle-beams and forms a strut between the members 1 and 2 of the side frame, the various parts being secured together by the

bolts 7. The tension member 3 fits between the flanges of the channel 2, as shown, and its ends are upturned to embrace the pedestals 4. The ends of the channel 2 are spread by flattening out its flanges into the plane of the web. In this way I enlarge the bearing-surfaces of the member 2 upon the pedestals 4. The ends of this member may also be upturned, as shown, if desired.

The spring-seat 9 is a single casting, preferably of the form illustrated. It comprises a base 10, upon which the springs rest and which conforms in outline to said springs and has upwardly-extending flanges 11 11. The base is also provided with the downwardly-extending flanges 12 12, which embrace the member 2 of the side frame. The spring-seat also comprises the upstanding front and rear walls 13 13. The outer surfaces of these walls for the greater portion of their height are hollowed out to form grooves 14 to receive the securing-bolts 7, which pass through apertures 15, 16, and 17 at top and bottom. (See Figs. 5 and 6.) The walls 13 also carry the integral projections or arms 18 for supporting the brake-hangers. The upper surfaces of the walls 13 are provided with upstanding flanges 24, which embrace the compression member 1.

Resting upon the springs is the movable spring-seat or bearing-plate 19. Between this plate and the bearing-plate 21, which is secured to the end of the bolster, I prefer to introduce the elliptical rollers 20 for permitting a slight endwise movement of the bolster. The plates 19 and 21 are hollowed out to receive these rollers and are also provided with recesses or slots 22 to engage the fins or tongues 23 upon the ends of the rollers, as shown. It is evident that the rollers will permit an endwise movement of the bolster, but will always tend to assume the position shown in Fig. 3 whenever the thrust of the bolster ceases.

It is evident that various changes from the form illustrated may be made without departing from the spirit of my invention, the scope of which is defined by the following claims.

I claim—

1. In a car-truck side frame, a flanged mem-

ber having the flanges at its ends flattened out into the plane of its web, substantially as described.

2. A side frame for car-trucks comprising
5 an upper compression member, a flanged upper tension member, having the flanges at its ends flattened out into the plane of its web, and a lower tension member, substantially as described.
- 10 3. A side frame for car-trucks, comprising an upwardly-flanged compression member, a downwardly-flanged tension member secured thereto at its extremities, a lower tension member between the flanges of the central
15 portion of said flanged tension member, and axle-pedestals between the extremities of said tension members, substantially as described.
4. A spring-seat for car-trucks comprising

a base and an integral upstanding wall, said wall being in the form of a web, and comprising a vertical upper portion, forming a groove, a vertical lower portion and an intermediate
20 perforated portion, forming the bottom of said groove, substantially as described.

5. A spring-seat for car-trucks comprising
25 a base and an integral upstanding wall, said wall being in the form of a web, and comprising a vertical upper portion, forming a groove, a vertical lower portion and an intermediate perforated portion, forming the bottom of said
30 groove, the base having an aperture in line with said groove, substantially as described.

CORNELIUS VANDERBILT.

Witnesses:

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