

No. 668,528.

Patented Feb. 19, 1901.

J. L. LEVY.
CAR TRUCK.

(Application filed June 28, 1900.)

(No Model.)

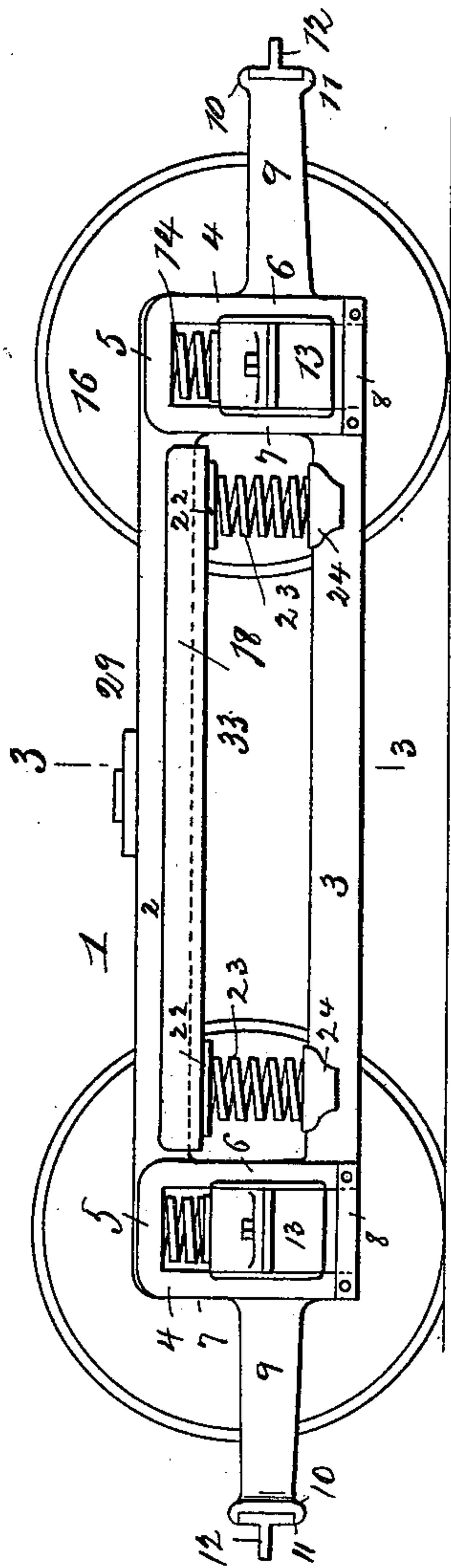


Fig. 1.

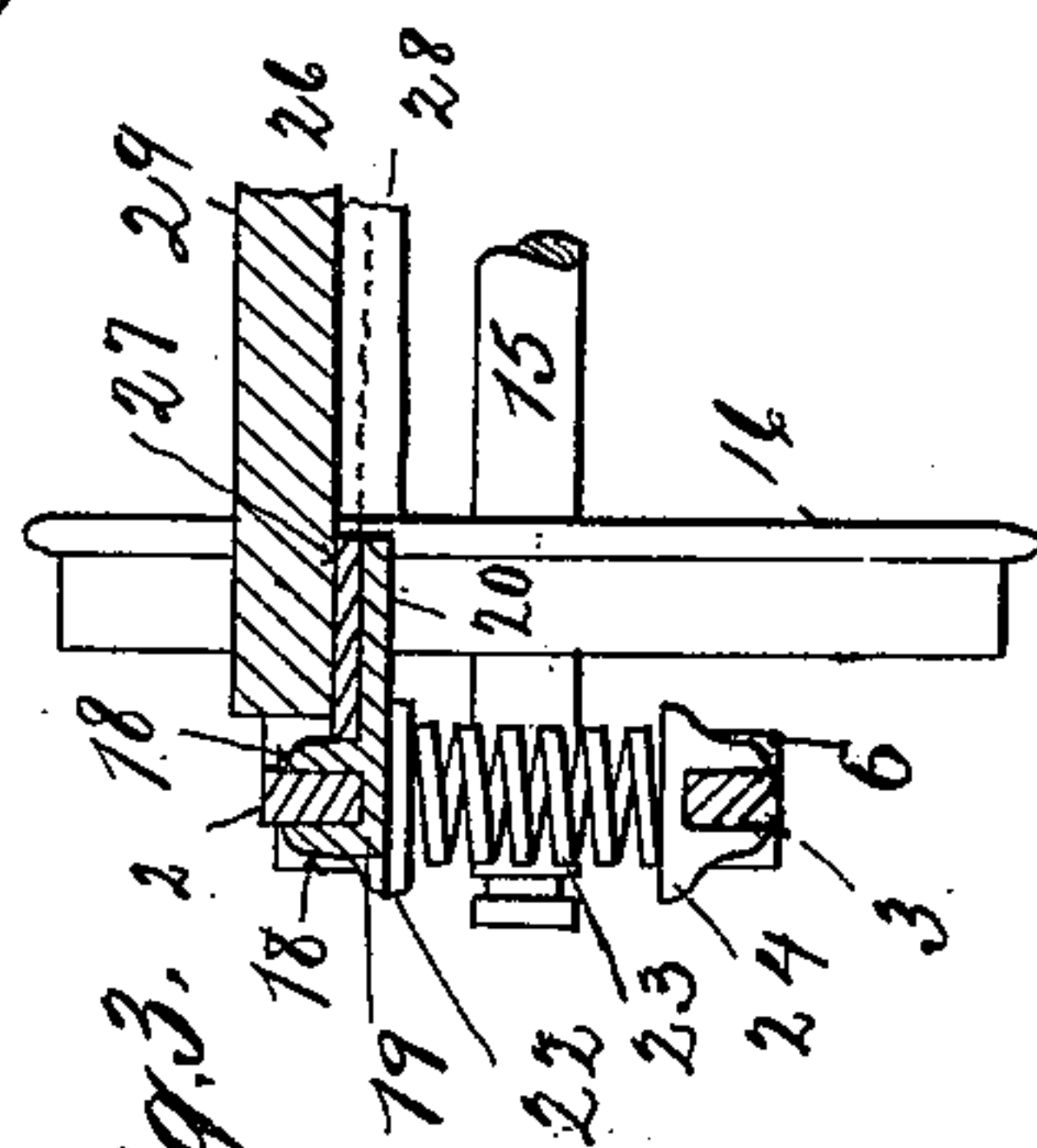


Fig. 3.

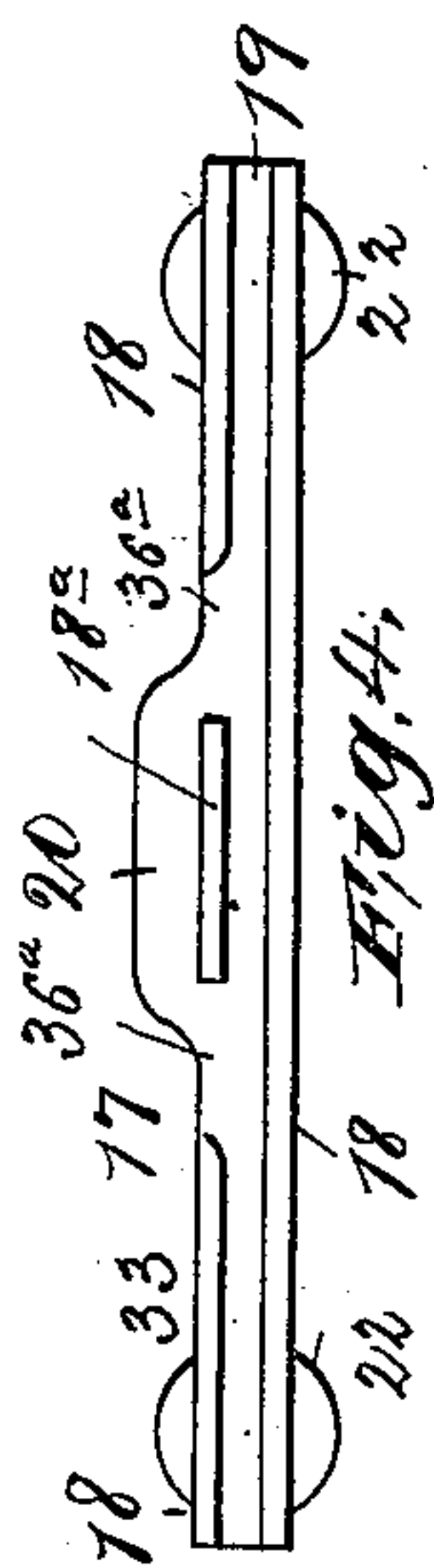


Fig. 4.

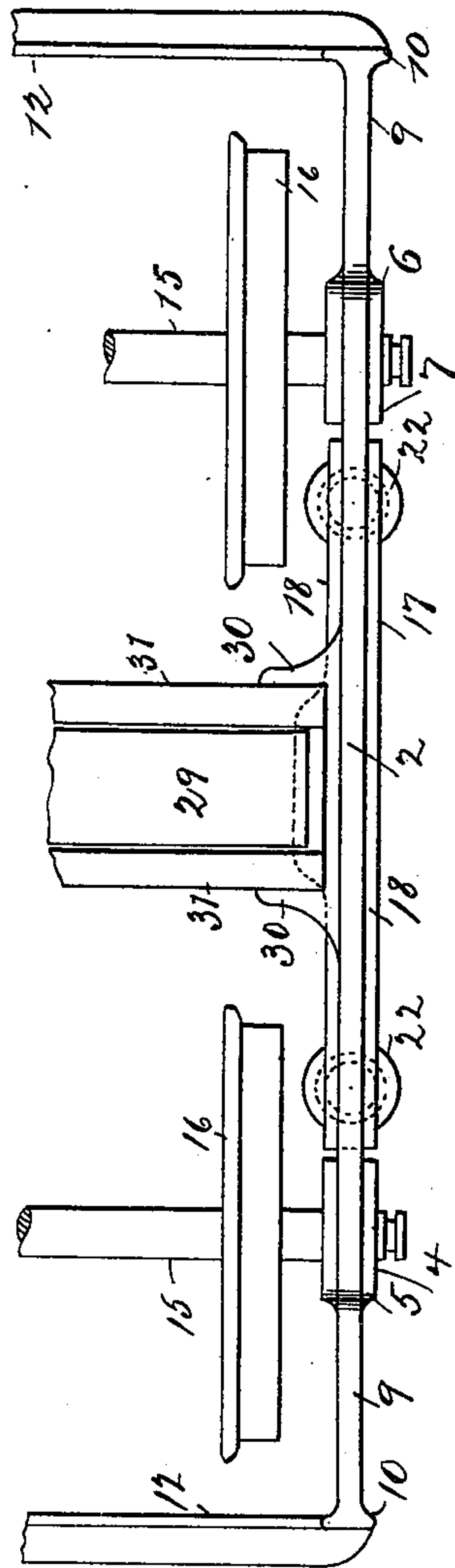


Fig. 2.

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UNITED STATES PATENT OFFICE.

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CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 668,528, dated February 19, 1901.

Original application filed September 14, 1897, Serial No. 651,697. Divided and this application filed June 28, 1900. Serial No. 21,983. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. LEVY, a citizen of the United States, residing in the city, county, and State of New York, have made
5 certain new and useful Improvements in Car-Trucks, of which the following is a specification.

My invention has relation to car-trucks; and it has special reference to pivotal trucks
10 employed in motor and cable propulsion, this case being a division of an application filed by me on the 14th day of September, 1897, Serial No. 651,697.

The object of my invention is to extend the
15 bolster suspension or spring-base of the same preferably, though not essentially, to a point closely adjacent to the axle-box pedestals in order to give a greater spring-base for the support of the car-body on the truck and,
20 further, to simplify its construction in this regard.

My invention therefore resides in the construction and combination of parts herein-
25 after described and further recited in the claims.

In the drawings forming part of this specification, Figure 1 is a side elevation of a car-truck embodying my improvements; Fig. 2,
30 a plan view of one side thereof; Fig. 3, a sectional elevation of Figs. 1 and 2 on the line 3 3; Fig. 4, a plan view of the spreader.

Similar numerals of reference indicate corresponding parts throughout the several views.

35 The truck to which I have applied my improvements consists, substantially, in the side frames 1, composed of the top chord 2, lower chord 3, axle-box pedestals 4, formed by the extension 5 from the top chord, and inner and
40 outer arms 6 7, open at the bottom and closed by a cross-bar 8, the frame extensions 9, united to the outer arms 7 of the pedestals and having enlargements 10, and a recess 11, in which is secured the T-iron cross-bar 12.

45 In the pedestals 4 are the axle-boxes 13, between the tops of which and the extensions 5 are springs 14, and at 15 16 are respectively the axles, journaled in the axle-boxes 13, and the wheels thereon. This form of truck of-
50 fers many advantages over others; but I do

not limit myself to the application of my specific improvements thereto.

Referring now to the drawings, I will describe my improvements.

At 17, Fig. 4, is what I term a "spreader," 55 which is formed with upright webs or side guides 18 and a horizontal web 19, an inwardly-extending lug 20 from the horizontal web 19, and a guide-web 18^a on the lug 20. At the ends the horizontal web 19 is provided 60 with downwardly-extending lugs 22, forming seats for the reception of spiral springs 23, which springs rest upon the cups 24, having depending lips straddling and secured to the lower chords 3. Each side bar of the truck 65 is provided with these parts, the spreader lying under the top chord 2, and a cross-bar 26, having a horizontal web 27 and depending strengthening-webs 28, is secured to the projection 20 of the spreader and rests upon the 70 same, as shown in Fig. 3, the depending webs 28 being cut away at the ends of the bar to allow the web 27 to rest directly upon the projection, the ends of the webs 28 abutting 75 against the end of the projection 20. On the cross-bar 26 is secured the bolster 29, on which may be secured center and side bearings in the usual or desired way.

It will be noticed that the springs 23 are located adjacent the axle-box pedestals and 80 support the spreader and bolster, the weight of the car-body depressing the spreaders against the stress of the springs 23, the webs 18, in connection with the chords 2, guiding the spreader in its vertical movements and 85 preventing transverse displacement.

At 30 are brackets extending outwardly from the inner side of the top chords 2, to which brackets are secured the angle-iron transoms 31, between which lies the bolster 29, the webs 90 18 18^a being intermitted, as shown in Fig. 4, to avoid contact with the brackets. The lugs 22 and spring-cup 24 may be connected by a spring-post or lugs in order to hold the springs in the usual manner for the purpose of steady- 95 ing the parts, if desired.

When the car is superposed on the truck, the springs 23 are compressed and the weight of the car is taken through the springs 23 to the lower chord of the side frames and thence 100

to the springs 14 over the axle-boxes. The location of the springs closely adjacent the axle-boxes extends the spring-base or spring-support of the bolster, increasing the leverage of the springs and causing the car to be supported more firmly on the truck and less liable to be influenced by inequalities of the road-bed and the like, the reverse action or reverse compression of the springs 23 being had either through the direct lifting of the end of the side frames or the lifting of the wheels, either or both of such movements resulting in a compression of the springs 14 and a further compression of the springs 23 against the weight of the car-body, thus resiliently checking either or both of these movements. Should the vertical play of the spreader be excessive, the horizontal web 19 of the spreader will bear against the lower edge of the top chord 2 and act as a stop.

Having described my invention, I claim—

1. A car-truck consisting of axle-box yokes having upright side members, a lower chord extending between the inner upright members of said yokes, springs on the lower chord, longitudinally-disposed spreaders resting on said springs, a bolster tying said spreaders transversely, and a guide for said spreaders forming part of the truck-frame lying above said spreaders and extending between said yokes, substantially as described.

2. The combination with the car-truck, of the truck-frame having upper and lower chords, springs on the lower chords, longitudinally-disposed spreaders resting on said springs, a bolster transversely tying said spreaders together, and a guide for said spreaders composed of a part of said spreaders and the upper chord, substantially as described.

3. The combination in a truck, of the truck-frame having upper and lower chords, the springs 23 supported on the lower chords,

and longitudinally-disposed spreaders comprising the upright web 18 and horizontal web 19, said webs being located respectively under and at one side of the top chord, and a cross-bar 26 having a horizontal web 27 secured to the horizontal webs on the spreaders, substantially as described.

4. In a car-truck, the combination with a truck-frame having upper chord 2 and lower chord 3, of the springs 23 supported on the lower chord, the longitudinally-disposed spreaders on said springs, said spreaders comprising the upright webs 18 located outside of the outer face of the top chord, and the horizontal web 19 extending under the top chord, a projecting ledge 20 from the web 19, and a cross-bar 26 having a horizontal web 27 resting upon said projection 20, and webs 28 depending from the horizontal web 27, substantially as described.

5. In a car-truck, the combination with the truck-frame, having the top chord 2, springs 23 supported on the truck-frame, the horizontally-disposed spreaders embracing said top chord and supported on said springs, and a bolster tying said spreaders transversely together, substantially as described.

6. The combination in the truck-frame having the top chord 2 and lower chord 3, the springs 23 supported on the lower chord, the horizontally-disposed spreader comprising the upright longitudinal and parallel flanges 18, and formed with a channel 34 between the flanges, said flanges embracing the top chord, and a cross-bar transversely supported upon said spreaders, substantially as described.

Signed in the city, county, and State of New York this 25th day of June, 1900.

JOSEPH L. LEVY.

Witnesses:

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