(No Model.)

C. THOMPSON.

CAR TRUCK.

No. 390,267. Patented Oct. 2, 1888.

Fig. 1.

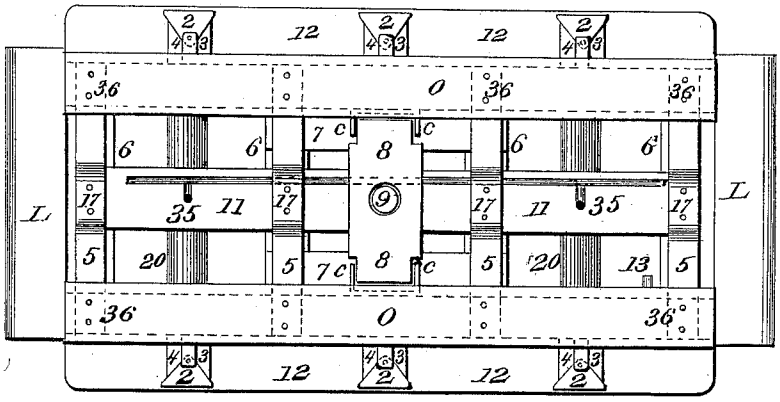


Fig. 2.

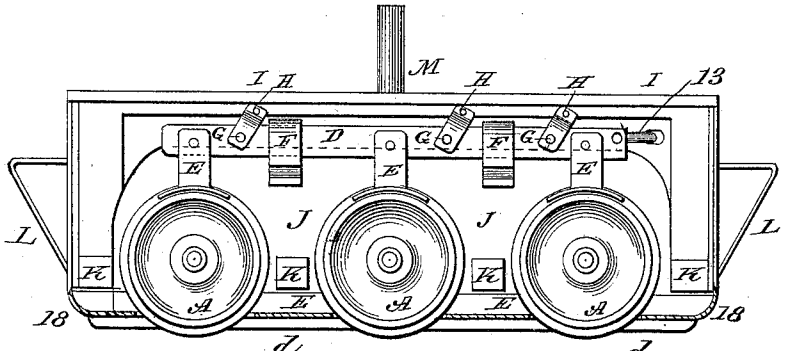
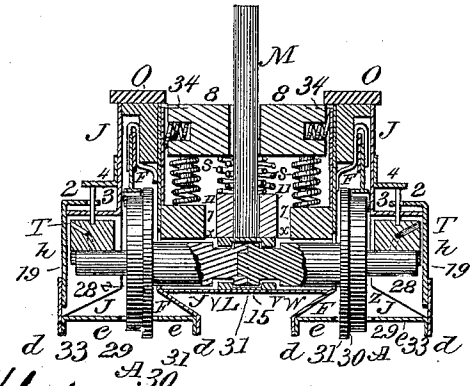


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES THOMPSON, OF OSWEGO FALLS, NEW YORK.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 390,267, dated October 2, 1888.

Application filed July 15, 1887. Serial No. 245,157. (No model.)

To all whom it may concern:

Be it known that I, CHARLES THOMPSON, of the village of Oswego Falls, in the county of Oswego, in the State of New York, a citizen of the United States, have invented a new and Improved Car-Truck, of which the following is a specification, reference being had to the annexed drawings, in which like letters and numbers of reference indicate like parts wherever they occur.

My object is to improve the general as well as the detail construction of the truck, to provide means and appliances for safety and to prevent derailment from a broken wheel or axle or a misplaced switch, to provide it with a sectional axle the joint of which is inclosed in a casing secured to the frame of the truck, and to increase the utility of the truck by the novel appliances and mechanisms which are hereinafter described.

My invention consists in the several novel features of construction and operation which are hereinafter described, and which are specifically set forth in the several clauses of claim hereunto annexed.

In the accompanying drawings, Figure 1 is a top plan view of the truck; Fig. 2, a side elevation with the outer casing removed. Fig. 3 is a vertical transverse sectional elevation.

It is constructed as follows: O O are the side timbers of the top of the truck-frame, and 5 5 are the cross-timbers, and 11 is a center brace parallel with O O and secured to the cross-timbers 5 or beneath them. The bolster-frame, consisting of the cross-pieces 6 and side pieces, 7, and bolster 8, mounted thereon, with the upright springs S supporting it, and the springs 34 in the ends of the bolster to steady it against lateral movement, and the inward flanges *c* upon the timbers O, Fig. 3, prevent the bolster from being displaced vertically. The hole 9 receives the king-bolt, which passes down through the bolster and center brace, 11.

A A are the wheels, mounted upon the axles 20, which axles are divided centrally and grooved circumferentially adjacent to their inner ends, as shown in Fig. 3, and 15 is the boxing, provided with inner flanges, *v*, fitting the grooves in the axle-sections, which incloses the joint between the axle-sections, and in which they are journaled. This boxing is secured at the top to the center brace, 11, and at the bottom to the cross-plate L, thus giving me a center support for the axle, which is also a rigid one.

The journals 19 of the axles are journaled in the boxes *h*, and T is an oil-reservoir above the journal. 28 is the chamber below it, provided with an inclined bottom. 4 is a bracket, 3 a pin holding the top brass in place, and 2 is a slide affording access to the box.

A shoe, *e*, provided with longitudinal inner and outer flanges, *d*, is supported by the plates J, which inclose the sides of the truck by the plates L, which inclose the bottom thereof below the axles, and also the ends, so that no dust can rise up into the truck, and the boxes are also tightly inclosed to keep out sand.

At 35 I show an oil-pipe for lubricating the axle-joint.

D is a brake-beam suspended from the oscillating bars G, pivotally mounted upon the bolts H. F F are the guides for the brake-beam. E E are the brakes connected to the brake-beam, and 13 is a crank connected to one end of the brake-beam, by which the brakes are brought to bear upon the wheels.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the main frame of a car-truck and the bolster-guides, of the bolster and the springs in the ends of the bolster bearing against the guides, substantially as described.

2. In a car-truck, the center brace, 11, in combination with the bolster and the spring interposed between them, substantially as described.

3. In a car-truck, the plate L below the axle, having an axle-box section secured to it, the center brace, 11, to which another axle-box section is secured, in combination with a sectional axle provided with circumferential grooves adjacent to the meeting ends of the sections, and a box provided with inner peripheral flanges fitting said grooves, substantially as described.

4. In a car-truck, the combination, with the frame, axles, and wheels, of a casing perforated to receive the wheels and inclosing the whole bottom of the truck between the wheels and

the sides of the truck outside of the wheels, substantially as described.

5. In a car-truck, the combination, with the frame, axles, and wheels, of a casing perforated to receive the wheels and inclosing the bottom, sides, and ends of the truck, substantially as described.

6. In a car-truck, the combination, with the frame, axles, and wheels, of a casing perforated to receive the wheels and inclosing the bottom, sides, and ends of the truck, and provided with parallel longitudinal ribs *d*, arranged in pairs, substantially as described.

7. The combination, with the wheels, of the swinging brake-beam D, provided with shoes E and suspended by hangers H, the beam-guides F, and crank 13, connected to the beam, substantially as described.

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Witnesses:
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