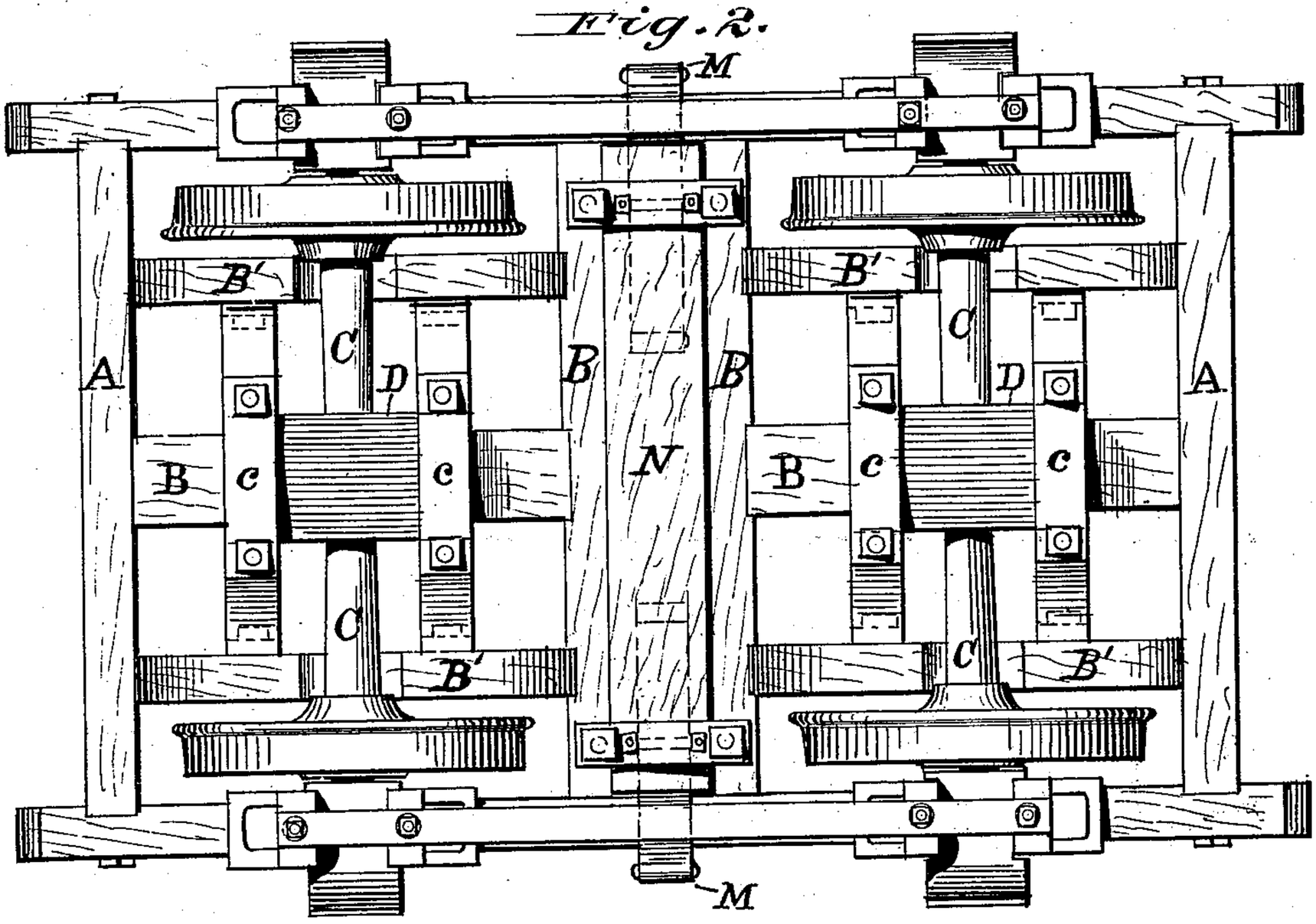
2 Sheets—Sheet 1

A. BERRY.
Car-Truck.

No. 208,058. Patented Sept. 17. 1878.

Fig. 2.



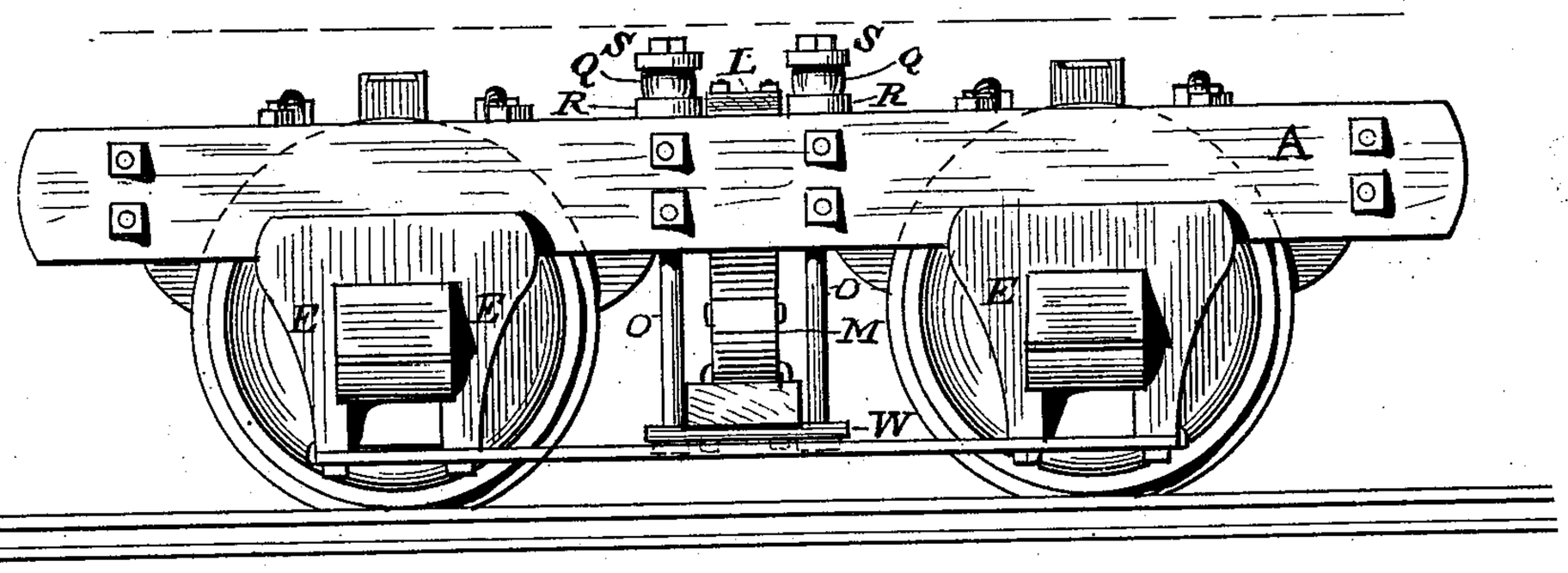


Fig. 1.

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By.

Inventor.
Austin Berry
Myers & Co
Attorneys.

2 Sheets—Sheet 2

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Fig. 3.

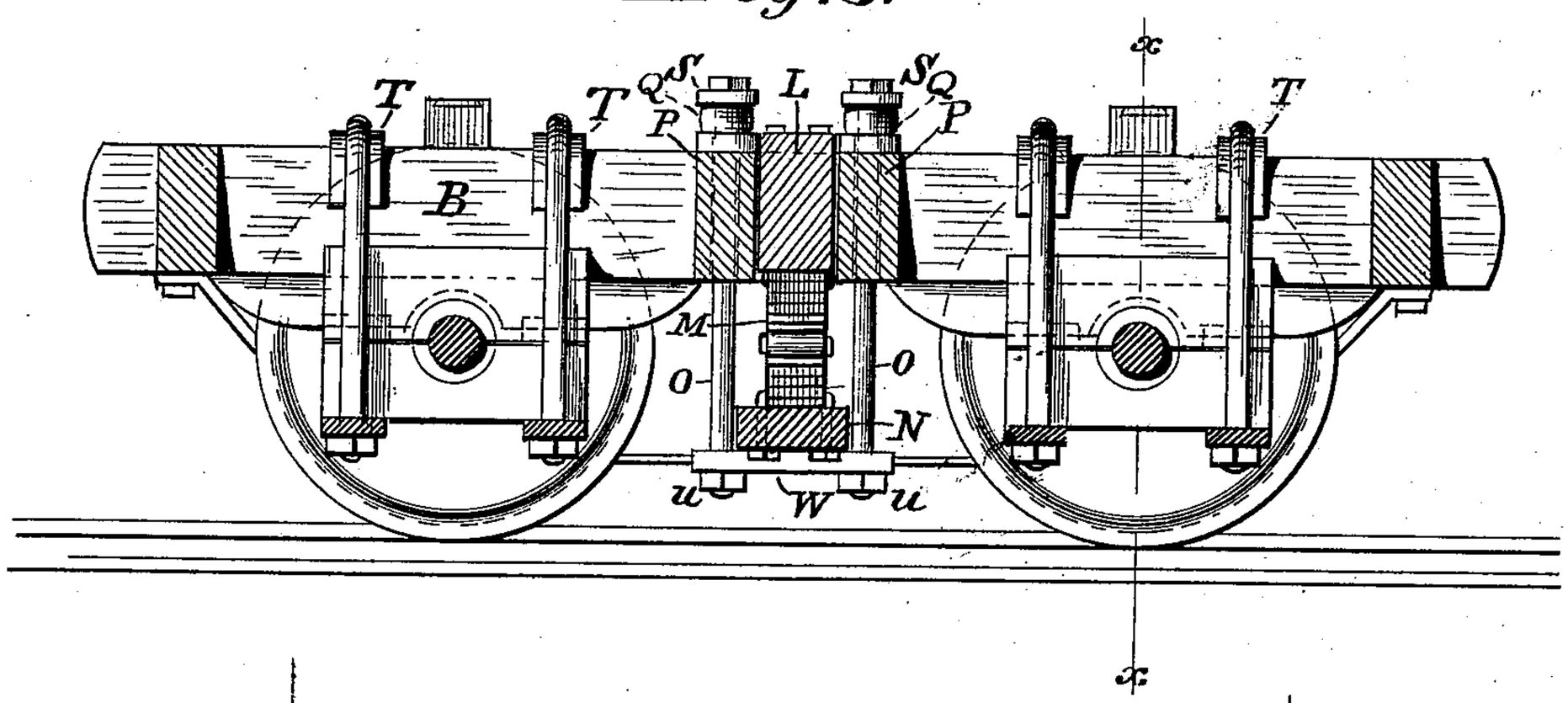


Fig. 4.

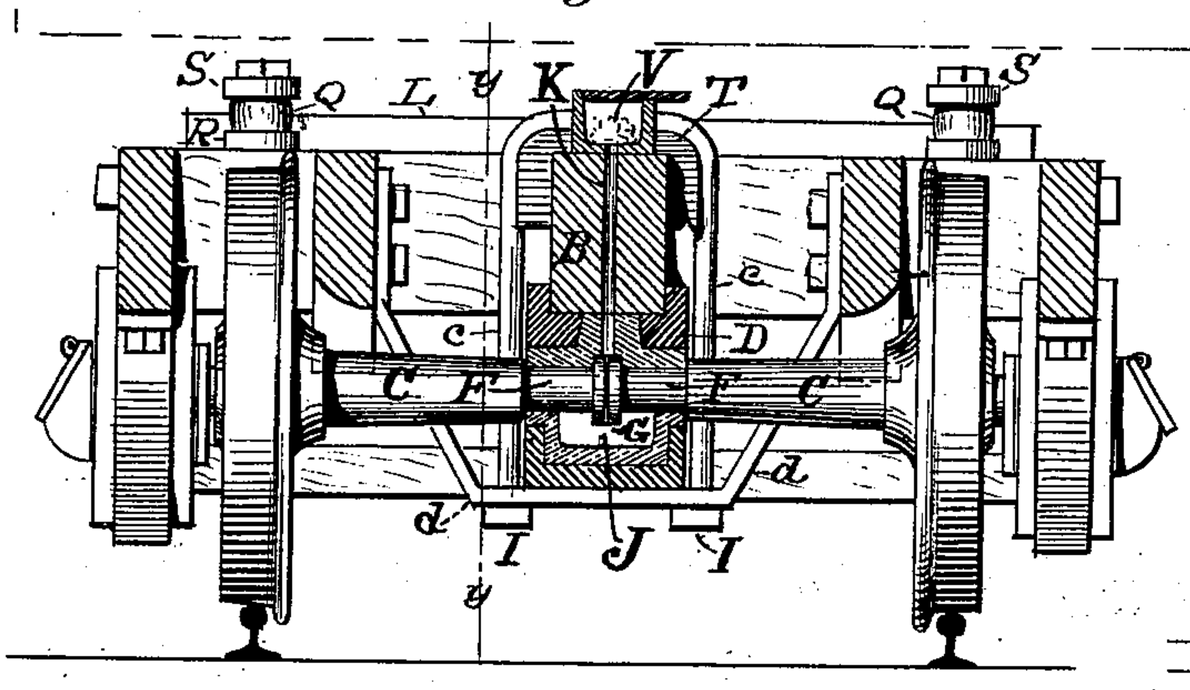


Fig. 5.

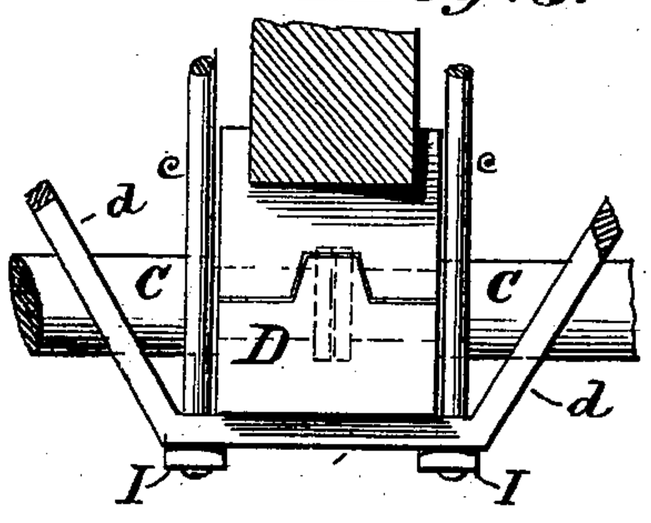
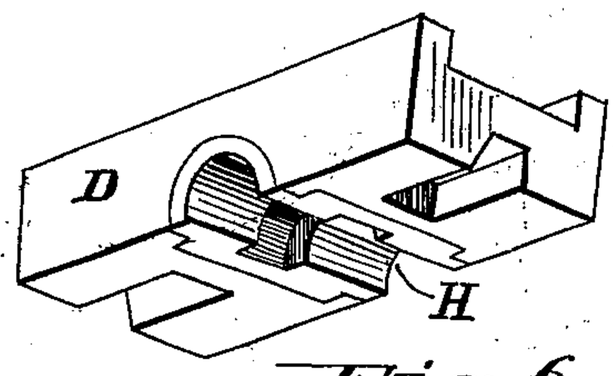
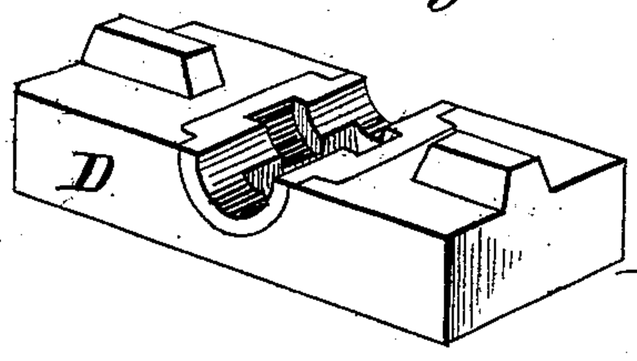


Fig. 6.





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UNITED STATES PATENT OFFICE.

AUSTIN BERRY, OF WARDEN, QUEBEC, CANADA.

IMPROVEMENT IN CAR-TRUCKS.

Specification forming part of Letters Patent No. **208,058**, dated September 17, 1878; application filed October 26, 1877.

To all whom it may concern:

Be it known that I, AUSTIN BERRY, of Warden, in the Province of Quebec and Dominion of Canada, have invented certain new and useful Improvements in Car-Trucks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

This invention has reference to car-trucks mounted on wheels having a divided axle, and is designed to secure to the truck-frame a journal-box of suitable construction for the abutting ends of the divided axle and to suspend the swinging bolster from the truck-frame by springs located above and below the truck, whereby equalizing-bars and the springs usually bearing thereon are dispensed with, the axles having no vertical motion in relation to the truck-frame.

The invention consists of a swinging bolster hung upon springs on the top of the truck-frame by means of hangers holding the suspension-bar below, the latter bearing the springs on which the swinging bolster is placed, whereby both sets of springs yield simultaneously to the pressure of the car, and in the combination and arrangement of the parts, as hereinafter more specifically set forth.

In the drawing referred to herein, Figure 1 is a side elevation of my improved car-truck. Fig. 2 is a bottom view of the same. Fig. 3 is a vertical longitudinal section. Fig. 4 is an end elevation, partly in section. Fig. 5 shows the journal-box detached. Fig. 6 shows the two parts of the journal-box detached.

A designates the rectangular frame of the truck, provided with the central longitudinal bars B B, auxiliary bars B′, and central transverse bars P for supporting the several parts of my construction.

C indicates the divided or sectional axles of the wheels, the abutting ends bearing in a journal-box, D, attached firmly to the under side of the bars B by stirrups *c c* and braces *d d*, bolted to the intermediate bars of the frame A, as shown, or by other suitable means.

The outer journals of the axles have bearing in boxes having no vertical sliding motion in the jaws E, secured to the truck A in the usual manner, and the usual equalizing-bars and springs thereon are dispensed with.

The abutting ends of each axle are formed with a journal, F, and collar G, and a bushing, H, in the upper section of the box D has a groove therein to receive the collar, so that when the whole is secured the sections of the axle have no endwise pressure on the jaws E to strain them out of place.

The boxes D are formed of upper and lower sections, rigidly secured together and to the bars B by the stirrups *c*, passing through the braces *d d*, and having nuts I on their ends, and to prevent the stirrups where they pass over the bar B from sinking therein saddles T are interposed.

The lower section of each of the boxes D is formed with a packing-chamber, J, which is fed with oil from a reservoir, V, above the bearing through a connecting-tube, K. The lubrication of the outer journals of the axle is effected in the ordinary way and by the usual means.

The car rests on the usual center casting, which is in position mid-length of the swinging bolster L, resting on the upper parts of elliptic springs M M, which are secured upon the suspension-bar N, suspended by hangers O, sliding loosely through the transverse timbers P of the truck-frame. The hangers O are provided with heads S, bearing on springs Q, seated on washers R, bearing on the top of the timbers P, the hangers passing through them and securing bearing-plates W near both ends of the bolster, and supporting the same by nuts *u* on the lower ends of the hangers.

The swinging bar is thus provided with springs above and below the truck, and the springs will yield correspondingly to the weight of the car. The axles, having no yielding motion, will cause the truck to carry more than an ordinary load and be run with greater safety, the weight of the load being distributed from the outer ends of the axles toward the center.

I claim as my invention—

1. The combination of the saddles T, central bar B, and stirrups C, substantially as shown, and for the purpose described.

2. The combination of the swinging bolster L, elliptic springs M, suspension-bar N, hangers O, with heads S, springs Q, with washers R, and bearing-plates W, with nuts *u*, substantially as shown and described.

3. The boxes D, secured to central bars B of the truck by stirrups C, provided with saddles T, and by braces *d* bolted to the frame A, and secured to the stirrups by nuts I, all in combination, as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

AUSTIN BERRY.

Witnesses:
T. N. BERRY,
A. C. SMITH.