

(No Model.)

L. K. JEWETT.

CAR TRUCK.

No. 383,181.

Patented May 22, 1888.

Fig 1.

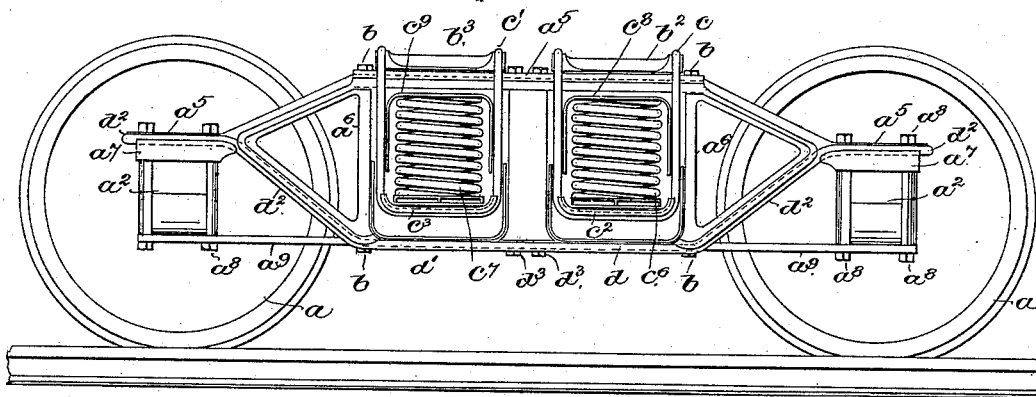


Fig 2.

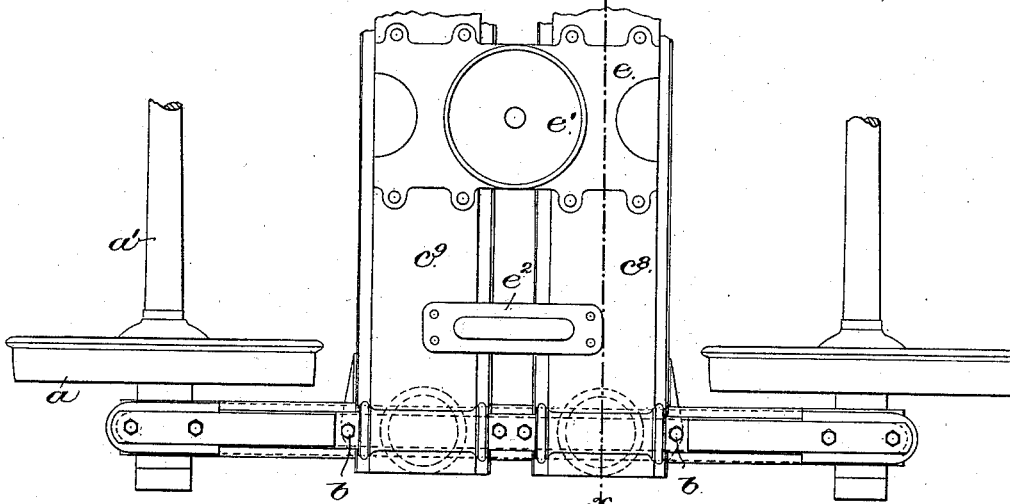
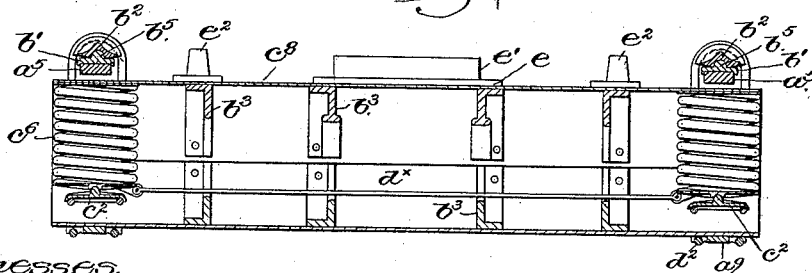


Fig 3.



Witnesses.

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# UNITED STATES PATENT OFFICE.

LUTHER K. JEWETT, OF BOSTON, MASSACHUSETTS.

## CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 383,181, dated May 22, 1888.

Application filed October 7, 1887. Serial No. 251,707. (No model.)

*To all whom it may concern:*

Be it known that I, LUTHER K. JEWETT, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Car-Trucks, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to car-trucks, and is an improvement upon the car truck shown and described in United States Patent No. 361,846, dated April 26, 1887. The patent referred to shows and describes a swing-motion car-truck having a single bolster and transom supported by links passed about a rocker-arm, (one at each side of the truck,) the said rocker arm being supported in a saddle, the said links being passed under a seat supporting a spring, which sustains the bolster to which the car-body is secured. A car-truck constructed in accordance with the said patent possesses many advantages over the ordinary car-truck, and is especially adapted for use on freight cars.

The object of this my present invention is to provide a swing-motion truck which shall be especially adapted to be used with passenger-cars, wherein it is desired to obtain the easiest possible riding-car and great strength. This object is accomplished by providing the truck with two bolsters connected together at their upper sides and adapted to swing in unison, each of said bolsters being supported at its opposite ends by a spring, the combined strength and action of all the said springs causing the car to be supported in such manner as to ride very easily over the track with a minimum jarring effect appreciable to the passengers.

The particular features in which my invention consists will be pointed out in the claims at the end of this specification.

Figure 1 is a side view of a passenger-car truck constructed in accordance with my invention; Fig. 2, a top view of a sufficient portion of my improved car-truck to enable my invention to be understood; and Fig. 3, a longitudinal section of Fig. 2 on line *x x*.

The wheels *a*, axles *a'*, and the housings *a''* and their contained boxes are and may be of any usual construction.

In accordance with my present invention

the arch-bar *a<sup>3</sup>* is supported by the sustaining blocks or casting *a<sup>4</sup>*, (shown as triangular in form,) one angle of each of the said triangular castings abutting against the clip *a<sup>1</sup>*, the latter having projections on its under side to embrace the housing *a<sup>2</sup>*, as in the patent referred to. The arch-bar *a<sup>3</sup>* at each end is extended beyond the casting *a<sup>4</sup>* and rests upon the clip *a<sup>1</sup>*, it being secured thereto by bolts *a<sup>5</sup>*, extended through the housing *a<sup>2</sup>* and wheel-strap *a<sup>6</sup>*, the latter being also secured to the casting *a<sup>4</sup>* by bolts *b*, and to the arch-bar *a<sup>3</sup>* by bolts or rods *b<sup>1</sup>*. The arch-bar *a<sup>3</sup>*, between the castings *a<sup>4</sup>*, has secured to it by the bolts *b* a saddle, *b<sup>2</sup>*, for the rocker-bars *b<sup>2</sup> b<sup>3</sup>*, the said saddle and rocker-bars being substantially such as shown in the patent above referred to; but in the present instance the saddle is a single piece extending from one to the other castings *a<sup>4</sup>*, a rib, *b<sup>5</sup>*, on the saddle being fitted to a central longitudinal groove in each rocker-bar, as shown in Fig. 3.

Each rocker-bar *b<sup>2</sup> b<sup>3</sup>* is embraced by double links *c c'*, respectively, which not only embrace the said rocker-bars, but are extended under the supporting-bar *c<sup>2</sup> c<sup>3</sup>*, upon which respectively are mounted and rock the spring-seats *c<sup>4</sup> c<sup>5</sup>*, each of the said supporting-bars having preferably at its longitudinal center a rib, which enters a concavity in one of the seats *c<sup>4</sup> c<sup>5</sup>*.

The spring-seats *c<sup>4</sup> c<sup>5</sup>* support springs *c<sup>6</sup> c<sup>7</sup>*, which respectively sustain bolsters *c<sup>8</sup> c<sup>9</sup>*, there being, as herein shown, a spring at each end of each of the said bolsters, the said springs being of sufficient strength to take up or reduce the jar or concussion in the line of the arch-bars and trusses, to be described.

The spring-seats *c<sup>4</sup> c<sup>5</sup>*, at opposite sides of the truck, are connected, as herein shown, by rods, only one rod, *d*, being shown in Fig. 3, so that the said spring-seats always maintain the same relative distance apart and swing in unison with their bolster as the latter moves longitudinally, it being permitted to do so by the links *c c'* resting upon the rocker-bars *b<sup>2</sup> b<sup>3</sup>*.

Each bolster *c<sup>8</sup> c<sup>9</sup>* has located below it a U-shaped transom, *d d'*, which is somewhat wider than the said bolster, so as to permit the links *c c'* to swing between the sides of the said transoms and the said bolsters.

The ends of the arch-bar  $a^5$  are embraced by and serve to hold a truss,  $d^2$ , composed of round or square metal rods of great strength, properly welded or united together to form, preferably, an endless band, the said truss extending from the ends of the arch-bars  $a^5$ , along the clips  $a^7$ , and thence under the transoms  $d^1$ .

The bolsters  $c^8$   $c^9$  are joined together by the plate  $e$ , having the hub  $e'$  to receive the king-bolt, (not shown,) by which the car-body is fastened to the truck, and also by the curve plates  $e^2$ , the said plates having one end or side bolted or otherwise secured to the bolster  $c^8$ , and the other to the bolster  $c^9$ , as clearly shown in Fig. 2.

It will thus be seen that a passenger-car-truck constructed as described possesses the advantage of a swing-motion truck with spring power sufficient to insure a smooth and easy moving of the car.

I claim—

1. In a car-truck, two metallic transoms, the arch-bar  $a^5$ , supporting blocks or castings  $a^6$ , and the truss  $d^2$ , combined with two bolsters, springs to support them, rocker-bars and links embracing the rocker-bars, and with the plate  $e$ , connecting the said bolsters, substantially as described.

2. In a car-truck, two metallic transoms, the arch-bar  $a^5$ , the supporting-blocks or castings  $a^6$ , and the truss  $d^2$ , combined with two bolsters, springs to support them, rocker-bars, links embracing the rocker-bars, and with the plates  $e$  and  $e^2$  to join the said bolsters, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LUTHER K. JEWETT.

Witnesses:

JAS. H. CHURCHILL,  
F. L. EMERY.