W. E. PEYTON

Car-Truck.

No. 219,512. Patented Sept. 9, 1879.

Fig. 1.

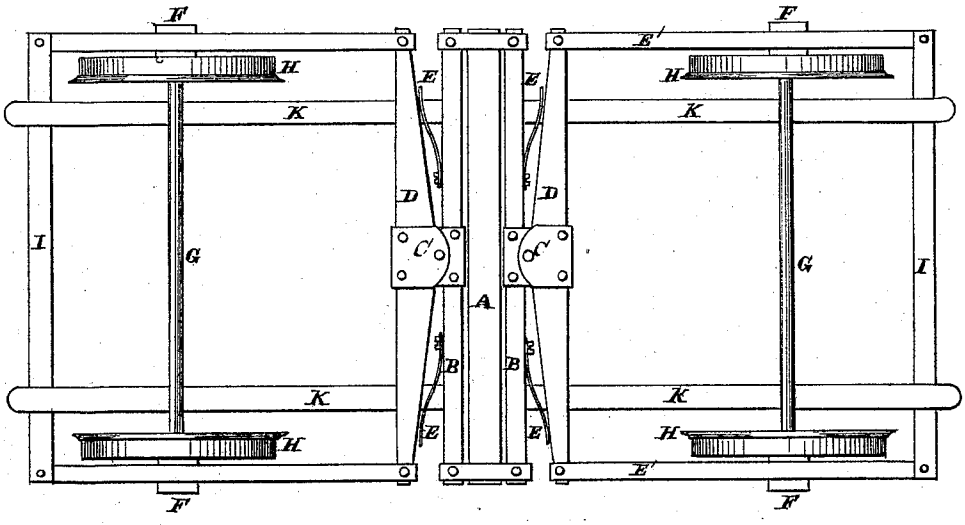


Fig. 2.

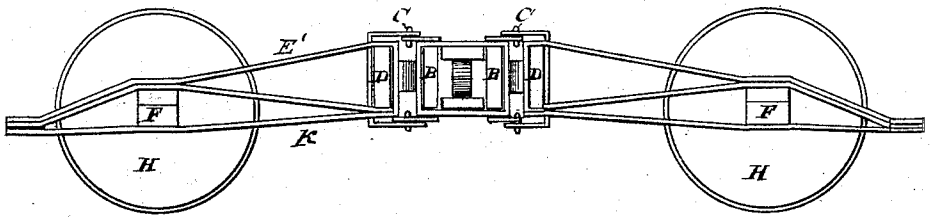
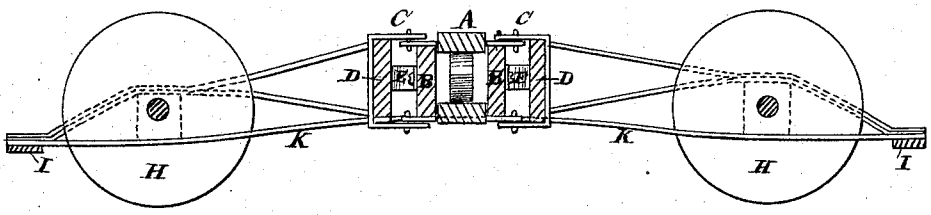


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM E. PEYTON, OF STOCKTON, CALIFORNIA.

IMPROVEMENT IN CAR-TRUCKS.

Specification forming part of Letters Patent No. **219,512**, dated September 9, 1879; application filed February 27, 1879.

To all whom it may concern:

Be it known that I, WILLIAM E. PEYTON, of Stockton, county of San Joaquin, and State of California, have invented an Improved Car-Truck; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings.

My invention relates to improvements in that class of railway-car trucks in which the two axles of a truck are, to a certain degree, independent of each other, so that in rounding a curve there is no drag or friction of the wheels on the rails.

My improvement consists in certain details of construction whereby very little change in existing conditions is made, while at the same time the front and rear axles are sufficiently independent of each other, so that there is no friction on the rails in rounding curves.

Figure 1 is a top view of my truck. Fig. 2 is a side elevation. Fig. 3 is a longitudinal section.

Let A represent the ordinary swinging bolster of a railway-car truck placed between the usual frame-timbers B. To these frame-timbers I hinge, as shown at C, a supplemental timber, D, beveled each way from the center, as shown. On each side of the hinge, between the supplemental timber D and frame-timber B, I place a metallic or rubber spring or cushion, E, as shown, for the purpose hereinafter described.

The iron-truss-frames E′, on which the axle-boxes rest, usually extend across the frame-timbers and swinging bolster. I divide them, however, and instead of being attached to the bolster, they are attached to the ends of the supplemental timbers D, as shown. They then extend out beyond the axle and have the boxes F, on which the axle G, carrying the wheels H, rests. A bar, I, connects the outer ends of the truss-frames, being secured on the upper side of their ends, as shown.

Attached to the under sides of the two or more frame-timbers B are two arched bars, K, one on each side of the truck. These arched bars extend out each way under the axles and over the bars I, connecting the outer ends of the truss-frames, as shown. These arched bars have their ends resting on the cross-bars I, so as to take the weight of the car off the hinges on the supplemental timbers, and the weight is thus properly divided.

With ordinary freight-car trucks I should only use one of the hinged supplemental timbers, and secure the truss-frame of the other axle to the main stationary frame-timbers of the truck; but for larger trucks, such as are used on passenger-cars, I should hinge each pair of wheels to the main timbers, as above described.

It will be seen that the curved metallic bars, which, from their peculiar shape, form supplemental springs, do not in any way interfere with the action of the swinging bolster on which the car-bed rests. This swinging bolster rests in the usual springs between the main timbers, and a curve is made in the arched bars between these timbers, so that a vertical motion is allowed to the bolster without its coming in contact with the arched bar.

It will be seen from this construction, as described, that whenever the car passes around a curve, instead of the wheels binding on the edge of the track, as is usual, each pair of wheels will adapt itself automatically to the curve and pass freely around without binding on the rails, thus doing away with the friction incident to the present system of construction.

It will be noticed that I make no radical changes in the ordinary railway-car trucks as at present constructed. The frame-timbers, bolsters, axles, boxes, &c., remain the same. I simply hinge my supplemental beveled timber to the main frame, as described. When the wheels pass around the curve the wheels on the inner side of the curve approach nearer to the central frames, the rear ones coming forward and the forward ones back, so that they go around in a shorter curve than the outer wheels. By the use of the springs or cushions between the beveled supplemental timbers and the stationary frames too much play is prevented, and as soon as the straight line of track is again reached the axles come again parallel with each other and with the bolster.

As the arched bars have their ends resting on the bar connecting the ends of the truss-frames, when the truck is carried around a curve, these arched bars slide on the cross-

bars, not being connected to but simply resting on them, and when the truck comes to the straight line of track again, said curved bars slide back again on the cross-bars to their original position, the friction on the rails being sufficient to automatically regulate the position of the axles.

This hinged supplemental timber and connections may be attached to any trucks already constructed with very little trouble or expense and very slight change in existing conditions.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The timbers D, centrally hinged to the frame-timbers B, and forming part of the wheel-frame D E′ I, as shown, in combination with the arched bars K, whereby the hinge is relieved from the weight of the car, and the bars I slide upon the bars K and allow the trucks to adjust themselves to the curves of the road, substantially as herein described.

In witness whereof I have hereunto set my hand.

WILLIAM EDGAR PEYTON.

Witnesses:
CHAS. G. YALE,
FRANK A. BROOKS.