T. LYMAN.

Car Truck.

No. 55,133. Patented May 29, 1866.

Fig. 2.

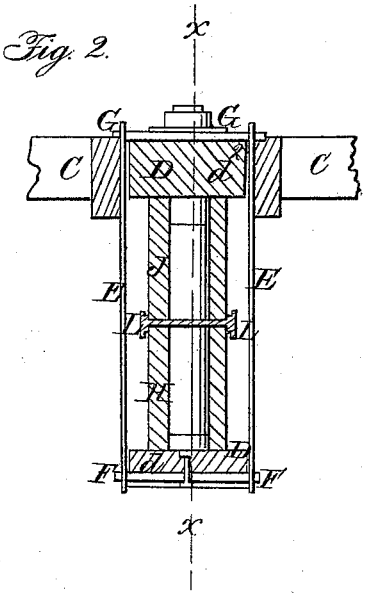
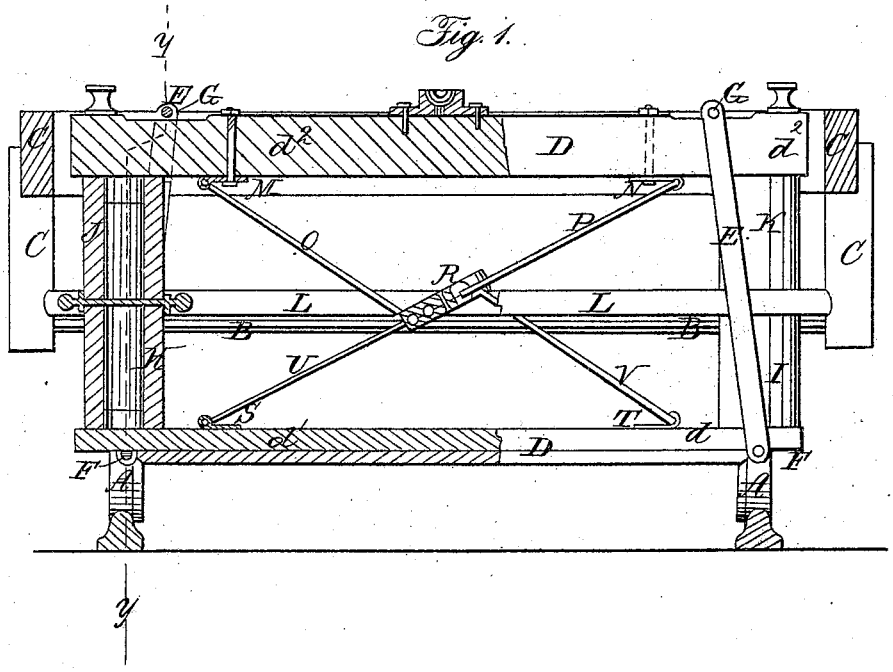


Fig. 1.



Witnesses:

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UNITED STATES PATENT OFFICE.

THEODORE LYMAN, OF SANDUSKY, OHIO.

IMPROVED CAR-TRUCK.

Specification forming part of Letters Patent No. **55,133**, dated May 29, 1866.

To all whom it may concern:

Be it known that I, THEODORE LYMAN, of Sandusky, in the county of Erie and State of Ohio, have invented a new and useful Improvement in Railroad-Cars; 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 make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of the swinging beam of an ordinary car-truck, partly in section, through the line *x x*, Fig. 1, illustrating my invention. Fig. 2 is a detail sectional view of the same, taken through the line *y y*, Fig. 1.

My invention has for its object to prevent the unpleasant oscillating or side motion and pounding now so frequently felt in riding in railroad-cars, and to give to the car an easy undulatory motion; and it consists in combining a set of braces and connecting-block with the swing-beam of a railroad-car, as hereinafter more fully described.

A are the wheels, B the axle, and C the frame, of an ordinary car-truck, about the construction and arrangement of which there is nothing new.

The swing-beam D is suspended from the car-truck C by the pendulum-rods E, by which means the necessary side motion is obtained, instead of obtaining it through the rocking of the springs in their seats, in which their position should be permanent. Through the lower ends of the rod E pass bars or rods F, upon which the lower timber, *d*, of the swing-beam C rests. Through the upper ends of these rods E are passed rods or bars G, the ends of which rest in notches made in the upper surface of the central cross-timbers of the frame C, as shown in Fig. 2.

Upon the ends of the lower timber, *d'*, of the swing-beam D are formed the seats of the lower springs, H and I, upon the tops of which rest the seats of the upper springs, J and K. The seats of the springs J and K are connected together by a frame, L, to which they are secured.

The upper timber, d^2, of the swing-beam D rests upon the upper ends of the upper springs, J and K, as shown. To the lower side of the upper timber, d^2, of the swing-beam D, toward its ends, are bolted or otherwise securely attached ears or plates M and N, to which the upper ends of the braces O and P are pivoted, as shown in Fig. 1. From these points the braces O and M pass downward and inward, and are pivoted to the central connecting-block, R, as shown in Fig. 1. To the upper side of the lower timber, *d'*, of the swing-beam D, toward its ends, are attached ears or plates S and T, to which the lower ends of the braces U and V are pivoted. From these ears the said braces U and V pass upward and inward, and are pivoted to the central connecting-block, R, as shown in Fig. 1.

By this construction an easy and perpendicular vibration of the springs is insured—that is to say, the springs will be compelled to vibrate in a line perpendicular to the plane of their seats, however much the road-track, and consequently the plane of the spring-seats, may be inclined.

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

The combination of the braces O P U V and block R with the swing-beam D of an ordinary railroad-car truck, substantially as described, and for the purpose set forth.

THEODORE LYMAN.

Witnesses:

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