(No Model.) 2 Sheets—Sheet 1.

E. P. LARÉE.

RAILWAY CAR.

No. 302,662. Patented July 29, 1884.

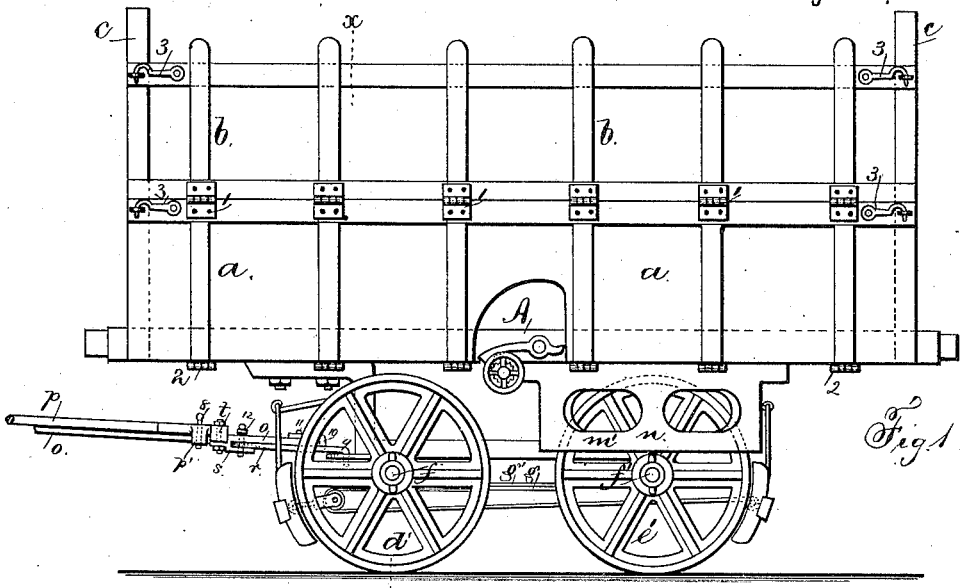

Fig. 1

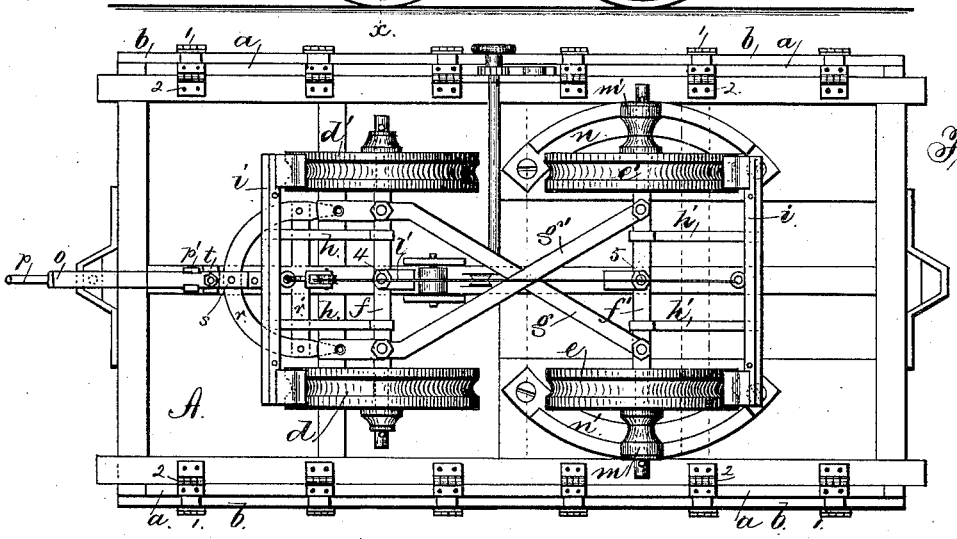

Fig. 2.

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(No Model.) 2 Sheets—Sheet 2.

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RAILWAY CAR.

No. 302,662. Patented July 29, 1884.

Fig. 3.

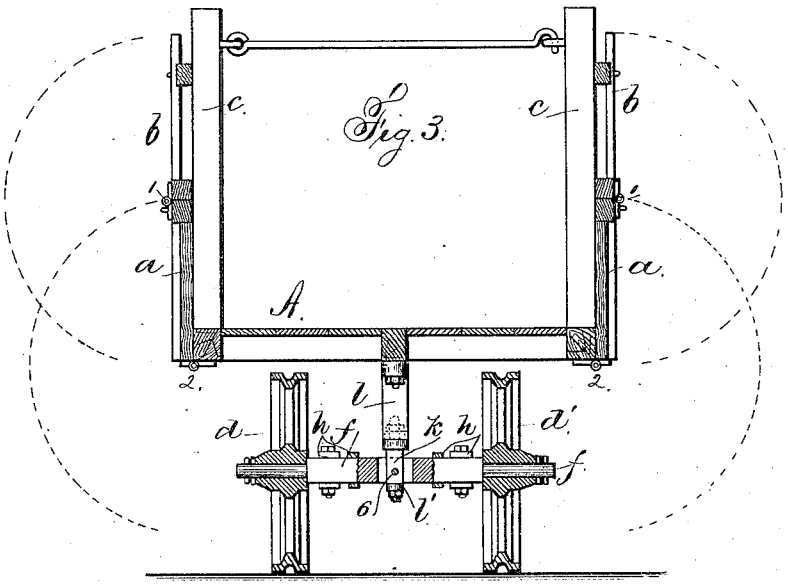


Fig. 4.

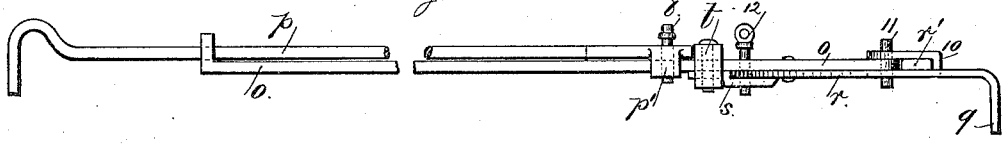
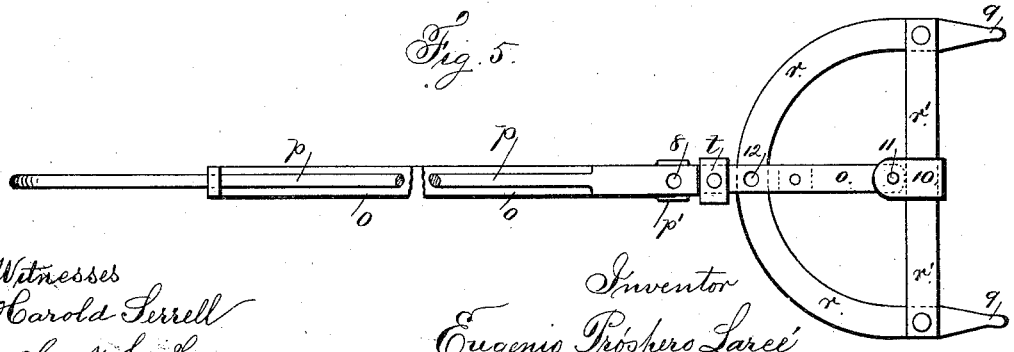


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

EUGENIO PRÓSPERO LARÉE, OF SANTA CLARA, CUBA, ASSIGNOR TO HIMSELF AND HILARIO YSABA Y LAZARTE, OF SAME PLACE.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 302,662, dated July 29, 1884.

Application filed December 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, EUGENIO PRÓSPERO LARÉE, of Santa Clara, in the Island of Cuba, have invented a new and useful Improvement in Railway or Tramway Cars; and the following is declared to be a description of the same.

My invention relates to a car adapted to railway or tramway service upon temporary tracks or uneven country roads, such cars being especially employed for the transportation of sugar-cane, tobacco, rice, cornstalks, &c.

My improved car combines several important features, which together make it very complete and efficient, as follows: The sides of the car are made double, the halves being hinged together and the lower half hinged to the bottom of the car. These halves are fastened by catches to the corner posts of the car, and can be folded over and outward, leaving a free clear space for unloading the contents of the car. The car-axles are mounted upon and pivoted to a longitudinal bearer, and they are free to turn upon said pivots, and I employ X-bars to connect said axles together, so that in turning a curve the axles will both assume a position parallel to the radius of the curve. The front axle of my car is made adjustable upon its pivot, so that the wheels will accommodate themselves to the inequalities of the surface of the country or road. The back axle is constructed with friction-rollers outside the traction-wheels, and said rollers bear against the under sides of segmental frames secured to the under side of the car. These frames form a medium for carrying the principal weight of the car and contents upon the friction-rollers and axle, but do not at all interfere with the axle and wheels turning upon the pivot or king pin. The pole of my car is made with a sector and securing-pin, and it may be elongated or extended. This is made necessary from the fact that in cane-growing countries, where my car will be mostly used, the planters employ oxen to draw the wagons, and where several wagons are coupled together either upon the rails or road, they employ several teams of oxen, and it is an advantage to extend the pole, that two teams of oxen may be coupled to it.

In the drawings, Figure 1 is a side elevation of my improved car. Fig. 2 is an inverted plan of the same. Fig. 3 is a cross-section at the line $x\ x$ of Fig. 1. Fig. 4 is a side elevation, and Fig. 5 a plan of the improved pole.

A is the floor of the car, which may be made in any usual manner.

The sides are in two parts, $a\ b$, and hinged together at 1, the lower part, a, being hinged to the floor-frame at 2. These sides will fold over against the wheel-frames down out of the way for unloading, and they are held up in position preferably by latches or hooks 3, and staples in the corner posts c of the car. In Fig. 1 a portion of the side a is shown as removed near the brake-wheel, which wheel and brake mechanism may be of any ordinary construction.

The wheels $d\ d'$ and $e\ e'$ are mounted upon axles $f\ f'$, and these are carried by a longitudinal frame secured upon the car-body, and said axles $f\ f'$ are pivoted to the frame by king-pins at 4 5, and I employ X-bars $g\ g$ between said axles, and pivoted to them at their ends, so that these bars compel the axles to turn together upon the radius of a circle corresponding to that upon which the car is moving. These X-bars, however, are old, and form no part of my present invention.

Upon the axles $f\ f'$ are arms $h\ h'$, and these arms support the swinging links and frames i i, carrying the brake-shoes.

The front axle, f, is slotted for the passage of the king-pin k, and there is a pin, 6, passing horizontally through the axle and pin k, coupling the axle and pin together. The pin k is supported in the frame l at its upper part, and at its lower part by a strap, l', from said frame. The axle f and wheels turn horizontally with and upon the pin k, and an oscillating movement upon the pin 6 is permitted by the slot in the axle. This movement allows the wheels $d\ d'$ to accommodate themselves to inequalities in the surface of the road traveled over without disturbing or upsetting the contents of the wagon.

The back axle, f', is constructed with friction-rollers m m' upon the same, and outside the traction-wheels e e', and I employ segmental frames or tracks n n', secured to the under side of the car-body, and these frames, resting upon the friction wheels or rollers m m', support the weight of the car at that part and remove the weight from the axle f'; and, further, said frames keep the wheels steady, and allow the forward axle to be turned easily by the tongue as the car is drawn along.

These cars are sometimes run on rails, in which case the rails will be received in the central grooves in the traction-wheels, and it is sometimes desirable to employ four oxen or other beasts of draft instead of two, in which case it is preferable to extend the pole, as next described.

The pole is made of the main piece o, and the extension-piece p is provided with lugs p', and connected to the piece o by a pin, 8.

The sector r is made with bent-down ends 9, acting as hooks to connect the pole with the perforated plates upon the front axle, f, and said sector r is connected to a bar, r', and by a strap, 10; and pin 11 to the piece o, and I provide a pin, 12, passing through the piece o and sector r, to keep the pole at right angles to the axle. This pin may be removed when the car is upon rails.

A strap, s, is secured to the piece o, and between it and o the sector is received, and I provide a connecting-strap, t, to connect the other end of strap s and the piece o, and form a stop for the extension-pole p when drawn back.

The whiffletree and means for hitching the animals to the pole may be secured in any desired position to the rear portion of the pole o, and when two teams are employed the outer end of the extension-pole is connected to the yoke or to the hame-straps.

I claim as my invention—

1. In a railway or tramway car, the combination, with the body and running-gear, of movable sides made in two parts and hinged together, and hinges for connecting the lower edge of the movable sides to the car, so that the sides will fold downward, affording a clear space for loading or unloading the car, as set forth.

2. In a railway or tramway car, the combination, with the body and running-gear, of segmental frames or tracks upon the under side of the car, and friction wheels or rollers upon the axles of the back wheels, upon which the car and frames rest, so that the main weight is taken off the axle and supported by these frames and rollers, as and for the purposes set forth.

3. In a railway or tramway car, a pole provided with a sector, and means for securing said sector to the front axle of the car, in combination with a secondary or sliding pole and pins for locking the parts in position, as and for the purposes set forth.

4. In a railway or tramway car, the combination of two-part hinged and folding sides, a slotted adjustable front axle, segmental frames or tracks, and friction bearing-rollers upon the axle of the back wheels, and an extension-pole having a segment and means for adjusting and securing the parts, and fastening it to the front axle of the car, as and for the purposes set forth.

Signed by me this 13th day of December, A. D. 1883.

E. P. LARÉE.

Witnesses:
GEO. T. PINCKNEY,
HAROLD SERRELL.