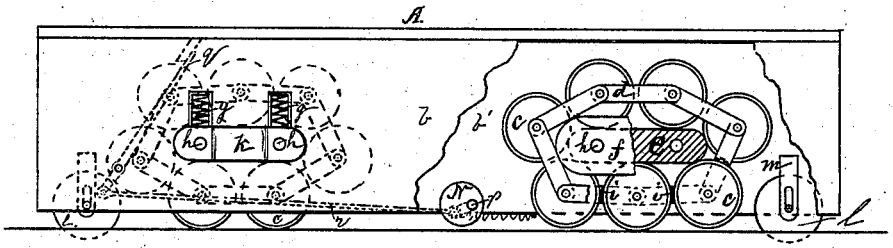
J. M. WEYMOUTH.

Railway-Cars.

No. 211,201. Patented Jan. 7, 1879.

FIG. 1.



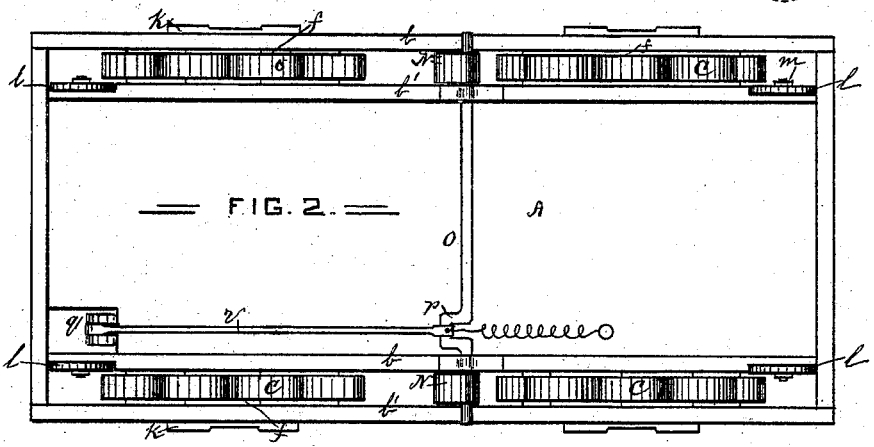


FIG. 2.

FIG. 4.

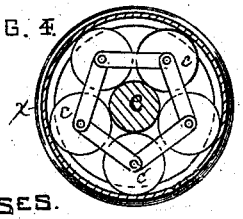
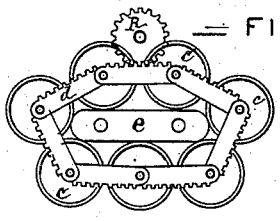


FIG. 3.



WITNESSES.

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JAMES M. WEYMOUTH, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN RAILWAY-CARS.

Specification forming part of Letters Patent No. **211,201**, dated January 7, 1879; application filed May 7, 1878.

To all whom it may concern:

Be it known that I, JAMES M. WEYMOUTH, a resident of the city of New Orleans, parish of Orleans, and State of Louisiana, have invented a certain new and useful Improvement in Railway-Cars; and I do hereby declare the following to be a full, clear, and correct description of the same, reference being had to the annexed drawing, making a part of this specification.

This invention embraces several novel and highly-important features, the chief of which is an arrangement of traction-wheels, which are so applied to the frame of the vehicle as to overcome friction, and hence enable the same to be drawn or propelled with an expenditure of but very little power. The other features comprise an arrangement of independent flange-wheels for maintaining a proper position on the rails and a means for stopping the vehicle.

The nature of my invention will, however, be much more readily understood by referring to the accompanying drawing, whereon—

Figure 1 represents a side elevation; Fig. 2, a view from the under side. Fig. 3 represents a means by which the driving-power may be applied to the wheels, and Fig. 4 a modification of the traction-wheels.

The frame A is provided with boxed side frames, *b b'*, in which operate the traction-wheels *c*. These are constructed in sets of seven or any other odd number, and are connected by a pair of side chains, *d*, the pins of which serve as journals therefor. These wheels are made to operate around a central bearing, *e*, the latter of a circular, oval, or flattened form. That shown in Figs. 1 and 3 is deemed preferable, for the reason that it requires a less height of frame.

The bearings *e* are provided on each side with flanges *f*, in order to insure the working of the wheels in a direct line. Each pair of links are connected by a cross-bar, *i*, which serves as a scraper for removing any dirt that may by chance be taken up by the wheels.

The sides *b* and *b'* are provided with vertical openings, in which are fitted steel or other springs, *g*, the lower ends of which are connected with pins or bolts *h*, that are fitted in the bearings *e* and washers or side plates, *k*, as shown, so that the weight of the whole apparatus may be upon the peripheries of the wheels, which in their rolling progressive movement are continually presenting new bearing-surfaces.

The flanged wheels *l* are each provided with a central pin, the ends of which operate in slotted bearings *m*, that are secured to the inside of the box-frame pieces *b*, as shown, so as to operate against the inner edges of the rails, and thus serve to prevent the apparatus from running off the track. These wheels should be provided with levers, so that they may be raised or lowered at pleasure, and additional wheels can be applied upon the outer sides of the frames, by which arrangement the car can be guided onto a side track simply by raising the inner wheels, so as to clear the switch, and by lowering those on the side where the branch track is located.

The brake consists of a pair of eccentrics, N N', that are keyed or otherwise secured to a shaft, O. This shaft is provided with a crank, *p*, which is connected with an operating-lever (shown in dotted lines at *q*) by means of a rod, *v*, and through which the eccentrics are made to operate on the face of the rails whenever it is required to stop the car.

This car may be propelled by animal-power; or a motive power may be placed on the body of the car, and the power transmitted through a cog-wheel, R, which, for this purpose, is made to engage in teeth that are cut in the outer edges of the links *d*, as shown.

It is intended to represent by Fig. 4 that should a circular bearing be employed, it will be necessary to incase the wheels *c* in a metal ring, *x*, as otherwise the said wheels would represent the outer ends of so many spokes, and in consequence thereof this form of bearing would, without the ring, be utterly impracticable. In this case flanges may be applied to the rings *x*, thus dispensing with the independent flange-wheels *l*.

Having described my invention, what I claim

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

1. In combination with the wheels *c* and links *d*, the bearing *e*, springs *g*, and frame A, substantially as described.

2. In combination with the frame A, provided with bearings *e* and wheels *c*, the flange-wheels *l*, arranged to operate as described, and for the purpose set forth.

In testimony whereof I have hereunto signed my name.

J. M. WEYMOUTH.

In presence of—
J. N. MILLER,
W. J. J. ARMSTRONG.