D. B. JAMES.

One-Track Railway-Car.

No. 208,738. Patented Oct. 8, 1878.

Fig. 1.

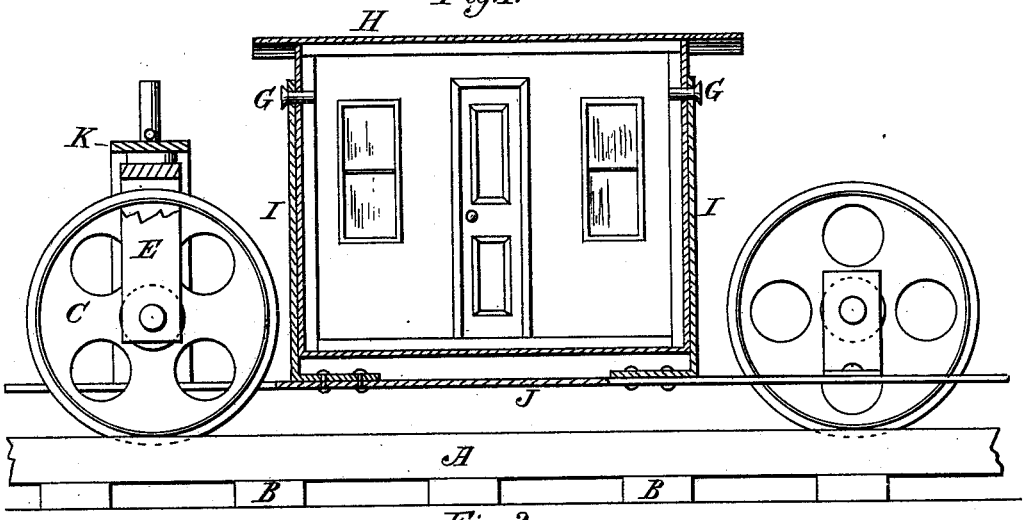


Fig. 2.

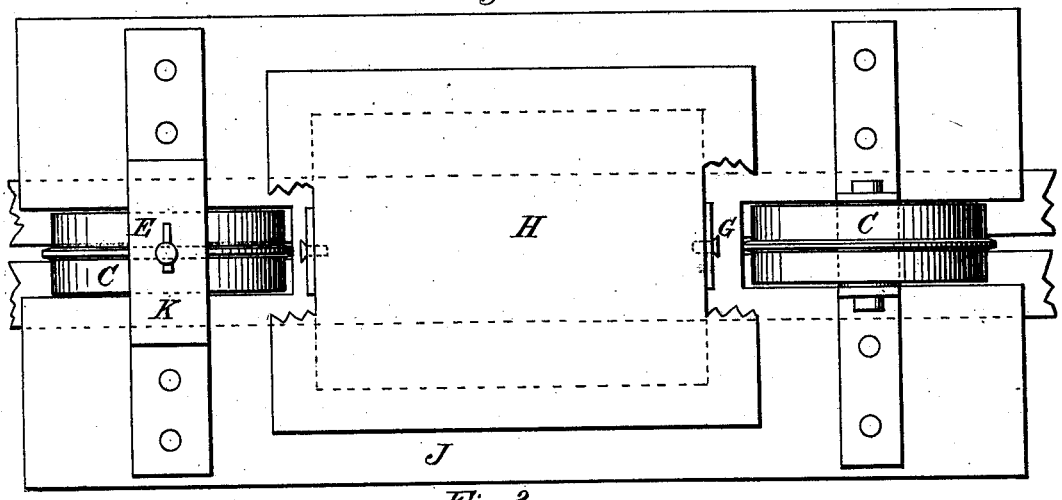
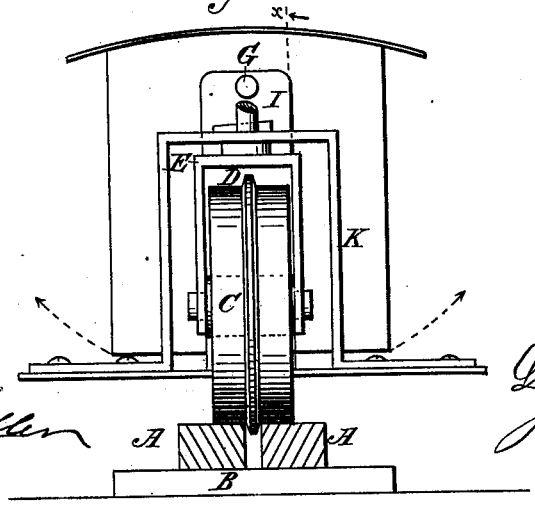


Fig. 3.



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UNITED STATES PATENT OFFICE.

DAVID B. JAMES, OF VISALIA, CALIFORNIA.

IMPROVEMENT IN ONE-TRACK RAILWAY-CARS.

Specification forming part of Letters Patent No. **208,738**, dated October 8, 1878; application filed June 11, 1878.

To all whom it may concern:

Be it known that I, DAVID BICE JAMES, of Visalia, in the county of Tulare and State of California, have invented a new and useful Improvement in the Construction of Cars, being an improvement on Patent No. 176,864, granted to me May 2, 1876.

The following is the description of the improvement now claimed:

In carrying out this invention one line of broad-faced wheels is used with beveled ridges or flanges standing out from the center of the face of the wheels, said ridges to drop into spaces between two rails of timber of any desired size, that are fastened on ties and act as guides to keep the wheels and cars upon the track, the flat surface of the wheels forming a base for the support of the car-bodies, which swing on trunnions in a line with the center ridges or flanges that are around the periphery of the wheels. The essential advantage of this contrivance is economy in the cost of cars, locomotives, and the cost of the track. Two rails of wood only are needed. It also offers no obstruction to wagon-road crossings; and, further, the rails and track can be used for street-cars.

Referring to the accompanying drawings, Figure 1 is a longitudinal sectional elevation of my improved railway car-wheel and track. Fig. 2 is a plan. Fig. 3 is an end view of the car with section of the track.

A A are the rails of wood, which can be shod with other wooden rails of less thickness or of iron.

B represents the ties. C represents the carrying-wheels of the car; D, the beveled ridges or flanges for guiding the wheels and enabling them to keep on the track, acting as a double flange.

E represents the rolling or turning gear that allows the wheel to turn on any curve; G, the trunnions the car-body H swings upon. These trunnions are supported upon the vertical posts I, secured to and rising from the truck-frame J, to which are also secured the frames K, in which the turning-gear of the wheels revolve.

In practice, it is found unnecessary to apply the turning-gear to more than one of the wheels, the other being left to revolve continually in the same plane relatively to the car-truck, as shown in the drawings.

By constructing the car and its truck in the manner above described the cost of permanent way, as well as that of the rolling-stock, is reduced to a minimum, while its capacity for carrying freight or passengers is equal to that of the narrow-gage roads constructed at much greater cost; and its peculiar construction enables curves of the shortest radius in use to be passed at a good speed in perfect safety.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent the following, to wit:

1. The double-tread wheel C, having a central beveled flange, D, in combination with the turning-frame E, supporting-frame K, and truck-frame J, all constructed and arranged substantially as and for the purpose set forth.

2. The swinging car H, in combination with the end supports, I, truck-frame J, and double-tread wheels C, substantially as and for the purpose described.

DAVID BICE JAMES.

Witnesses:
T. M. MCNAMARA,
SPIER JACKSON.