

(No Model.)

J. F. BATCHELOR.

RAILWAY CAR.

No. 300,937.

Patented June 24, 1884.

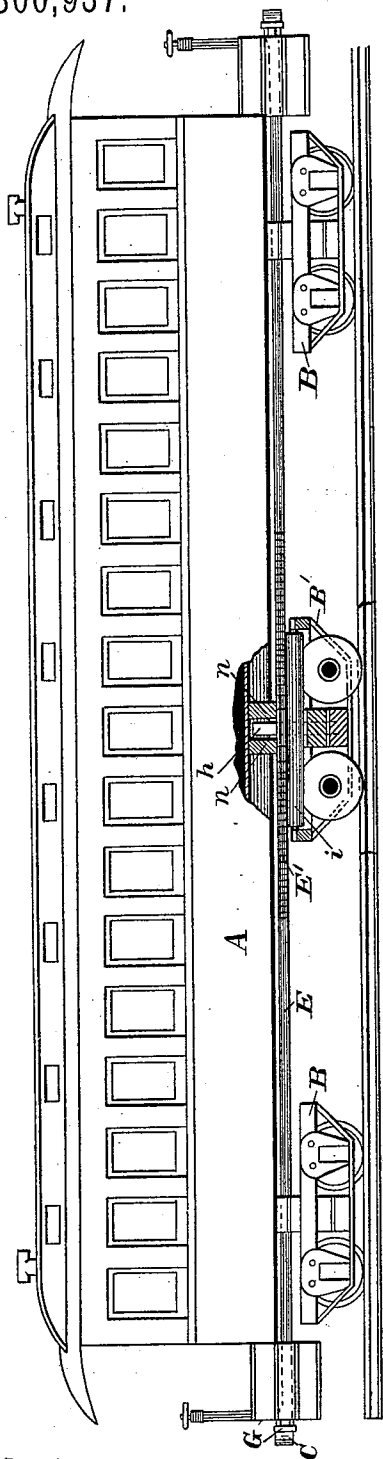


Fig. 1.

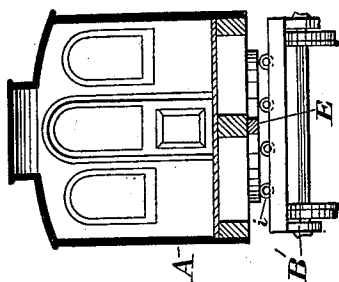


Fig. 3.

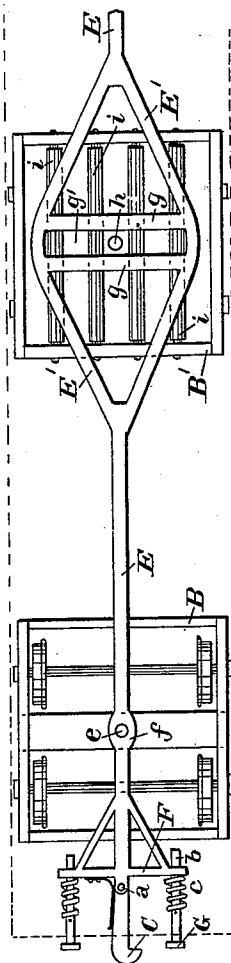


Fig. 2.

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UNITED STATES PATENT OFFICE.

JOSEPH F. BATCHELOR, OF BALTIMORE, MARYLAND.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 300,937, dated June 24, 1884.

Application filed April 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH F. BATCHELOR, a citizen of the United States, residing at Baltimore, State of Maryland, have invented certain new and useful Improvements in Cars, of which the following is a specification.

My invention relates to certain improvements in railway-cars, and includes an improved draw-bar and provision for a truck between the end trucks.

The construction of the several parts will first be described, and then those parts and combinations of parts which comprise the invention will be designated in the claims.

In the annexed drawings, Figure 1 is a side elevation of a car. Fig. 2 is a plan view showing the top of the trucks and the draw-bar resting thereon. Fig. 3 is a vertical cross-section of a car.

The letter A designates the body of a car; B, the end trucks, and B' a third truck between the end trucks. The hooked draw-head C is pivoted at *a* to the continuous draw-bar E in a manner well known. At each end of the car the draw-bar is provided with a cross-head, F, to which the two slide shanks, *b*, of buffers G are attached, one on each side of the draw-head. A spring, *c*, about each buffer-shank, serves to break the concussion when cars come together. By this arrangement the buffers are directly connected to the draw-bar. The king-bolt *e* over each end truck passes through a boss, *f*, on the draw-bar, and thereby the draw-bar is connected to the end trucks. At the center of the car the draw-bar has two branches, E', which spread apart a distance nearly equal to the width of a car, and at the point where these branches separate the widest they are connected by two parallel cross-bars, *g*, spaced apart from each other far enough to allow the entrance of a stud or bolt, *h*, projecting up on the middle truck, B'. This upward-projecting stud serves as a king-bolt, and in passing sharp curves, as the middle truck traverses the curve and deviates to one side, the stud moves laterally in the space *g'* between the cross-bars on the draw-bar. The frame-work in the bottom of the car has two parallel cross-beams, *n*, (see Fig. 1,) which come directly over the cross-bars *g* of the draw-bar. The stud or bolt *h*,

which projects up from the middle truck, may thus enter the space between these beams. The center truck is provided on its top frame with rollers *i*, preferably four in number. These rollers sustain the pressure or weight from the branches E' and cross-bars *g* of the draw-bar. As the axes of these rollers extend lengthwise of the car, they allow the middle truck, when passing a curve, to move laterally out of a straight line drawn between the end trucks. By this arrangement cars may be built of greater length than allowable where only two trucks are used, as the extra truck, B', supports the middle of the car. It is obvious that in the same way a car may be mounted on four trucks—that is, have two trucks placed between the end trucks. A continuous draw-bar, as here arranged, takes all the strain off the frame-timbers of the car.

Having described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a car, a draw-bar continuing from end to end of the car, and having at the center two branches which spread apart, and provided with two cross-bars which connect the branches, as set forth.

2. The combination of a middle truck having an upward-projecting stud or bolt, *h*, and a draw-bar continuing from end to end of the car, and having cross-bars with a space, *g'*, between to allow lateral movement of the said stud or bolt, as set forth.

3. The combination of a car-body, a draw-bar continuing from end to end of the car, and two end trucks, and a truck between the end trucks provided on top with rollers adapted to allow it to move laterally, as set forth.

4. The combination of a middle truck having an upward-projecting stud or bolt, *h*, and provided on top with rollers, and a draw-bar continuing from end to end of the car, and having parallel cross-bars with a space between for said stud, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH F. BATCHELOR.

Witnesses:

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