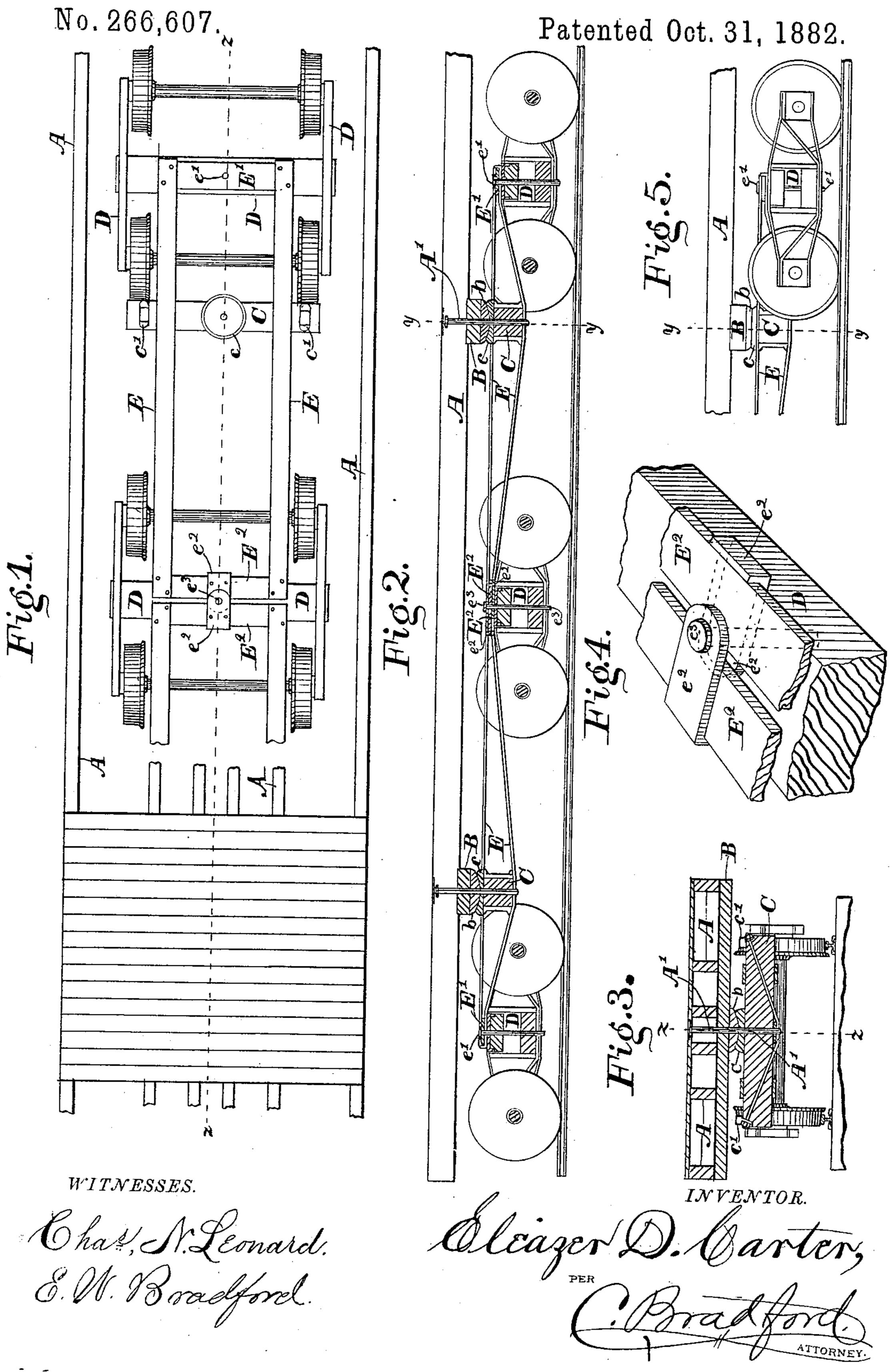
E. D. CARTER.

## RUNNING GEAR FOR CARS.



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## United States Patent Office.

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## RUNNING-GEAR FOR CARS.

SPECIFICATION forming part of Letters Patent No. 266,607, dated October 31, 1882.

Application filed June 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, ELEAZER D. CARTER, of the city of Terre Haute, county of Vigo and State of Indiana, have invented certain new and useful Improvements in Running-Gear for Cars, of which the following is a specification.

The object of my said invention is to produce a running-gear for cars in which the weight of the car shall be equally distributed upon three sets of trucks. Said object is accomplished by providing three sets of ordinary car-trucks, connecting each of the end sets with the center set by a truss-frame, and mounting the car-body upon said truss-frame, as will be hereinafter more fully described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a top or plan view of the greater portion of a flat-car embodying my invention, the body or platform being broken away to show the greater portion of the running-gear; Fig. 2, a central vertical section of such a car on the dotted line z z; Fig. 3, a transverse vertical section on the line y y; Fig. 4, a perspective view of the central joint between the trusses, and Fig. 5 a side elevation of one end of the car.

In said drawings, the portions marked A repose resent the frame-work of the car-body or platform; B, the bolsters thereon; C, the cross-beams of the trusses on which the bolsters rest; D, the truck-frames, and E the trusses necessary to my invention.

The frame-work A is simply any ordinary frame-work for the bottom of a car.

The bolsters B are or may be of any common form or construction, but instead of being located directly above the trucks, as is usual, are moved to points about one-third the distance from the center of the end trucks to the center of the center trucks, as is shown most plainly by Fig. 2.

The cross-beams C support the bolster in the same manner that the top beams of the truck-frames do in ordinary car construction. The bearing-plates b c, the king-bolts A', the sway contact-plates c', and other details are or may be all of well-known forms.

The truck-frames D are or may be of any ordinary or approved form, and are supported by the ordinary wheels and axles.

The trusses E are each constructed of an upper and a lower member, and are connected at the ends by cross-bars E' E2. The outer 55 ends of the trusses are connected to the corresponding truck-frames by the pins e', which pass down through the centers of the bars E' and said truck-frames. The inner ends of the trusses are connected together and to the cen- 60 tral truck - frame by the pin  $e^3$ , which passes down through the overlapping plates  $e^2$ , which are connected to said bars and through said truck-frame. The pins e'  $e^3$  form pivots upon which the trusses may swing as the cars pass 65 over curves in the track, as well as connecting-pins to hold the running-gear together. The trusses are also left slightly apart in the center in order to give the necessary freedom of motion. By this arrangement any of the 70 trucks can rise in passing over inequalities in the track without throwing any portion of its load onto the others. As will be readily seen, each truck carries its own portion of the whole load, and has a free movement both 75 laterally and vertically greater than is necessary to meet any usual requirements.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a running-gear for cars, of three trucks, each having four or more wheels and two double trusses, each of which trusses connects one of the end trucks to the central truck and supports one end of the carbody at a point between said end truck and central truck, substantially as shown and specified.

2. The combination of a car-body, three cartrucks, one at each end and one at or near the center of said car-body, and trusses connect- 90 ing the end trucks to the central truck, said trusses each being mounted, as shown, with one end resting on an end truck and the other resting on the central truck, and said car-body being mounted upon and supported by said 95 trusses, substantially as described, and for the purposes specified.

3. A running-gear for cars, composed essentially of three trucks and two trusses, wherein said trusses run from the end trucks to the roc center truck, where they nearly meet, and are connected together and to said center truck by means of a plate,  $e^2$ , extending from each, and the pin  $e^3$ , which passes through said plates and

down into the bolster of said truck, said pin serving both as a joint-pin and as a pivot on which the trusses may swing laterally, substantially as set forth.

4. The combination of the car-body, the cartrucks D D D, and the trusses E E, said trusses being provided with cross-beams C, on which the bolsters of the car-body rest, substantially as set forth.

In witness whereof I have hereunto set my 10 hand and seal, at Indianapolis, Indiana, this 24th day of June, A. D. 1882.

ELEAZER D. CARTER. [L.s.]

In presence of— C. Bradford, E. W. Bradford.