

(No Model.)

2 Sheets—Sheet 1.

F. W. DUNTON.
RAILWAY CAR.

No. 562,218.

Patented June 16, 1896.

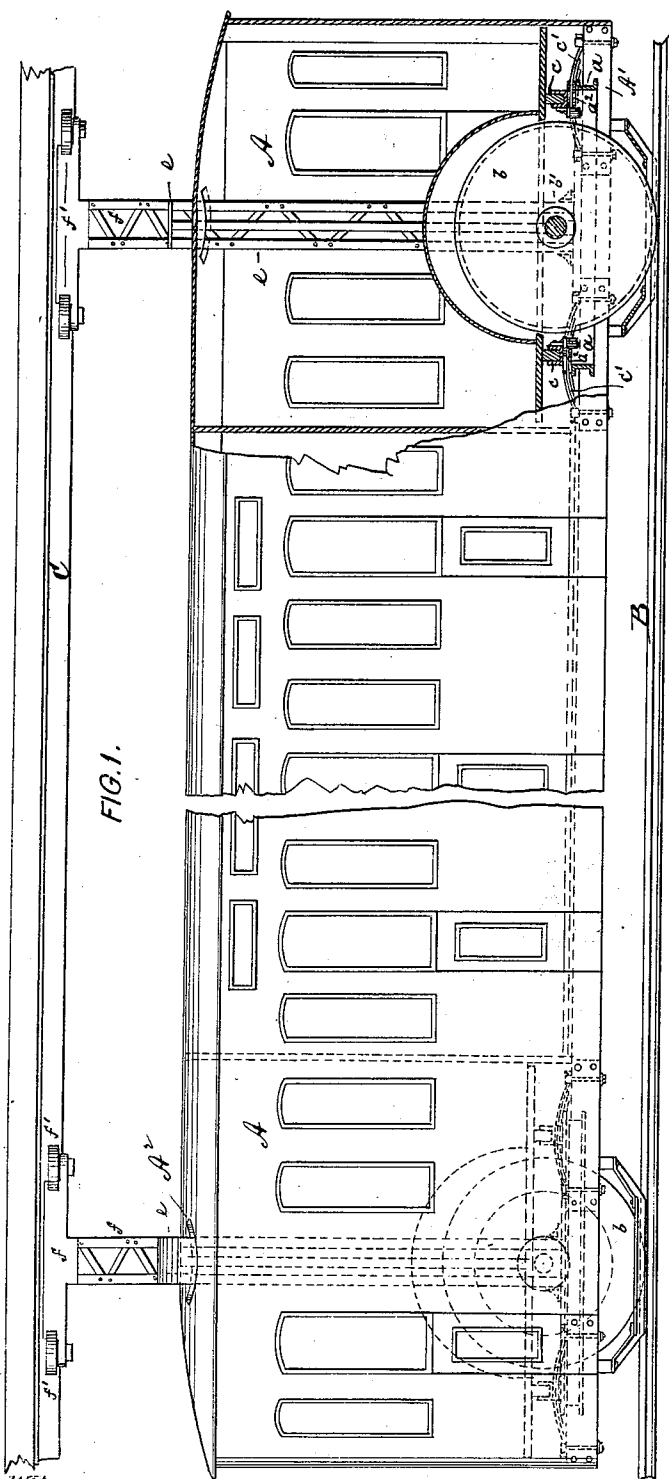
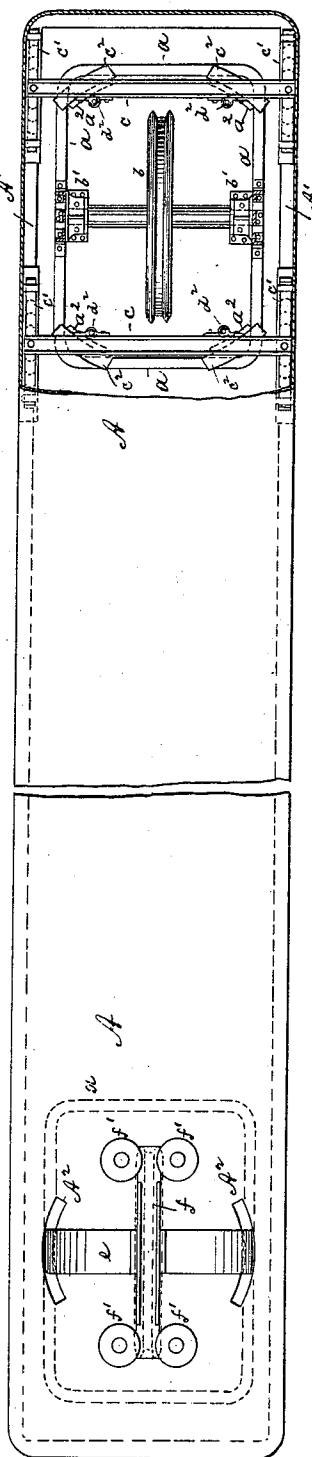


FIG. 2.



Witnesses:

John Becker.
H. S. Whiting

Inventor:

Frederick W. Dunton
by his attorneys
Roeder & Bissell

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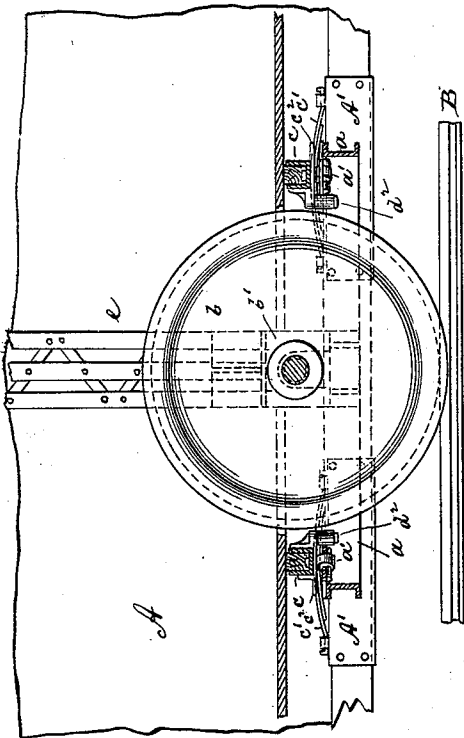


FIG. 4.

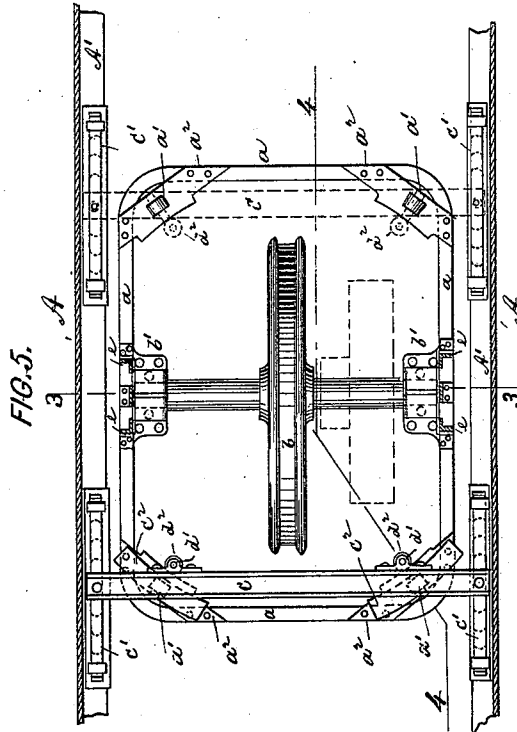


FIG. 5.

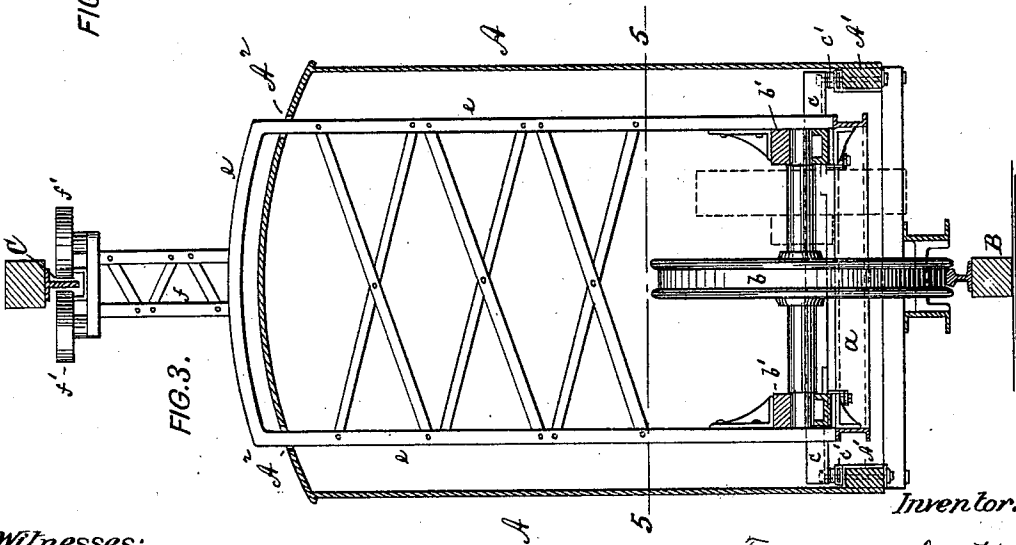


FIG. 3.

Witnesses:
John Becker.
Wm S. Whiting

Inventor:
Frederick W. Dunton
by his attorneys
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UNITED STATES PATENT OFFICE.

FREDERICK W. DUNTON, OF HOLLIS, NEW YORK, ASSIGNOR TO EMILY M. DUNTON, OF SAME PLACE.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 562,218, dated June 16, 1896.

Application filed February 15, 1896. Serial No. 579,413. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. DUNTON, of Hollis, Queens county, New York, have invented an Improved Railway-Car, of which the following is specification.

This invention relates to a railway-car of the kind which engages a single rail on top and also a single rail at the bottom.

The object of the invention is to so construct the car that it cannot become derailed, that it may be low hung, and that it has a free pivotal motion upon its truck.

In the accompanying drawings, Figure 1 is an elevation, partly in section, of my improved railway-car; Fig. 2, a plan, partly in section, thereof; Fig. 3, a cross-section of the car on line 3 3, Fig. 5; Fig. 4, a detail longitudinal section on line 4 4, Fig. 5; and Fig. 5, a horizontal section on line 5 5, Fig. 3.

The letter A represents the body of the car which is supported at each end by a truck. The truck consists, essentially, of a square frame a , the two longitudinal sides of which are provided with boxes b' to receive the axle of the traction-wheel b , that projects into the car-body. Across the frame a there extend two channel irons or beams c , connected at their ends to springs c' , which in turn are connected to the sills A' of the car-body A. Thus it will be seen that by means of the beams c the car-body rests upon or is supported by the truck.

In order to permit a free rotary motion of the car-body upon the truck, I secure within the corners of the frame a four (more or less) antifriction-rolls a' , journaled in bearing-plates a^2 , which are riveted to the upper side of frame a . The rolls a' turn on a horizontal axis and bear against segmental corner-plates c^2 , secured to the lower side of beams c . These corner-plates are arranged equidistant from the center of the truck, so that as the car-body rotates, the rollers a' will constitute the antifriction-bearing between car-body and truck.

To the beams c there are furthermore secured the bearings or supports d' of down-

wardly-extending bolts or rolls d^2 , turning on a vertical axis. These rolls contact with the inner curved edge of the corner-plates a^2 , and constitute collectively in effect a king-bolt for the car. The arcs of the inner edges of the plates a^2 are struck from the center of the truck, and in this way the car-body is free to rotate in either direction upon the truck.

It will be seen that by the construction thus far described a proper connection between truck and car-body is effected; but as the car is supported upon a single lower rail B, the truck must also be provided with means for reaching and guiding it along the upper rail C. To this effect there are secured to the longitudinal sides of the frame a the two uprights or shanks of a yoke e , which may be braced in the manner indicated in Fig. 3. The yoke e is narrower than the body of the car and projects outwardly through segmental slots A^2 of the car-roof, Fig. 2, so that the yoke offers no obstruction to the proper rotary motion of the truck. From the cross-piece of the yoke e there projects upwardly a T-shaped upright or arm f , in which are journaled the guide-rollers f' , engaging the upper rail C.

It will be seen that in my improved car the wheels $b f'$ are in positive and permanent engagement with the rails B C, so that a derailment is rendered impossible. Moreover, the car-body is spring-supported and its connection with the truck is such that it has the greatest freedom of pivotal motion.

What I claim is—

1. The combination of a truck having wheels adapted to engage an upper and a lower rail and a frame surrounding the lower wheel, with a car-body having cross-beams supported upon the frame, and a series of upright bolts for revolvably connecting the car-body with the truck, substantially as specified.

2. The combination of a frame a , with a lower traction-wheel hung therein, an upwardly-projecting yoke, upper guide-rolls pivoted thereto, a slotted car-body embracing the yoke and a beam for supporting the car-

body upon the frame, substantially as specified.

3. The combination of a frame a , with segmental plates a^2 , a lower traction-wheel, an upwardly-projecting yoke, upper guide-rolls pivoted thereto, a car-body, spring-supported cross-beams secured thereto, antifriction-rolls

between the cross-beams and frame, and a series of upright bolts that engage the segmental plates, substantially as specified.
F. W. DUNTON.

Witnesses:

F. V. BRIESEN,
WM. G. WHITING.