

(No Model.)

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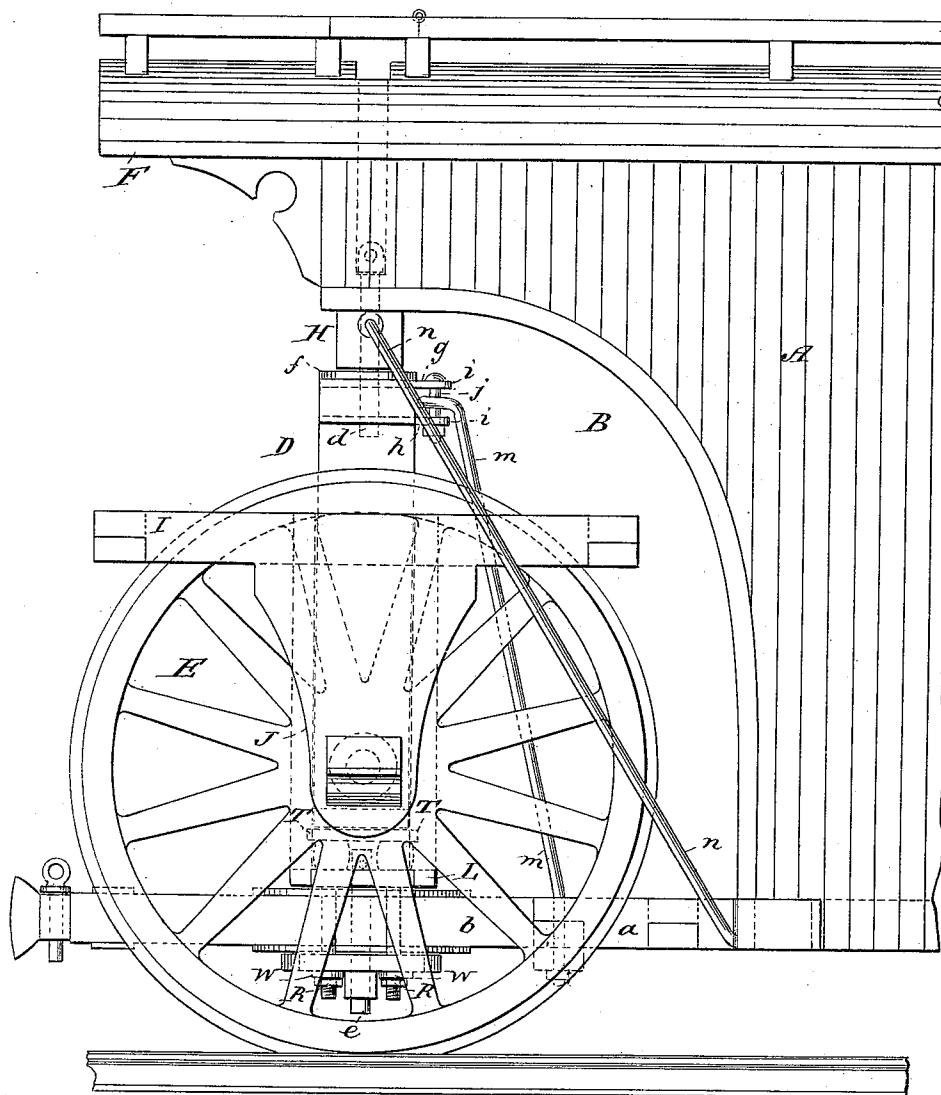
A. W. DRIGGS.

RAILWAY CAR.

No. 330,825.

Patented Nov. 17, 1885.

Fig. 1.



WITNESSES:

Edward Wolff.

George Cook.

INVENTOR

Arthur H. Driggs.

BY

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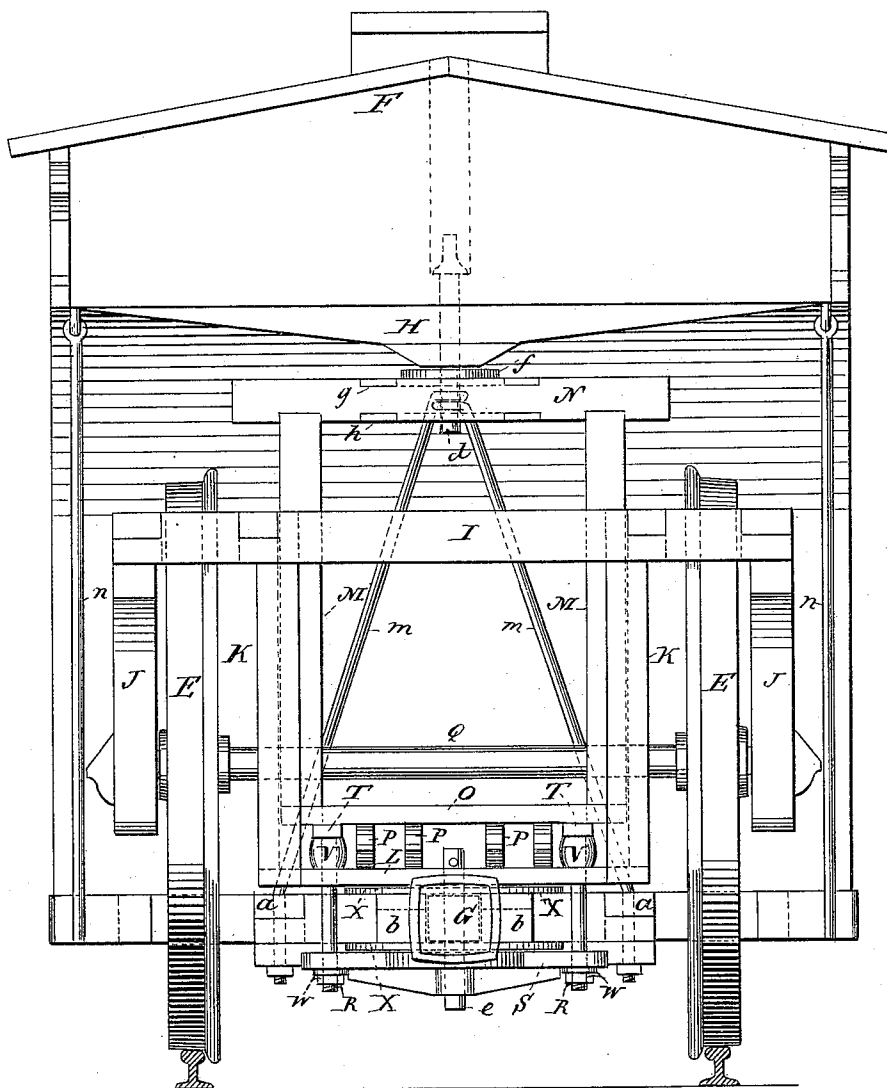
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Fig. 2.



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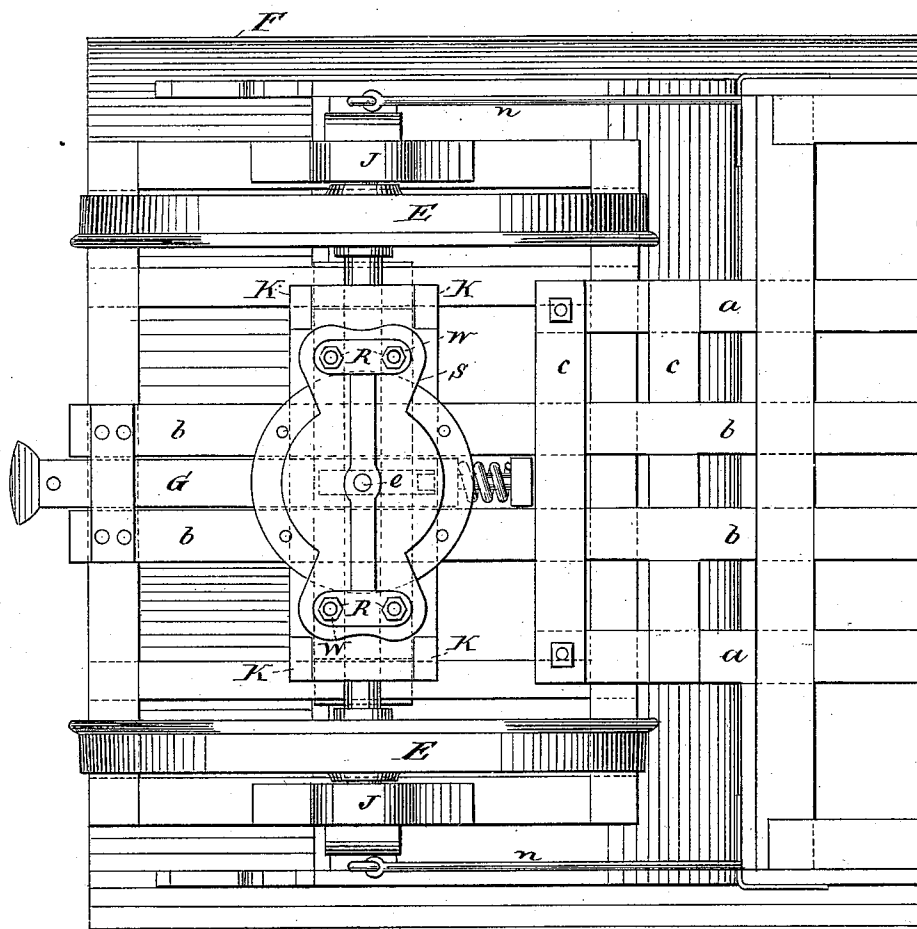
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Fig. 3.



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UNITED STATES PATENT OFFICE.

ARTHUR W. DRIGGS, OF BROOKLYN, NEW YORK.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 330,825, dated November 17, 1885.

Application filed September 16, 1885. Serial No. 177,237. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR W. DRIGGS, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Stock and Freight Cars, of which the following is a specification.

The invention relates to improvements in stock and freight cars; and it consists in a novel construction and arrangement of the ends of the car, the trucks for the wheels at said ends, and the platform or frame to which the trucks are pivotally secured.

The object of my invention is to dispense with the system of running-gear for freight and stock cars now in use, and to mount each car upon four large wheels, two being at each end, set into recesses provided in the ends of the car and mounted upon frames, and secured to the car in such manner that the floor of the car is brought below the line of the axles, that the car may readily and without danger be moved over curves, that the usual methods of coupling cars may be pursued, that one truck may be discarded and another substituted with but slight loss of time, that the strain on the ends of car is equally distributed as far as possible throughout the structure, that in case of collision or jamming the collapsing of the cars as far as possible may be prevented, that the swinging lateral and rocking motion incident to the cars now in use is reduced to a minimum, with the consequent saving of wear and tear on the cars and track, and that the structure as a whole shall be durable, practicable, and easily handled.

There are numerous advantages in employing large wheels at the ends of the car in lieu of the customary four-wheeled trucks, such as reduced friction, increased speed, diminished liability of derailment, &c.

The particular arrangement and construction of the parts composing the invention will be understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of one end of a car embodying the invention. Fig. 2 is a front view of same, and Fig. 3 is a bottom view.

In the drawings, A designates the car, which is recessed, as at B, to receive the truck D and

wheels E within the vertical plane of the end of the roof F, in order that the wheels of the separate cars of a train will not interfere with each other, that the structure may be compact, and the tendency of the car to swing or rock be obviated as far as practicable. The ends of the car being exact counterparts of each other, but one is shown in the drawings, that being sufficient to fully illustrate the invention. The floor-beams *a a* and *b b* extend into the recess B, and are connected by the cross-pieces *c c*, forming a platform, beyond which the beams *b b* project a suitable distance and receive between them the coupling G. The truck-frame is pivoted above to the beam H and below to the beams *b b*, and it consists of the rectangular frame I, having dependent arms J K, passing downward, respectively, on each side of the wheels E, the arms K being connected at their lower end by the cross-bar L, and inclosing the standards M, which are connected at their upper end by the cross-bar N and at their lower end by the cross-bar O. The frame, composed of the standards M and cross-bars N O, is adapted to have a vertical adjustment, and rests upon the springs P, secured to the cross-bar L. The axle Q for the wheels E extends through ways provided in the standards M and arms K, the ends of the axle being journaled in the lower ends of the arms J. Below the cross-bar L is suspended on bolts R a plate, S, of suitable dimensions, which may be moved upward against and caused to firmly clasp the under side of the beams *b* when the latter are in position between said plate and the cross-bar L. The upper ends of the bolts R are connected by bars T, and are encompassed between said bars T and the cross-bar L by springs V. Suitable nuts, W, are supplied upon the lower ends of the bolts R, whereby the plate S may be caused to approach or recede from the cross-bar L. Upon each side of the beams *b* are secured plates or washers X, against which the cross-bar L and plate S are brought to bear by the bolts R, as shown.

The truck-frame above described, with its wheels, is secured in position by the pin *d*, passing downward from the roof of the car through the beam H and cross-bar N, and by the pin *e*, extending through the cross-bar L,

washers X, coupling G, and plate S. The pins *d e* are in line with each other and operate as a pivot upon which the truck-frame may have a given amount of movement.

- 5 Upon the upper side of the cross-bar N, at the point where the pin *d* passes through it, will preferably be provided a washer, *f*, and upon opposite sides of this cross-bar at said point are plates *g h*, having inwardly-projecting ears *i*, connected by a vertical pin, *j*, to which the upper ends of the brace-rods *m* are attached, the lower ends of said rods being firmly secured to the front corners of the platform formed by the ends of the beams *a b* and cross-pieces *c*.

The ends of the car are strengthened by brace-rods *n*, passing from the lower corners of the car to the upper outer ends of the recesses B.

- 10 In the construction above described I have particularly designed, among other objects, to produce a strong durable car, in which the body thereof may be brought near the track and supported by four large wheels without jeopardizing the safety of the car, but tending to prevent any swinging motion in the same, and adding to the comfort of the stock carried therein.

The doors for the entrance to and exit from the car will be on the sides thereof in the usual location.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The car having the recesses B formed in its ends, and the floor-beams extending into said recesses, combined with the truck-frame,

and large wheels located within the recess at each end of the car and pivoted above to the beam H, forming a rigid part of the car, and below to the said floor-beams, substantially as and for the purposes described.

2. The car having the recesses B formed in its ends and the floor-beams extending into said recesses, combined with the trucks and large wheels located and pivotally secured above and below within said recesses, the lower portion of the trucks being provided with the clamping-plate S and bolts R, substantially as and for the purposes set forth.

3. The car having the recesses B formed in its ends, and the floor-beams extending into said recesses, combined with the trucks located and pivotally secured above and below within said recesses, the truck-frame consisting of the rectangular frame I, arms J K, cross-bar L, standards M, cross-bars N O, and clamping-plate S, substantially as set forth.

4. The car having formed in each end the recess B, braced by the rods *n n*, in combination with the trucks (with large wheels) located and pivotally secured above and below within said recesses, and the brace-rods *m*, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 14th day of September, A. D. 1885.

ARTHUR W. DRIGGS.

Witnesses:

CHAS. C. GILL,
EDWARD WOLFF.