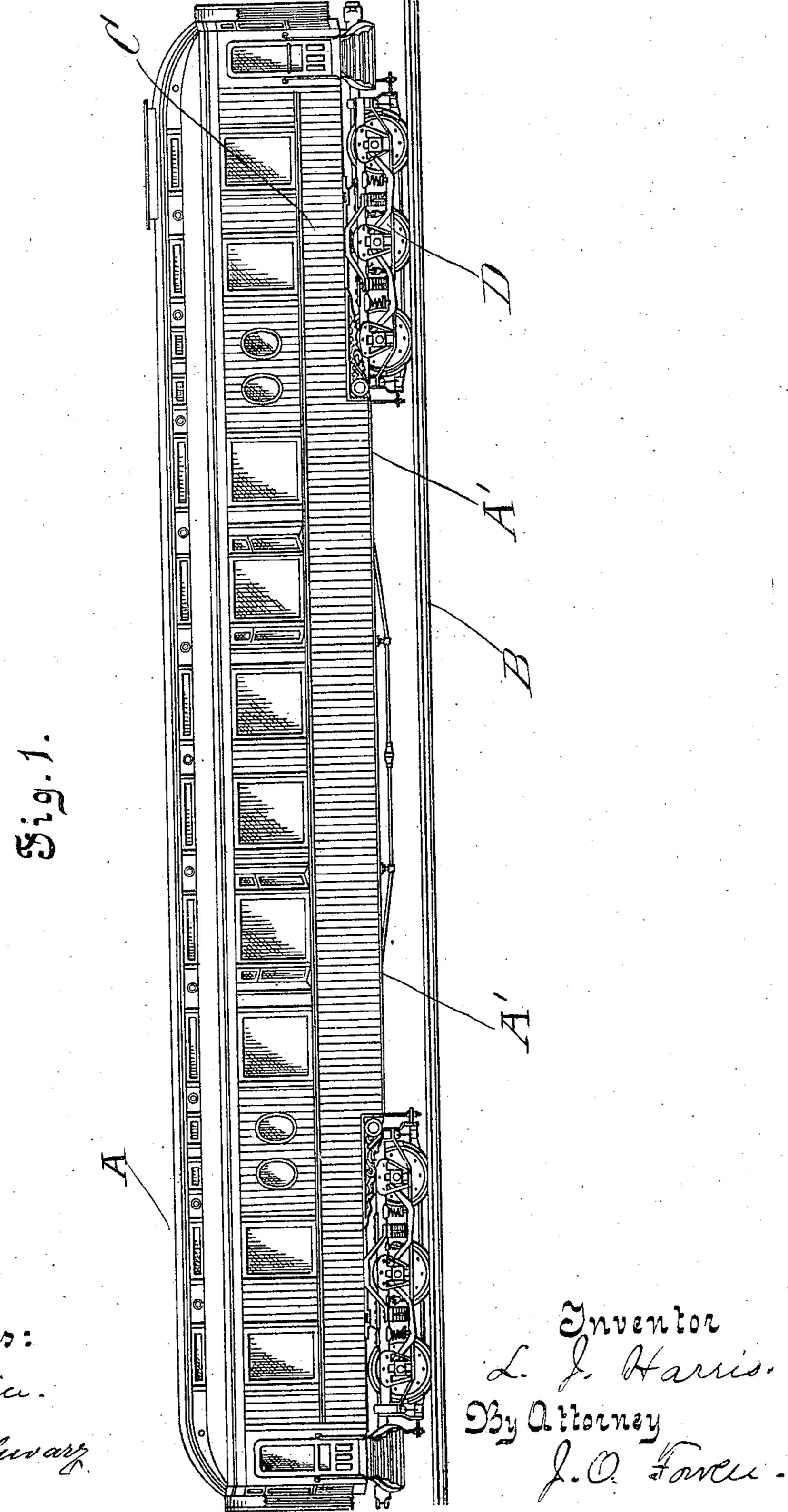
L. J. HARRIS.

RAILWAY CAR.

APPLICATION FILED AUG. 27, 1906.

3 SHEETS—SHEET 1.



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THE NORRIS PETERS CO., WASHINGTON, D. C.

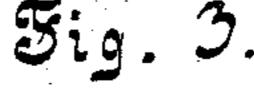
No. 846,846.

PATENTED MAR. 12, 1907.

## L. J. HARRIS. RAILWAY CAR.

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3 SHEETS-SHEET 2.



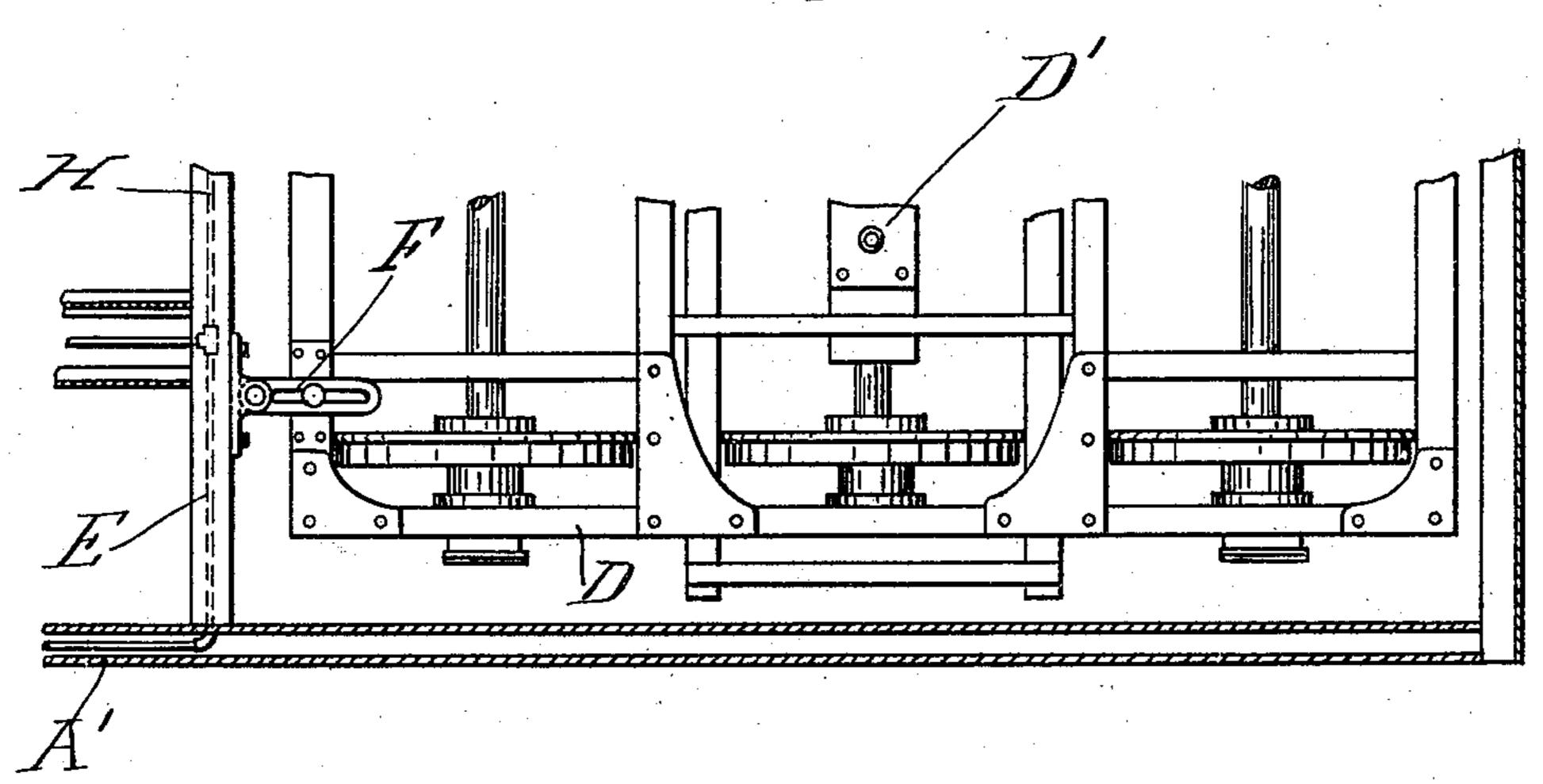
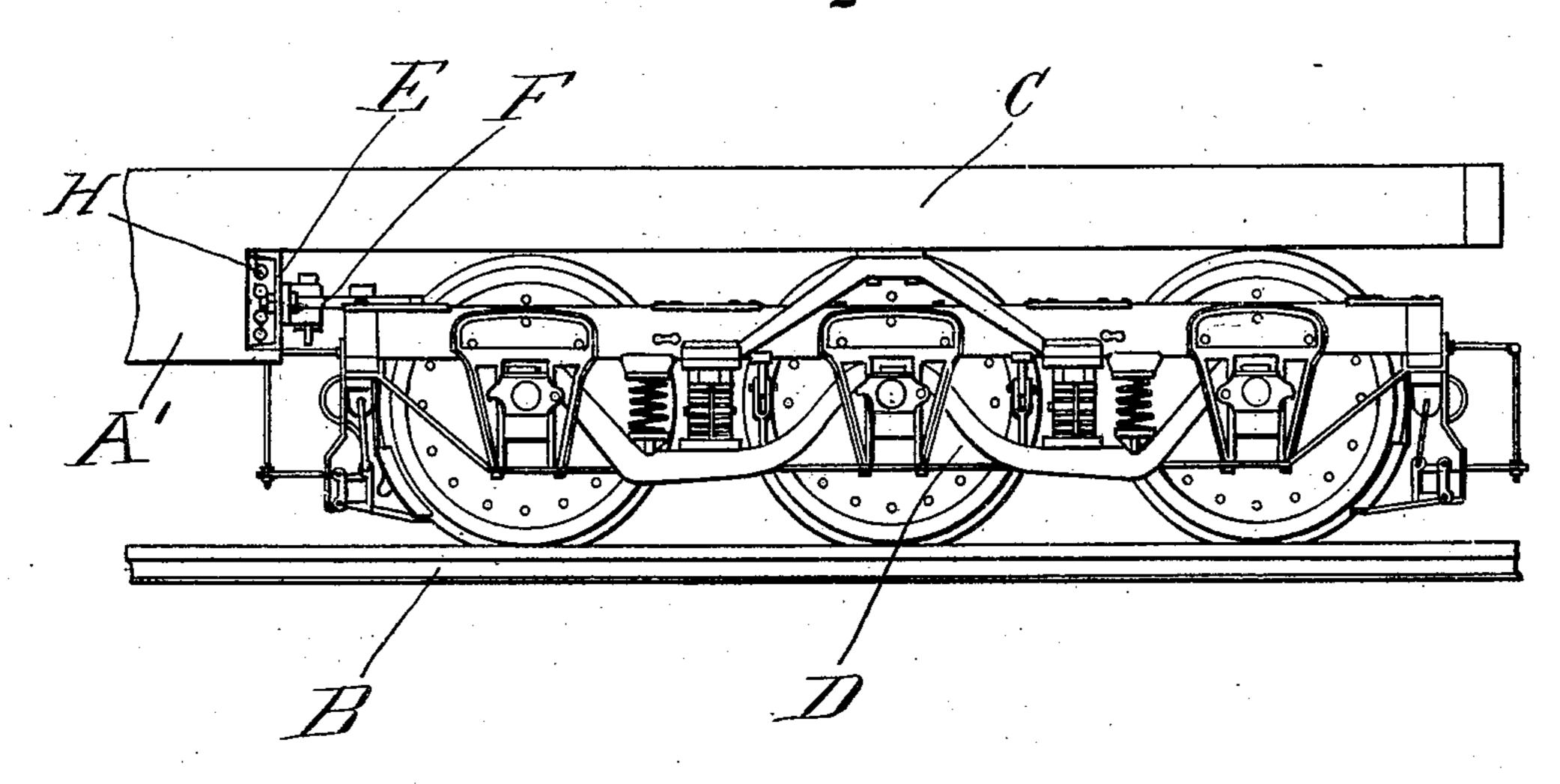


Fig. 2.



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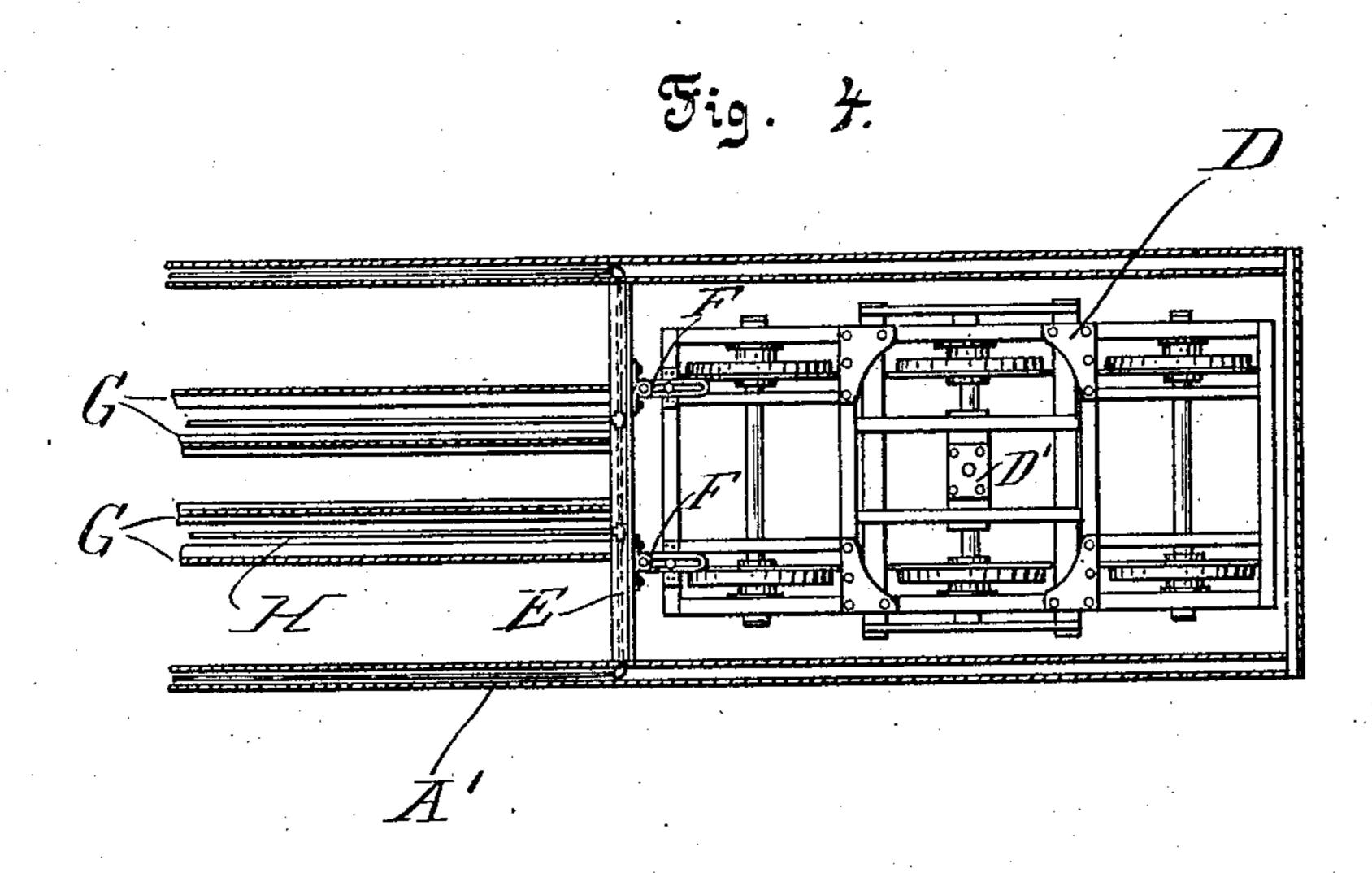
THE NOPRIS PETERS CO., WASRINGTON, D. C.

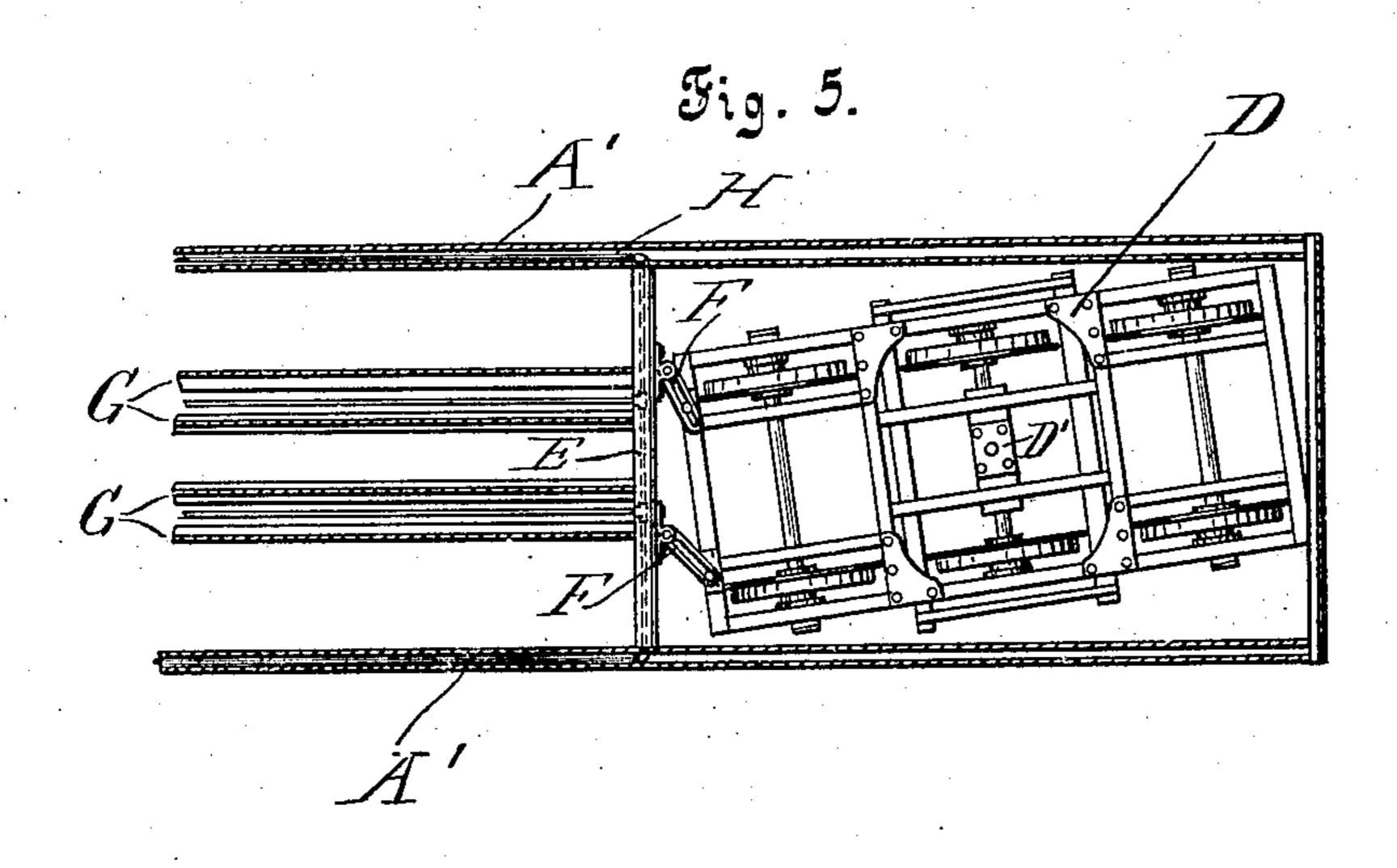
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## L. J. HARRIS. RAILWAY CAR.

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By his Altorney L.O. Forker.

## UNITED STATES PATENT OFFICE.

LOUIE J. HARRIS, OF NEW YORK, N. Y.

## RAILWAY-CAR.

No. 846,846.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed August 27, 1906. Serial No. 332,279.

To all whom it may concern:

Be it known that I, Louie J. Harris, a citizen of the United States of America, and a resident of New York, in the county of 5 New York and State of New York, have invented a certain new and useful Railway-Car, of which the following is a specification, the same being a full, clear, and exact description of the invention, such as will enro able others skilled in the art to which it ap-

pertains to make and use the same.

This invention relates to railway-cars, and more particularly to that class of cars which are constructed with the car-body between 15 the trucks depressed or hung down, as shown in my Patent No. 737,403, August 25, 1903, and also to old or new cars which may have the body between the trucks reinforced by attaching to the bed or bottom of the car a 20 resisting structure, either made of wood or metal, and a connection between the same and the trucks whereby the trucks, either separately or collectively, are caught or held, so as to prevent them from assuming 25 an abnormal position, so as to allow for the ordinary lateral movement or swing of the truck ends, but which forms a resistance in case of derailment or accident; and my invention embodies certain novel features of 30 construction and combination and arrangement of parts forming in operation a simple and efficient organization.

To attain the desired end, this my invention consists in the construction, arrange-35 ment, and operation of novel devices and combination of devices, as hereinafter set

forth.

In order to enable the invention to be fully understood, I will proceed to explain 40 the same by reference to the drawings, illustrative of one embodiment of the invention, which accompany and form a part of this specification, and in which-

Figure 1 represents a side elevation of a 45 car constructed according to this invention. Fig. 2 is a view in detail, being an elevation of the truck. Fig. 3 is a partial plan view of the truck; and Figs. 4 and 5 are plan views of a truck and a portion of the car-body, the 50 truck being shown in a normal median position in Fig. 4 and in Fig. 5 in its extreme

limit of displacement. Like letters of reference indicate like parts

in all the views.

Referring particularly by letter to the drawings, A denotes a car provided with

means for resistance, as the hangdown A', the body of the car lying over the trucks being indicated by the reference character C.

ordinarily provide auxiliary resistance 50 means, as a member or members consisting, preferably, of the cross beam or plate E, ordinarily reinforced by the member formed by the longitudinal beam G, which latter parts may, if desired, be either attached to the 65 bottom face of the hangdown A' or in cases where there is no such depending portion directly to the bed or bottom of the car, provided that they lie inwardly or rearwardly of and below the upper face of the truck- 7° frame, by which device a resistance means to the inward or rearward movement of the truck in case of a collision is formed capable of standing a very heavy strain.

Intermediate the trucks D and the said 75 resistance means is located a connecting device whereby a limited movement is allowed for the swing of the trucks, which turn on the center of king-pin D' in the ordinary manner, as the pivoted links F, forming a sort of tog- 80

gle-joint.

Under ordinary conditions the trucks will have a slight swinging movement in going around curves, &c.; but in case of accident such, for example, in the event of the derail- 85 ment of the car and the structure being thrown, by the impact of a collision, from the rails B—the toggle-joints F will limit the swinging movement of the trucks, and thus prevent the same from being displaced.

By constructing the framing of the carbed with reinforcing means and truck connections I make a stronger car and do away with the truck-chains now common in car use and eliminate to a very great degree the 95 liability of any derailment of the trucks and also the telescoping of the car. The said auxiliary means may also consist of pipes or tubing H used either in connection with or separately from the reinforcing means, 100 consisting of the plate E and beam G.

I wish it to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person 105

skilled in the art.

What I claim as my invention is—

1. In a car, a truck, a rigid part extending across the car and lying inwardly or rearwardly of and below the upper face of the 110 truck-frame, to provide a resistance means to the rearward or inward movement of the

truck, and intermediate means connected with the car and truck to allow only a limited

movement of the truck.

2. In a car having a hangdown, or depend-5 ing portion of the same, a truck, a rigid part lying inwardly or rearwardly of and below the upper face of the truck-frame, to provide a resistance means to the rearward or inward movement of the truck, and forming 10 a facing for the said hangdown or depending portion, and intermediate means connected with the car and truck to allow only a limited movement of the truck.

3. In a car, a truck, a rigid part lying in-15 wardly or rearwardly of and below the upper face of the truck-frame, to provide a resistance means to the rearward or inward movement of the truck and comprising a resistance device and an auxiliary metal structure, 20 and intermediate means connected with the car and truck to allow only a limited move-

ment of the truck.

4. In a car, a truck, a rigid part extending across the car and lying inwardly or rear-25 wardly of and below the upper face of the truck-frame, to provide a resistance means to the rearward or inward movement of the truck, and intermediate means connected with the car and truck to allow only a limited 30 movement of the truck consisting of a piv-

oted link mechanism.

5. In a car having a hangdown, or depending portion of the same, a truck, a rigid part lying inwardly or rearwardly of and below 35 the upper face of the truck-frame, to provide a resistance means to the rearward or inward movement of the truck, and forming a facing for the said hangdown or depend-

ing portion, and intermediate means connected with the car and truck to allow only 40 a limited movement of the truck consisting

of a pivoted link mechanism.

6. In a car, a truck, a rigid part lying inwardly or rearwardly of and below the upper face of the truck-frame, to provide a re- 45 sistance means to the rearward or inward movement of the truck, and comprising a resistance device and an auxiliary metal structure, and intermediate means connected with the car and truck to allow only 50 a limited movement of the truck consisting of a pivoted link mechanism.

7. In a car, a truck, and a rigid part located a distance away from the truck and lying inwardly or rearwardly of and below 55 the upper face of the truck-frame, and consisting of a metal framework to provide a resistance means to the rearward or inward

movement of the truck.

8. In a car, a truck, and a rigid part ex- 60 tending across the car and lying inwardly or rearwardly of and below the upper face of the truck-frame, and consisting of a metal framework to provide a resistance means to the rearward or inward movement of the 65 truck, in combination with a device connected with the car and truck to allow only a limited movement of the truck.

In testimony of the foregoing specification I do hereby sign the same, in the city of New 70 York, county and State of New York, this

6th day of August, 1906.

LOUIE J. HARRIS.

Witnesses:

Rob. Schwarz, J. Odell Fowler.