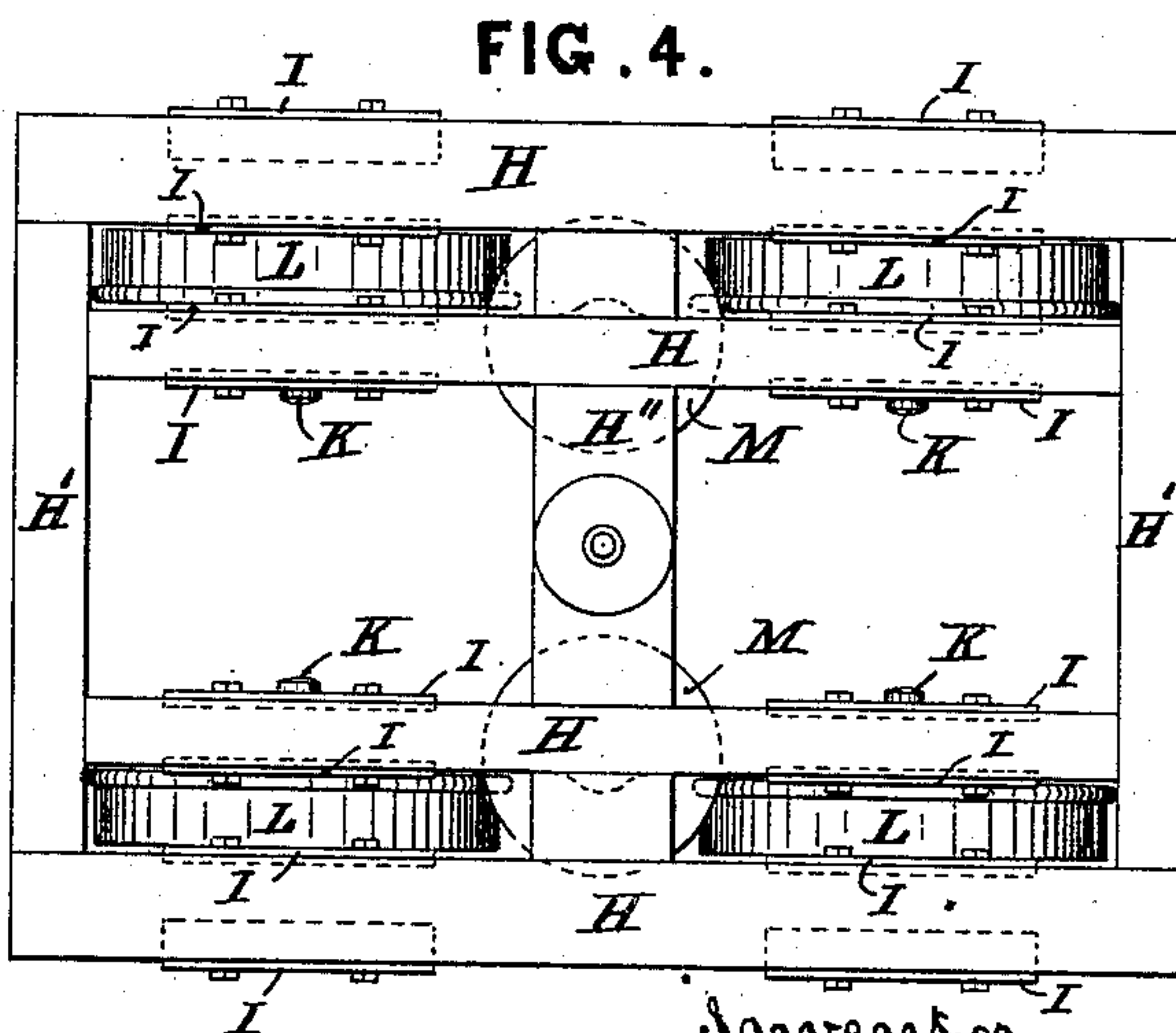
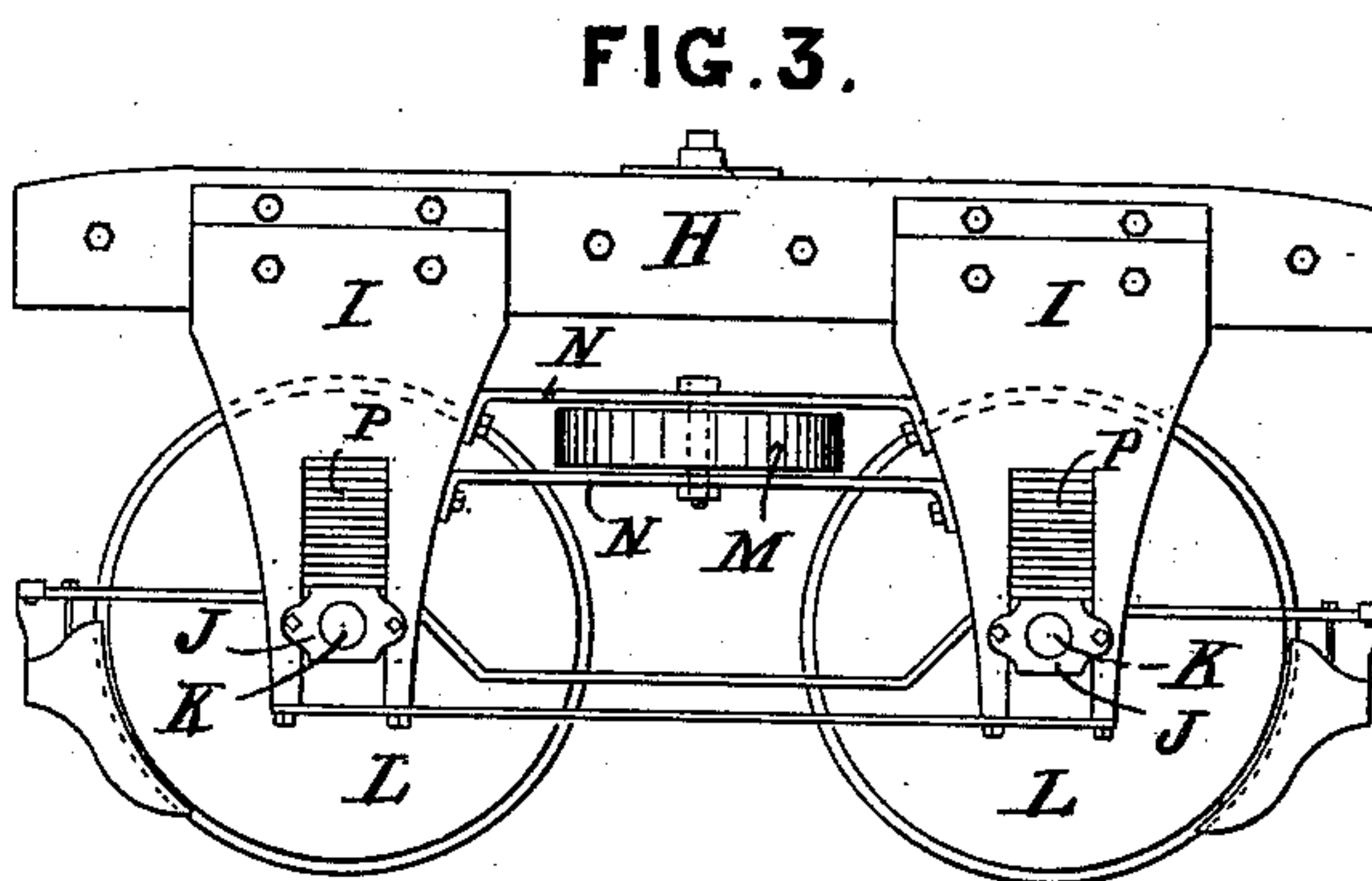
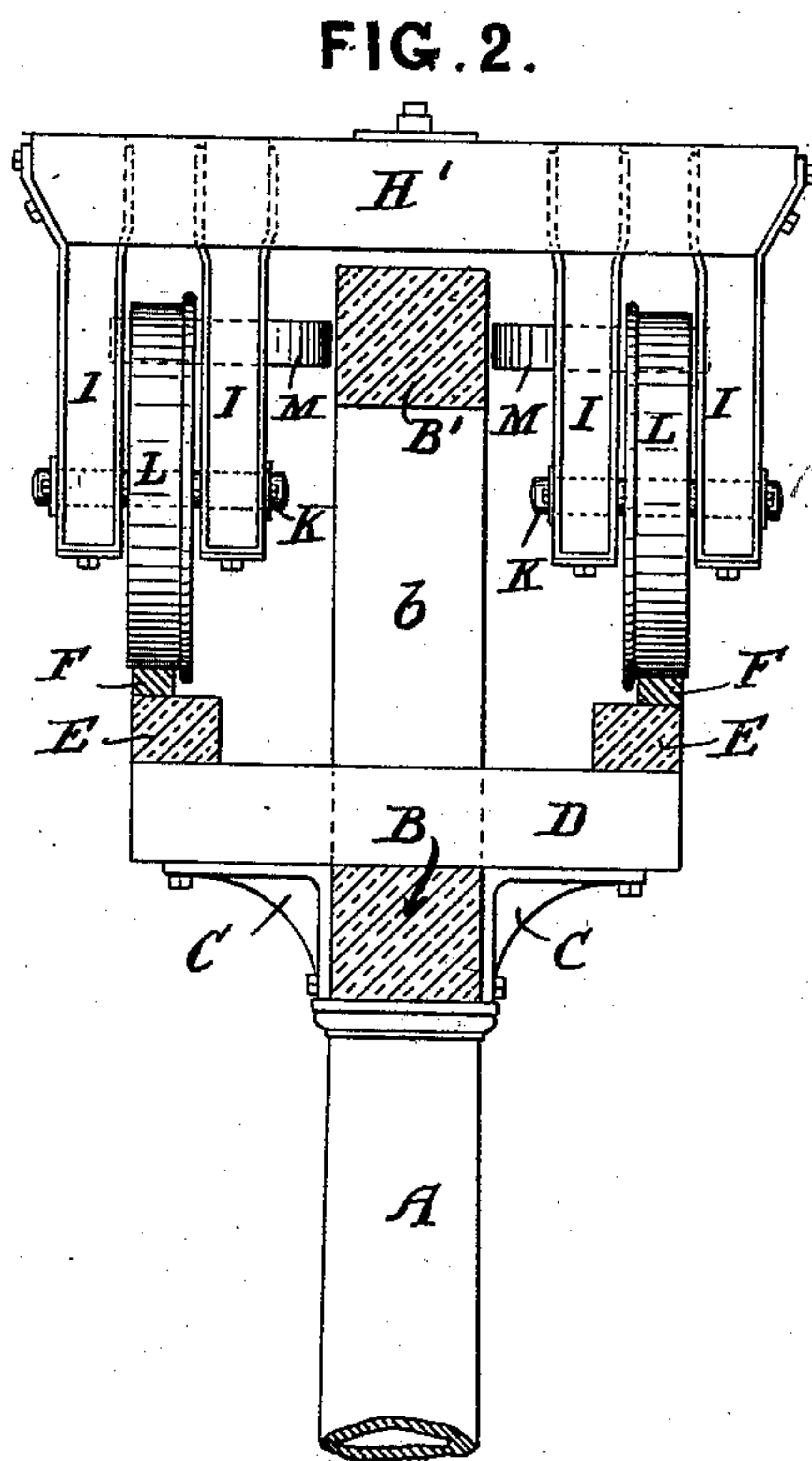
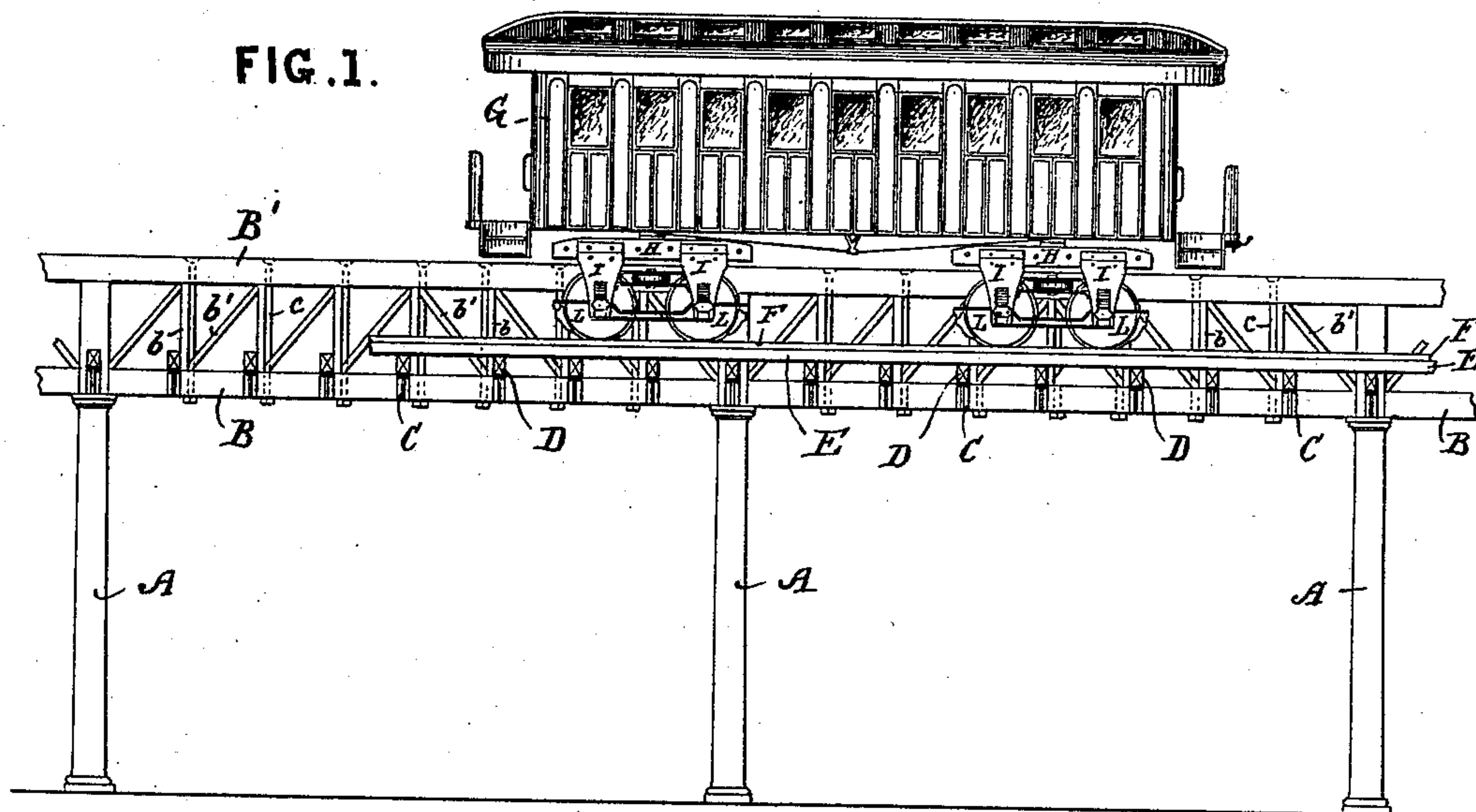


(No Model.)

D. MOULTON.
ELEVATED RAILROAD.

No. 345,645.

Patented July 13, 1886.



Witnesses.
E. Blanta.
J. D. Van Duzee

Inventor.
David Moulton
by J. H. Adams
Attorney.

UNITED STATES PATENT OFFICE.

DAVID MOULTON, OF MALDEN, MASSACHUSETTS.

ELEVATED RAILROAD.

SPECIFICATION forming part of Letters Patent No. 345,645, dated July 13, 1886.

Application filed July 17, 1885. Serial No. 171,837. (No model.)

To all whom it may concern:

Be it known that I, DAVID MOULTON, a citizen of the United States, residing at Malden, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Elevated Railroads, of which the following is a specification.

My invention relates to certain improvements in elevated railroads to be supported upon a single line of posts or columns in connection with the trucks of the cars to be run thereon; and the invention consists in certain details of construction hereinafter fully described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a side elevation of a portion of a railroad and car embodying my invention. Fig. 2 is a transverse section of the elevated railroad and an end view of the truck or bogie frame, on an enlarged scale. Fig. 3 is a side view of the truck or bogie frame, and Fig. 4 is a plan or top view of the same.

A A are columns or posts arranged in a single line, upon which is supported a deep girder composed of two longitudinal stringers, B B', one above the other, and connected together by uprights *b* and braces *b'*, and firmly held by bolts *c c*, this construction being the same as that described and shown in Patent No. 312,004, granted to me February 10, 1885.

On each side of the lower stringer, B, are secured a series of brackets, C C, the upper surfaces of which are flush with the top of the stringer.

D D are sleepers laid across the stringer and secured to the brackets C C. To the outer ends of these sleepers are secured sills E, that carry the rails F. By this arrangement I am enabled to have the track of any desired gage, which may be made to correspond with a track laid upon the ground, so that when the railway passes through a city it can be elevated on a single line of posts, and when it leaves the city may be laid upon the ground.

The trucks or bogie-frames that support the car G are each composed of four longitudinal

timbers, H H, secured together at each end and in the center by transverse timbers H' H''.

To the longitudinal timbers H H are secured pedestals I I, in which are the axle-boxes J J. There are two of these pedestals I to each wheel L—that is, one on each side—so that only a short axle, K, is required, each wheel being thus independent of the other. The truck can easily run round very sharp curves.

M M are friction-wheels supported by suitable braces, N N, bolted to the pedestals I I.

P P are springs, working in the pedestals I above and bearing on the axle-boxes J.

It will be seen that the truck-frame, as here- in described, is equally applicable to steam and street railway cars, as the difficulty in turning sharp curves is entirely overcome by the use of the short axles K.

What I claim as my invention is—

1. An elevated-railroad track and support, consisting of a girder composed of two stringers, B B', arranged one above the other and connected together by uprights *b* and braces *b'*, in combination with the sleepers D, brackets C, the sills E, rails F, and the supporting-columns A, all as shown and described.

2. The wheels L L, journaled on the short axles K K in the lower end of the pedestals I I, and extending below the said pedestals, two pedestals being placed on each side of the truck-frame H H', and each two having a wheel journaled therein, as shown and described.

3. The combination of the frame H H' H'', pedestals I I, wheels L L, journaled on the short axles K in boxes J, the horizontal wheels M M, stringers B, rails F on sills E, sleepers D, and columns A, as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID MOULTON.

Witnesses:

J. H. ADAMS,
E. PLANTA.