(No Model.)

H. W. LIBBEY.

ELEVATED RAILWAY.

No. 399,997. Patented Mar. 19, 1889.

Fig. 1.

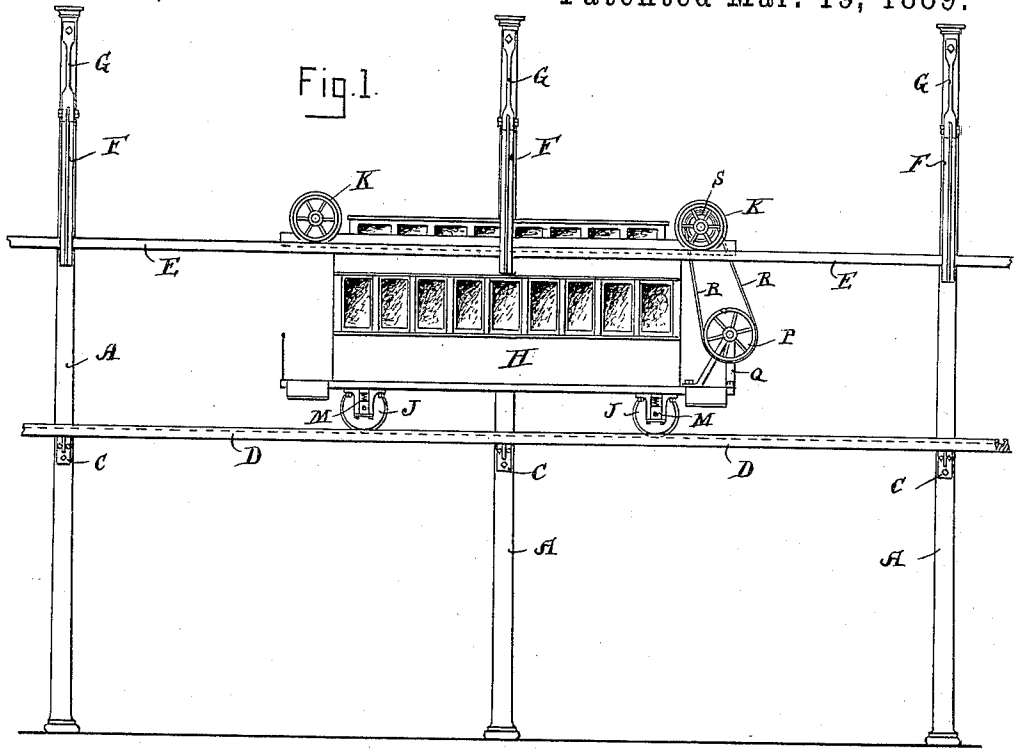


Fig. 2.

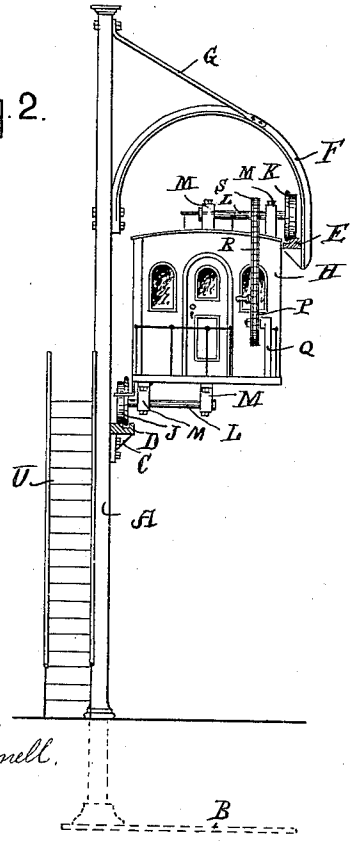
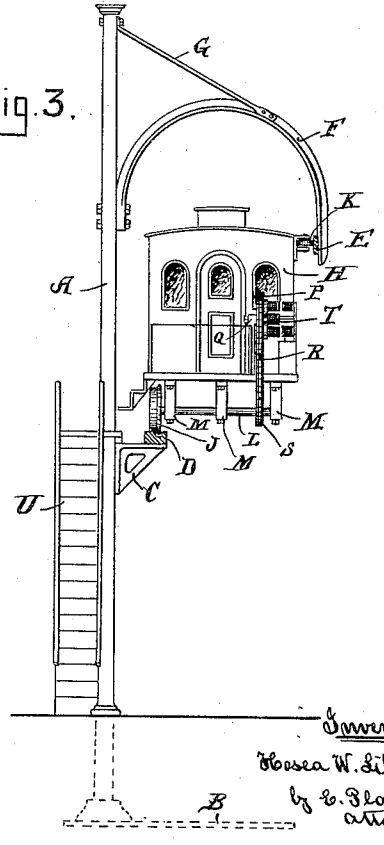


Fig. 3.



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ELEVATED RAILWAY.

SPECIFICATION forming part of Letters Patent No. 399,997, dated March 19, 1889.

Application filed May 25, 1888. Serial No. 275,022. (No model.)

To all whom it may concern:

Be it known that I, HOSEA W. LIBBEY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Elevated Railways, of which the following is a specification.

My invention relates to certain improvements in elevated railways to be supported by a single row of columns or posts; and the invention consists in the peculiar construction of the track and its support, whereby the cars are carried or supported on one side by wheels below the car, and on the other side are carried or suspended by wheels above the car.

The invention also consists in the means for mounting and driving the cars, all as hereinafter fully described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a side elevation of a railway and car embodying my invention. Fig. 2 is a transverse section of the elevated railway and an end view of the car. Fig. 3 is a similar view showing the motive power applied to one of the lower axles.

In constructing an elevated railroad according to my invention I erect columns A A in a single line at suitable distances apart. Each of these columns extends some feet below the ground and rests upon a stout bed-plate, B, which extends outward so as to be under the track, as shown. At a suitable height upon each post I secure a bracket, C, to which is secured the lower rail, D. The other rail, E, is supported from the columns A by means of an arched T-iron, F, and a suitable brace or stay, G. More than one stay may be employed, if desired. The car H is supported on the rails D E by wheels J K, the lower wheels, J, being secured upon axles L, mounted in spring-bearings M, secured to the under side of the car, and the wheels K are mounted in similar bearings M, secured to the top of the car or at the side, as shown in Fig. 3. It will be seen that the car is thus supported on one side by the wheels J, running on the lower track or rail, D, while the other side of the car is supported by the wheels K, running on the upper track or rail, E, and all liability of the car jumping the track is thus prevented.

The car is driven by means of a chain and sprocket wheels, the main or driving wheel P being mounted upon a suitable frame, Q, secured to the platform of the car, and through chain R transmits motion to a smaller sprocket-wheel, S, mounted upon either the upper or lower axle, L. Motion may be imparted to the wheel P by hand, or a small engine or electromotor might be employed. In Fig. 3 I have shown an electromotor, T, and the power may be applied at both ends of the car, if desired.

Although I prefer to operate each car in the manner described, a small engine might be employed to draw one or more cars.

U is a flight of steps leading from the ground to a platform, from which passengers can board or alight from the car.

By this construction a very cheap, light, and substantial elevated railway is produced and without any heavy longitudinal girders, the columns being placed sufficiently close together that the rails are all that are required to support the car, and consequently the light is not obstructed.

What I claim as my invention is—

1. An elevated railway and support consisting of the columns A, arch F, brace G, bracket C, and rails D E, substantially as shown and described.

2. In an elevated railway, a car provided on one side with wheels below the car and on the other side with wheels at the top of the car, in combination with a track or way consisting of a lower and an upper rail, both supported from a single row of columns, substantially as set forth.

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

HOSEA W. LIBBEY.

Witnesses:

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E. PLANTA.