

(No Model.)

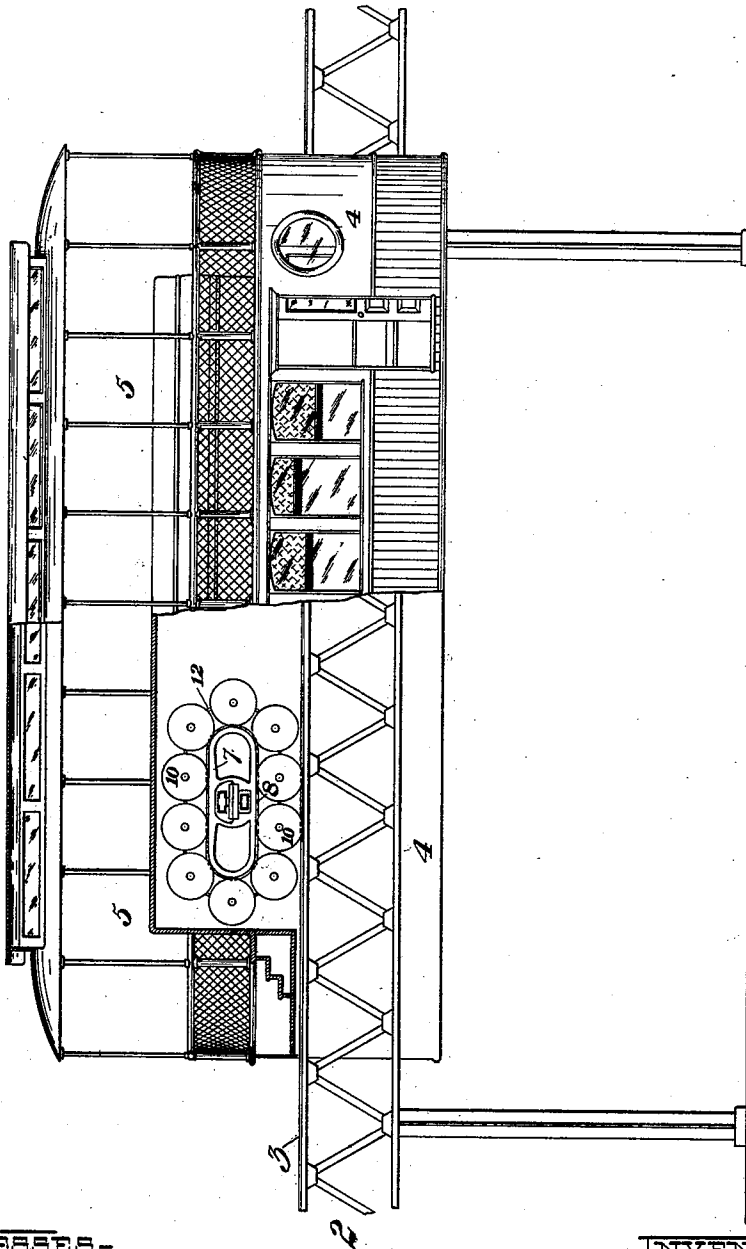
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J. L. POPE.
CAR FOR ELEVATED RAILWAYS.

No. 508,631.

Patented Nov. 14, 1893.

Fig. 1.



WITNESSES=

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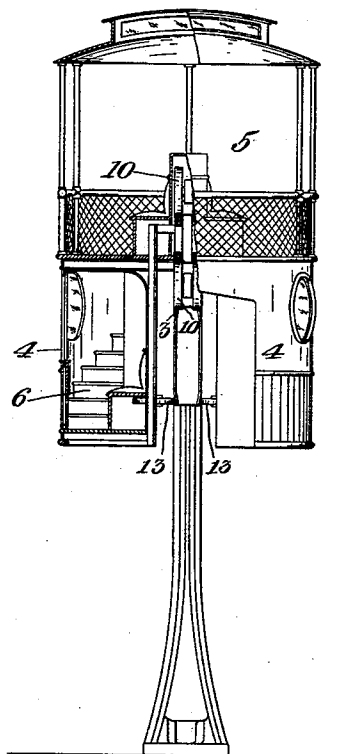
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Fig. 2.



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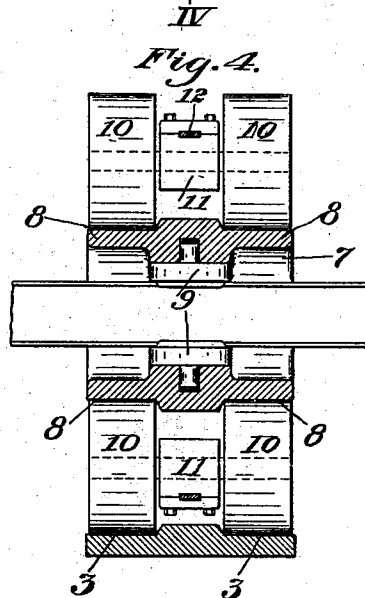
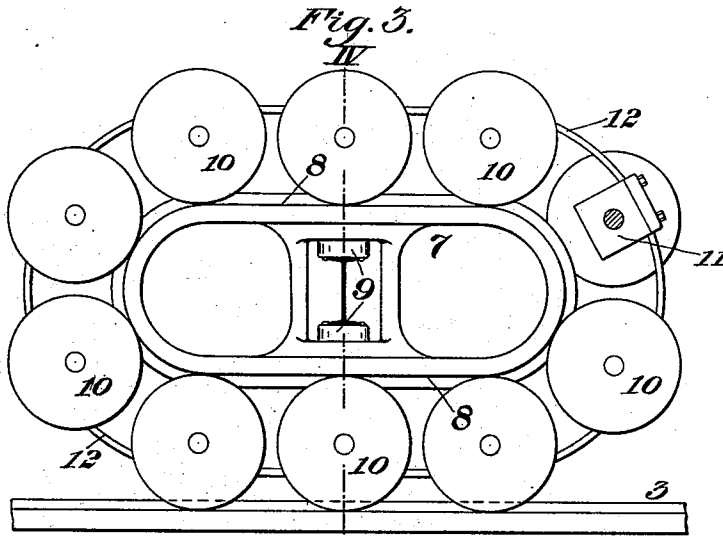
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UNITED STATES PATENT OFFICE.

JOHN L. POPE, OF CLEVELAND, OHIO.

CAR FOR ELEVATED RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 508,631, dated November 14, 1893.

Application filed November 9, 1892. Serial No. 451,432. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. POPE, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Cars for Elevated Railways, of which the following is a full, clear, and exact description.

I shall describe my improvement with reference to the accompanying drawings, in which—

Figure 1 is a side elevation, partly in vertical longitudinal section, showing a car embodying my invention. Fig. 2 is an end elevation of the car, partly in vertical cross-section on the line II—II of Fig. 1. Fig. 3 is a side elevation of one of the two trucks with which the car of Fig. 1 is provided. Fig. 4 is a vertical cross-section on the line IV—IV of Fig. 3.

The object of my invention is to provide a railway system which will be cheaper in construction and operation, safer and more rapid in transit; and to provide a truck that is operated with less power, and in which the construction is much lighter for elevated roads, so as not to darken the streets, and takes up but little space.

In the drawings, 2 represents the track which consists of an elevated structure, suitably braced and carrying, at the top, rail-surfaces 3 on which the wheels of the car run. The car is forked or divided longitudinally on its under side, having two lower side-compartments 4 at opposite sides of the track, and having an upper compartment or compartments 5. The forked portion of the car fits over the track, which is thus straddled by the car.

The trucks by which the car is supported on the track are situate at the upper end of the forked portion, at the middle of the car and are constructed as follows:

7 is a shell, preferably made hollow and of oblong form, having a peripheral track or tracks 8, extending entirely around it and adapted to receive the wheels hereinafter described. This shell may be secured to the frame-work of the car by swivel-plates 9, which permit the trucks so accommodate themselves to the travel of the car around the curves of the track.

In the drawings I show on the truck two peripheral parallel tracks, and I therefore show also two series of wheels 10, the adjacent members of the series being secured together by axles, as shown in Figs. 3 and 4. On these axles are set journal-boxes 11, and the boxes are serially connected, preferably, by a metallic flexible band 12, bolted or clipped to the boxes, or such connection can be made by chain-links.

The series of wheels encircle and bear against the periphery of the shell 7, on the tracks 8 thereof, and on the under side of the shell the wheels bear at the lowest points of their periphery upon the rail-surfaces 3 of the elevated track and at the opposite points they bear upon the frame or shell. As the car is moved longitudinally, by traction or by a suitably arranged motor, so that as the car moves forward the shell passes over the tops of the wheels, thus bringing them, one after the other, into contact with the track 3, the wheels rotate and, being connected by the band 12, travel in series around the shell and on the elevated track, thus supporting the car and permitting it to move with the least possible friction. There may be two or more supporting-trucks provided with such wheels. Their advantages are that they reduce the friction of travel, and as the wear is exerted mainly on the peripheries of the wheels, they are very durable.

The car is steadied and guided in its travel on the track by lateral guide-wheels 13, journaled on vertical axes in the car-fork on opposite sides, and bearing against suitable lateral rail-surfaces on the track.

In order to connect the upper compartment of the car with the lower side compartments in the forked portion, I construct at one or both ends of the car, at the end or ends of the truck near the level of the track, a platform or platforms 15, having stairs which lead down into the side compartments and a stair which rises to the upper compartment. In this way I provide a convenient and simple means of communication with the parts of the car, enabling every part of the interior to be utilized.

Modifications in the construction and general arrangement of the parts of the appara-

tus, within the scope of my claims, may be made by those skilled in the art without variance from my invention, since

What I claim is—

- 5 1. A car for elevated railways, forked at its under portion and adapted to be set astride a track, said car having an upper compartment, and also compartments in the lower forked portion thereof, a truck situate in the
- 10 fork above the level of the track, and at the end of the car a platform extending across the track near the level thereof, stairs leading to the platform from the lower compartments at opposite sides of the car, and other
- 15 stairs leading up from the platform to the upper compartment; substantially as described.

2. A truck comprising a frame or shell, having parallel peripheral tracks extending around the same, and a series of wheels set
- 20 in pairs surrounding the frame or shell and bearing on the tracks thereof, said wheels being somewhat separated laterally and adapted thereby to fit a track having a longitudinal rib or projection; substantially as described.
- 25

3. A car forked at its under portion, and

adapted to be set astride a track, a truck comprising a shell and a series of wheels adapted to travel around the same, said truck being situate in the fork and joined to the car by a swivel connection; substantially as described.

4. A car forked at its under portion and adapted to be set astride a track, a truck comprising a shell, and a series of wheels adapted to travel around the same, said truck being
- 35 situate in the fork and the side compartments of the fork extending below the wheels of the truck; substantially as described.

5. A truck comprising a shell, a double parallel series of wheels axially connected and
- 40 surrounding the frame, said wheels being adapted to bear at opposite points on the track and on the frame or shell and a flexible connection connecting the axles of the wheels; substantially as described.
- 45

In testimony whereof I have hereunto set my hand this 7th day of November, A. D. 1892.

JOHN L. POPE.

Witnesses:

C. W. POPE,

W. B. WHITING.