

(No Model.)

2 Sheets—Sheet 1.

T. E. POPE.  
RAILWAY CAR.

No. 504,615.

Patented Sept. 5, 1893.

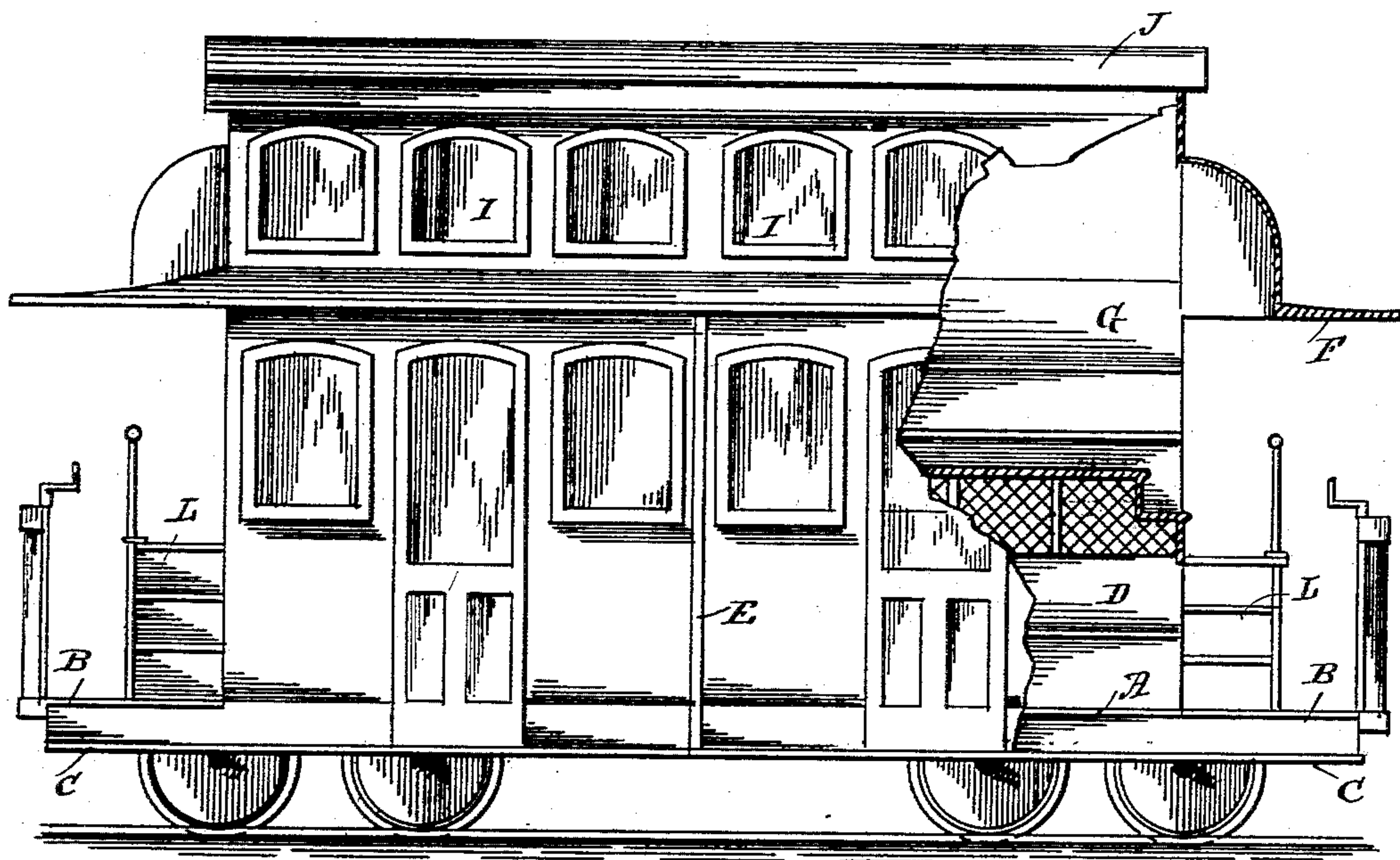


Fig. 1.

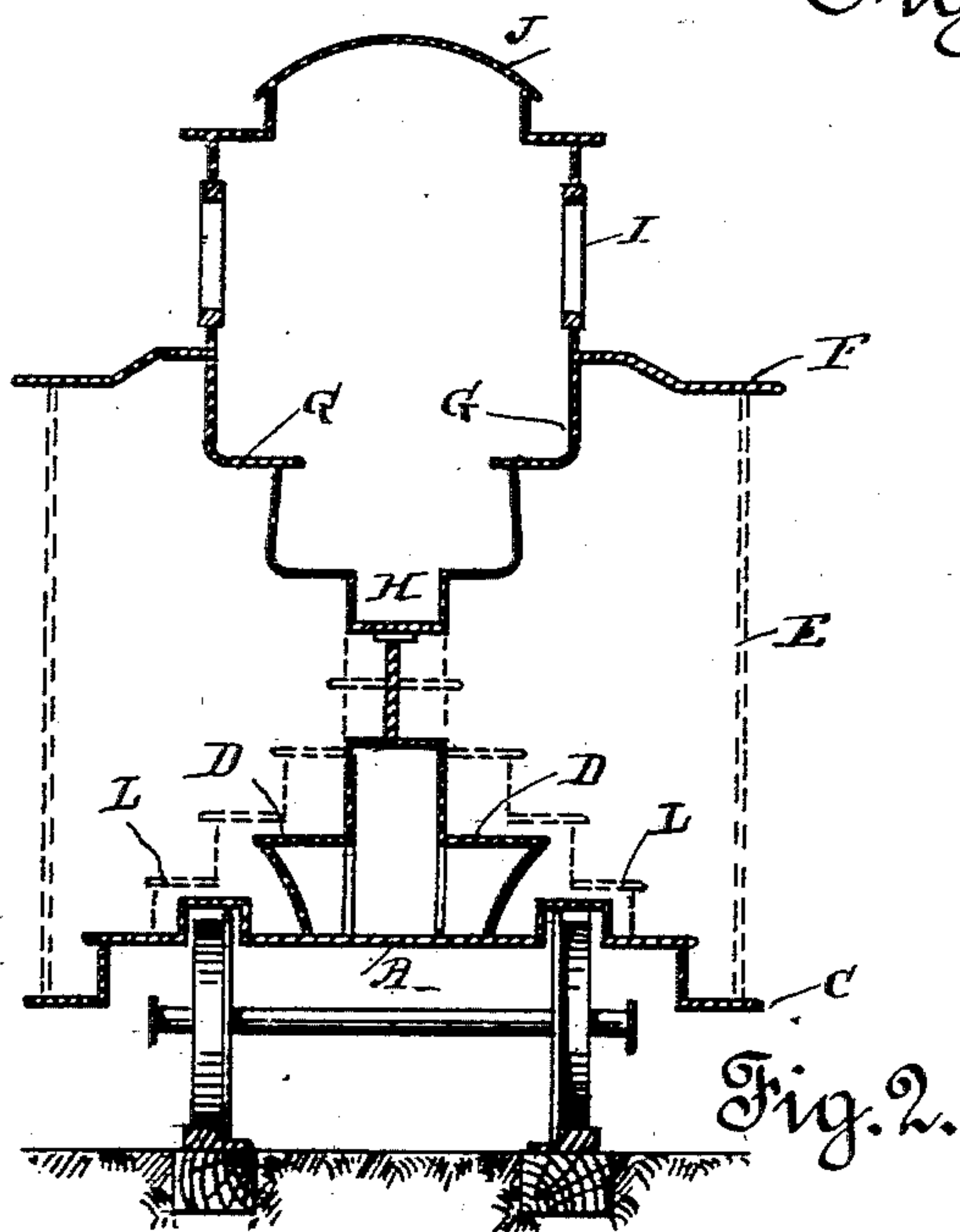


Fig. 2.

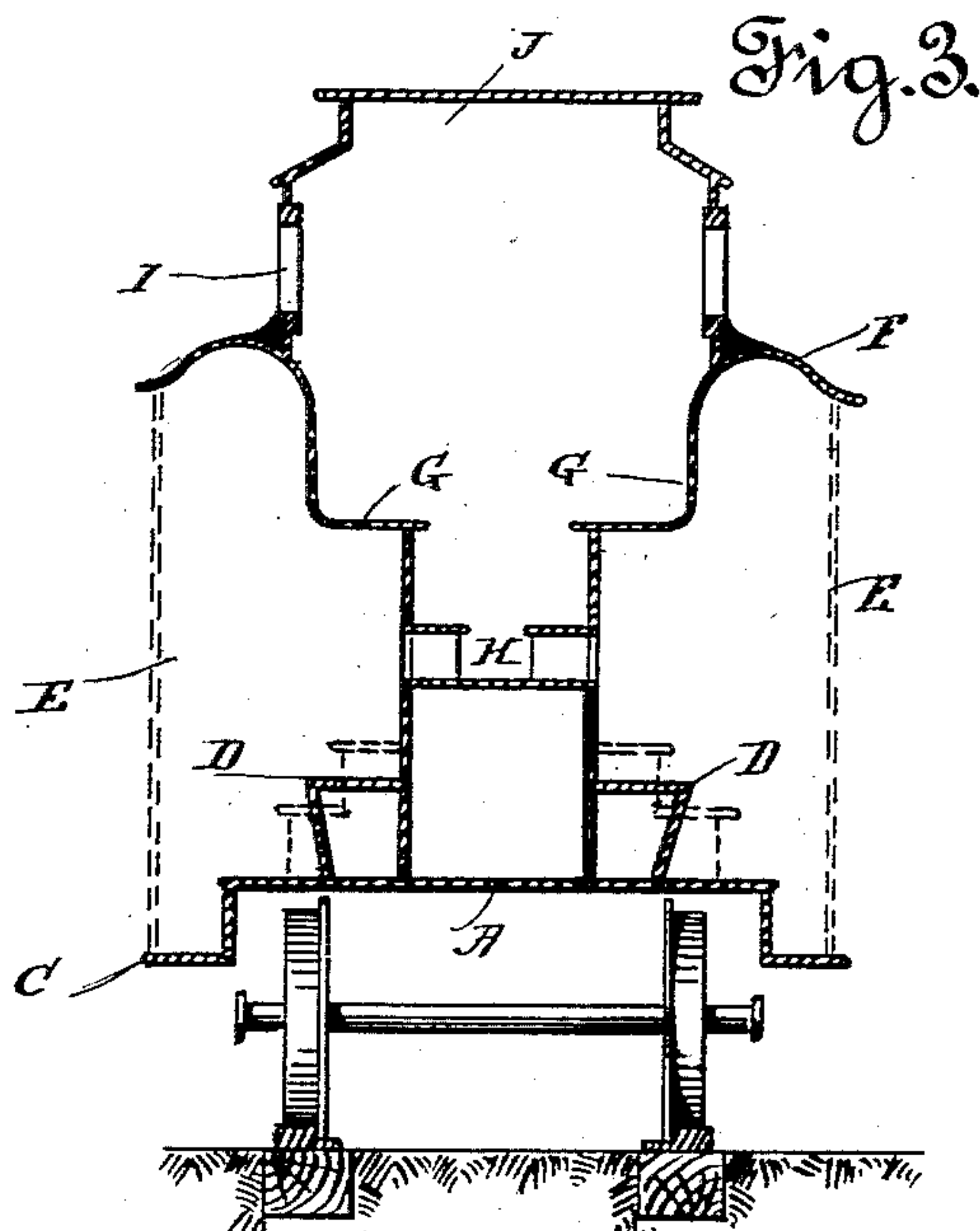


Fig. 3.

Witnesses.

*H. J. Fouteverde,*

*J. V. Hitchcock.*

Inventor.

*Thos. Edward Pope*

*by his attorney*

*Jno. L. Boone*

(No Model.)

2 Sheets—Sheet 2.

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RAILWAY CAR.

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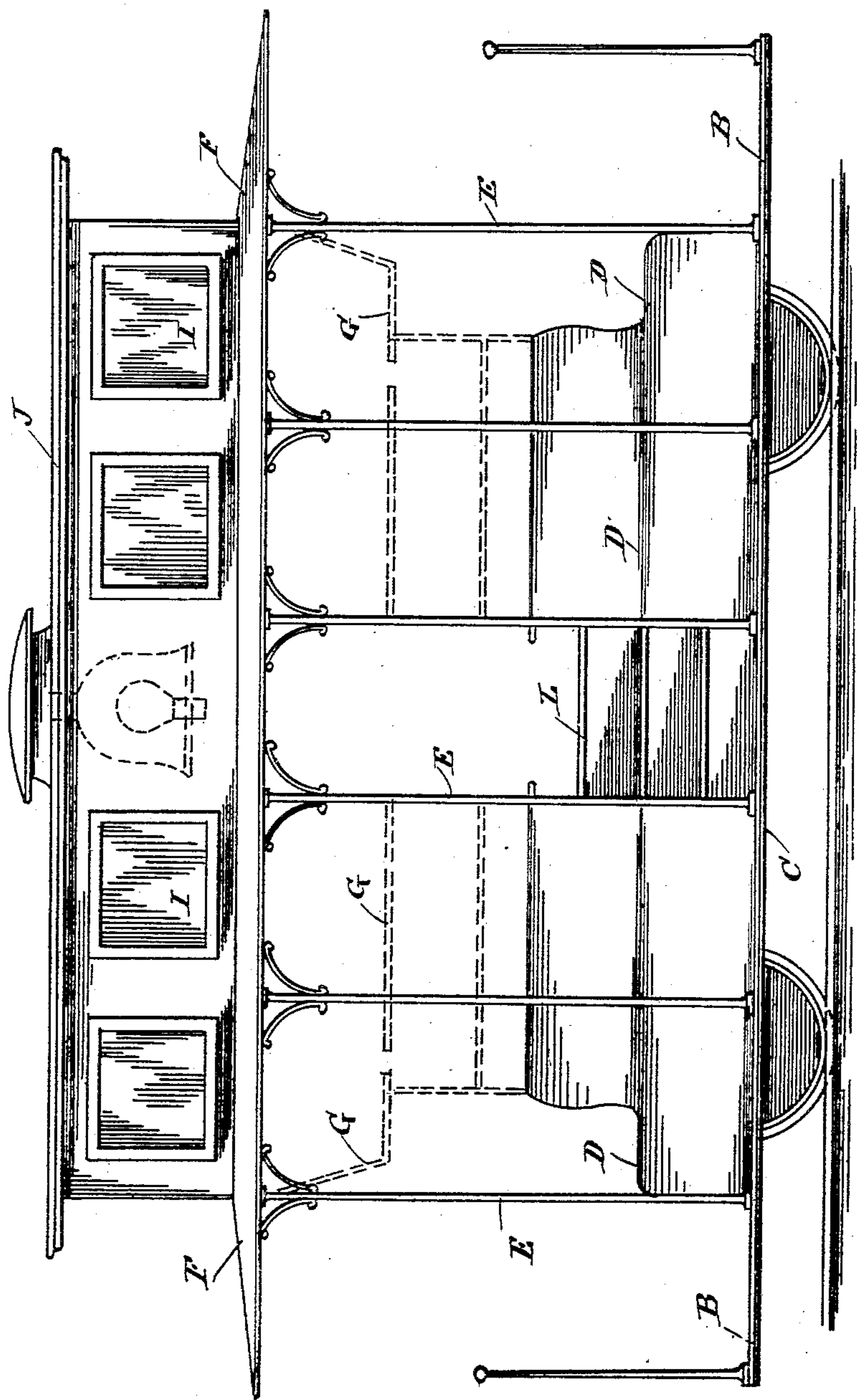


Fig. 4.

Witnesses.

*J. H. Monteverde*  
*J. V. Hitchcock*

Inventor

*J. Edward Pope*

by his Attorney

*Jno. S. Boone*



# UNITED STATES PATENT OFFICE.

THOMAS EDWARD POPE, OF SAN FRANCISCO, CALIFORNIA.

## RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 504,615, dated September 5, 1893.

Application filed August 18, 1891. Serial No. 403,031. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS EDWARD POPE, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented certain new and useful Improvements in Railway Cars and Carriages; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

My invention relates to that class of railway cars and carriages known as double deckers wherein an upper and lower story compartment is provided for seating passengers, and it consists of the combination of parts, including their construction, substantially as hereinafter more fully disclosed and definitely pointed out in the claim.

Referring to the accompanying drawings, Figure 1. is a side elevation showing a portion of the car broken away at one end so as to show the upper and lower tiers of seats. Fig. 2. is a cross section of a car showing the seats close together. Fig. 3. is a cross section of a car showing the seats farther apart and close to the outer edge of the floor; and Fig. 4 is a side elevation of a car showing the stairs passing up through the side of the car.

Let "A" represent the main floor of any car or railway carriage. The platforms, "B" may be of any ordinary construction and arranged at either or both ends of the cars as desired.

"C" is a step or foot-board, which extends parallel with the length of the car on either side and which serves as a convenient step for passengers entering the car at any part of its length. The seats "D. D." on this floor are placed lengthwise of the car facing outward, so that the backs of the two seats oppose each other through the middle of the car. In Fig. 2, these seats are shown in a position with their backs in close proximity to each other, but in Fig. 3, they are shown farther apart, so that they occupy positions closer to the side of the car.

"E E" are the uprights or stanchions, which support the roof "F" of that part of the car which forms the lower compartment, and they can be rabbeted, or otherwise formed, so that

temporary sides can be fitted to them when it is desired to convert the car into a closed car.

The upper compartment is constructed partly above and partly below the roof "F" of the lower compartment. It is built into the roof "F," and its lower portion, or in other words, that portion which extends below the roof, contains the seats "G" and passageway "H" of the upper compartment; while the portion that extends above the roof is provided with windows "I" and a roof "J," or if preferred, the sides of this compartment which project above the roof can be left open. The seats "G" of the upper compartment face inward as shown, and they are separated at the bottom by the passage or footway "H," thus forming a compartment of gradually diminishing size projecting down into the lower compartment and occupying the space directly above the seats in the lower compartment. The upper compartment is reached by a stairway "L," which may lead from the platform at either or both ends of the car, as shown at Fig. 1, or it may be placed in a passageway at the middle of the car, so as to lead from each side upward to the upper compartment. When this stairway leads from a platform at the end of the car it is preferably made in two short flights, as shown at the broken away portion of Fig. 1, but when it is constructed in a special passage way leading through the sides of the car, as at Fig. 4, Sheet 2, it will be preferable to make it in a single flight, as shown at Figs. 2 and 3.

By reason of the car construction above described it requires but few steps to reach the footway of the upper compartment. This is one of the most important advantages secured by this plan of construction, because in all the other styles of double-deck cars, with which I am familiar, the passenger is required to mount a long flight of stairs, which is usually unprotected, leading to the roof of the car, in order to reach the upper compartment; but, by the construction herein described, I drop the upper compartment down into the useless space of the lower compartment, so that the floor or footway of the upper compartment is but slightly elevated above the



floor of the lower compartment, and is consequently easily reached by a short flight of stairs, which can be easily protected and covered.

5 The construction above described also has the advantage of bringing the weight of the car, whether loaded or empty, nearer the middle line of the car, and between the tracks, which is also a decided advantage. It practically produces a car within a car, and gives an upper and lower compartment without materially adding to the height of the main car, and at the same time it gives symmetrical proportions to the car that cannot be attained when  
15 upper and lower compartments are formed in the ordinary way. This arrangement of a car is easily adapted for the application of cable, electric or steam power, without interfering with any of its parts, and the space between  
20 the seat backs can be utilized in winter and in cold climates for containing heating appliances.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

25 A railway car or carriage consisting of a floor or bottom A having side or longitudinal, steps C below its general surface and opposed seats D at its center and above its general surface, extending longitudinally thereof, the  
30 roof F secured upon uprights or stanchions, at the sides of the car or carriage, themselves secured upon the steps C, upper compartment seats G extending from the roof F and below it, the foot or passage way H, arranged below  
35 said seats G and low down in the lower compartment, centrally of the seats D, the upper compartment J, and the end steps L leading from the floor A of the lower compartment to the passage or foot way H, under cover, substantially as set forth. 40

T. EDWARD POPE.

Witnesses:

WM. M. FITZ MAURICE,  
IRA V. HITCHCOCK.