

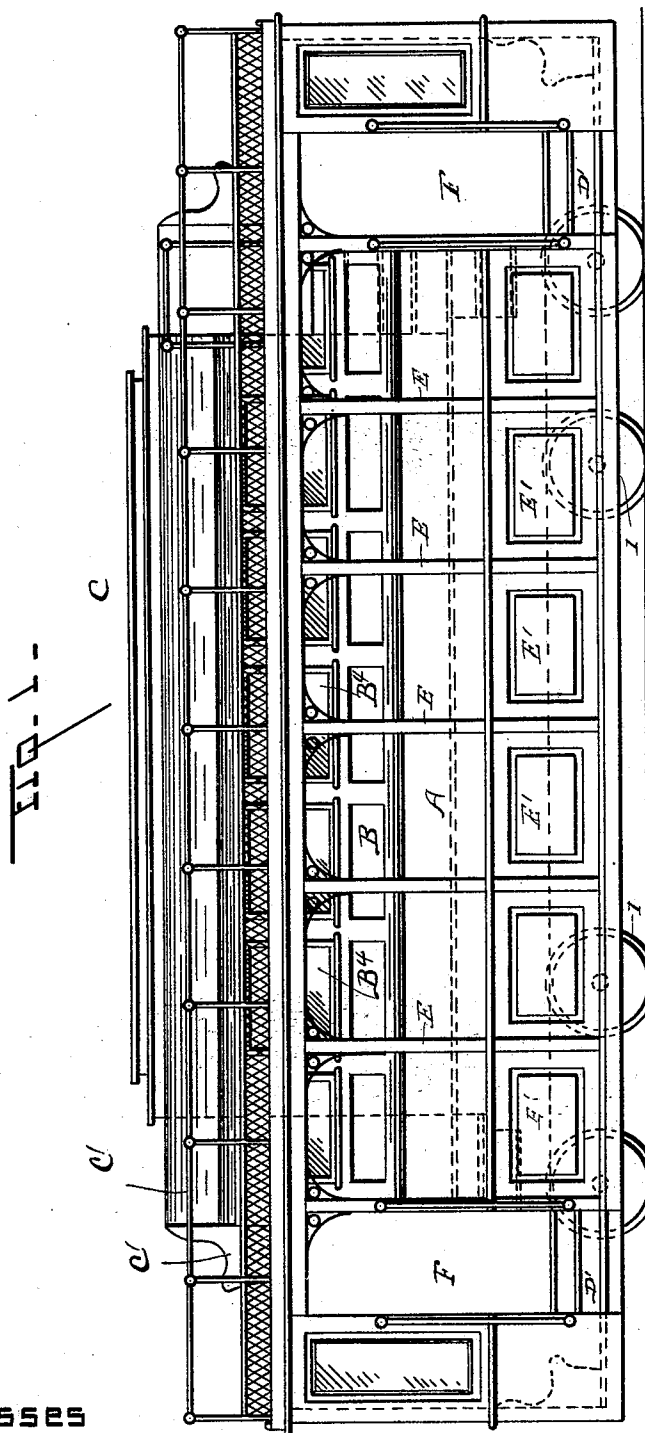
(No Model.)

3 Sheets—Sheet 1.

T. E. POPE.
CAR.

No. 509,325.

Patented Nov. 21, 1893.



Witnesses

A. S. Fairé
A. Peterson

Inventor

Thomas Edward Pope

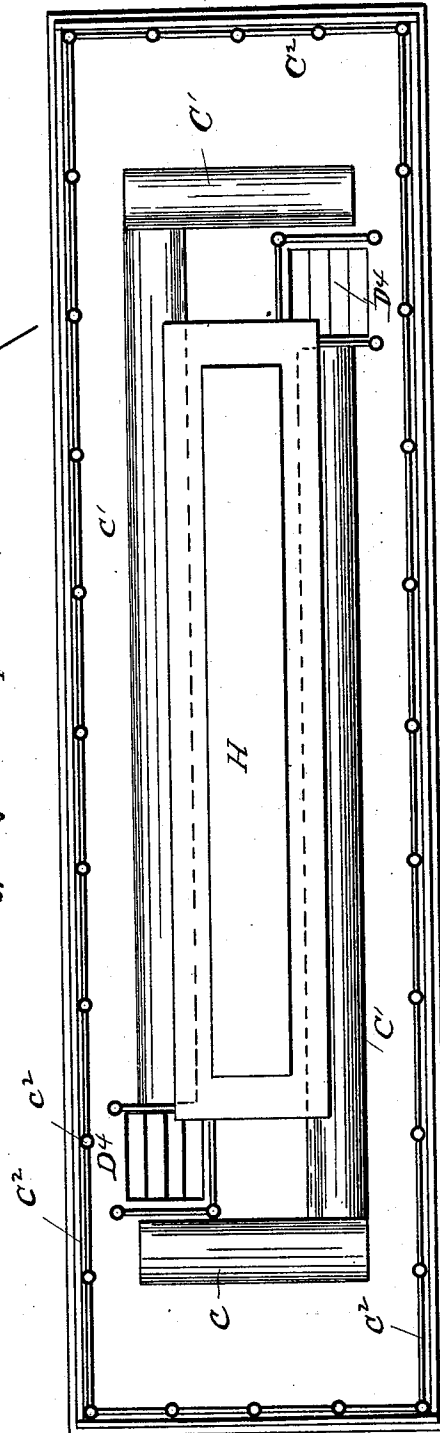
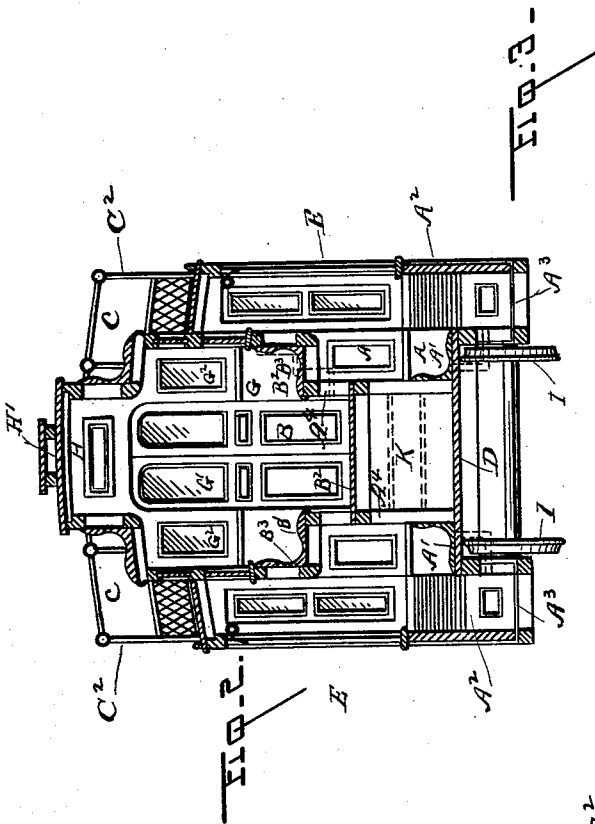
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3 Sheets—Sheet 2.

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Patented Nov. 21, 1893.



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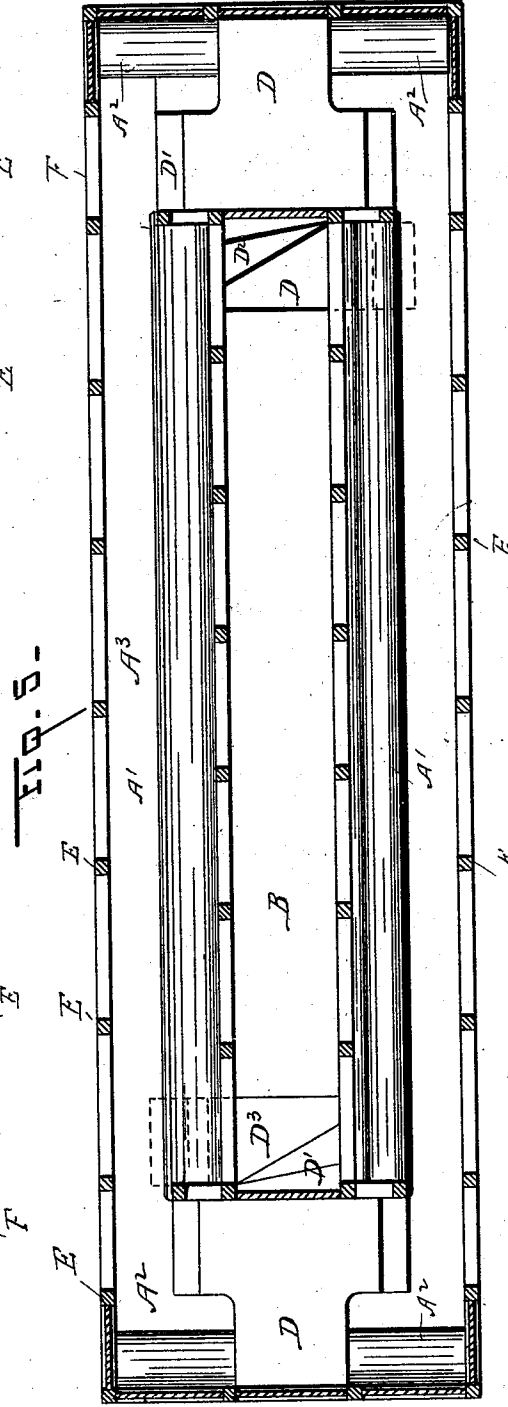
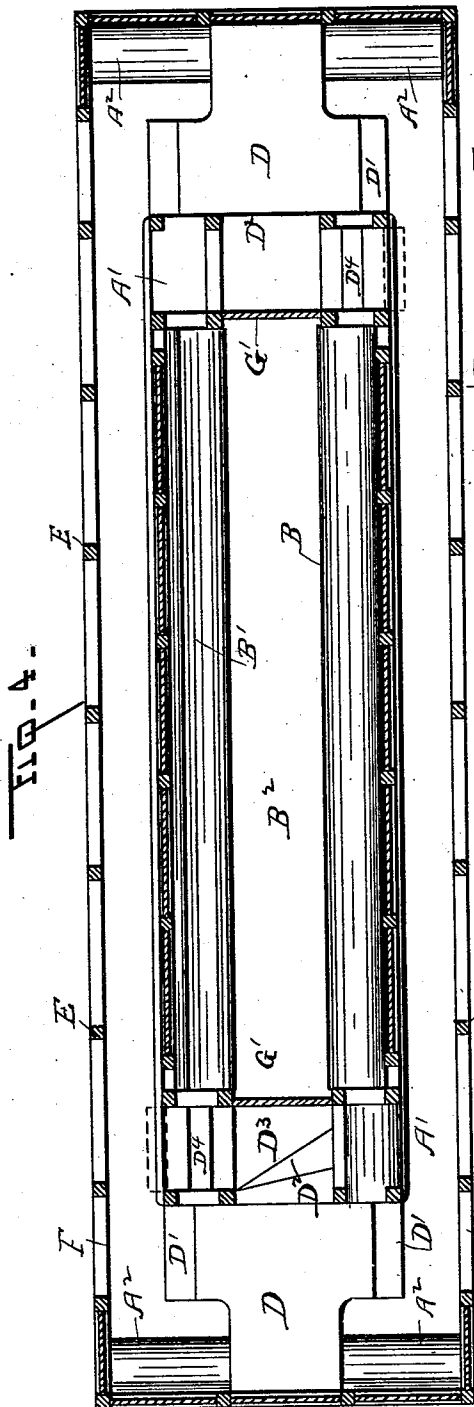
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No. 509,325.

Patented Nov. 21, 1893.



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UNITED STATES PATENT OFFICE.

THOMAS EDWARD POPE, OF SAN FRANCISCO, CALIFORNIA.

CAR.

SPECIFICATION forming part of Letters Patent No. 509,325, dated November 21, 1893.

Application filed August 8, 1893. Serial No. 482,694. (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 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.

This invention relates to improvements in cars, and consists in the novel construction and arrangement hereinafter set forth and claimed.

It has for its object to provide an increased seating capacity while obtaining the greatest economy of space, and to place the weight of the load between the wheels of the car.

In the drawings:—Figure 1 is a side elevation of the invention. Fig. 2 is a cross-section of the same, showing the relative arrangement of the seats. Fig. 3 is a plan view of the upper, or observation, deck. Fig. 4 is a horizontal section, showing in plan the arrangement of the second floor or inclosed compartment, also of the stairs by which the different floors are reached. Fig. 5 is a horizontal section, showing in plan the arrangement of the first floor with the stairs leading therefrom.

In the drawings the letters A, B and C designate respectively the three seating compartments, that is A is the first floor compartment, B the second floor or inclosed compartment and C the third floor or observation compartment.

In the compartment A are two rows of side seats A', A', and end seats A², A². The side seats A', A', are placed upon the structural platform D or directly over the wheels of the car. From this platform D are hung the floors A³ of this compartment, which extend down over the side of the wheels to a sufficient distance to give an easy foot rest to the occupants of the seats A', A². Upon these floors are raised the side frames of the car, consisting of light stanchions E, extending to and supporting the upper, or observation, floors substantially as shown in the drawings, Fig. 1. Between these stanchions is built to a suitable height a solid paneling E', to serve

as a protection to the occupants of the seats A. Between the ends of the side seats A' and the end seats A², at both ends, are provided the entrances F on the sides. Forward of these entrances the frame is glassed in to serve as a wind or weather break. It is in these protected portions of the car I place the end seats A³, which are raised on the floors A³, to the same level as the seats A'. From the platform D are raised on either side the backs A⁴ of the seats A' to a suitable height to provide head room under the seats of the compartment B, which rest on these backs A⁴.

To enter the compartment B the passenger at entrances F advances to platform D by the step D' in front of the entrances, then turns and by steps D² he arrives at the landing D³, that is at a level with the floor B² of this compartment which he enters by doors G'.

The compartment B is provided with the side seats B', which, as above mentioned, are built on those parts of the structure forming the backs of the seats in compartment A, and extend outward, resting to the rear on the beams B³. By this arrangement the seats B' are brought directly over the seats A', but facing inwardly. Between the backs A⁴ is laid the floor B² of compartment B. The weight of this and the upper compartment is carried by the frames G, which form the ends of this compartment. These frames are provided with the doors G' and windows G². From the beam B³ is raised the side frames of this compartment. These are provided with windows B⁴ to give light and air to this compartment. These side frames are extended upward to receive the seats of the upper, or observation, floor and give suitable head room under them for the occupants of the compartment B. Ventilation for this compartment is provided by drawing the air from the lantern through the channel H', in the lantern H, which is formed between the backs of the seats on the upper floor. If, however, the passenger, on entering the car, desires to go to the upper, or observation, floor instead of the compartment B he, on arrival at the landing D³, turns to the steps D⁴, which lands him on the floor of the compartment C. This floor is virtually the top of the car, and is supported by the side frames of the compart-

ment B and the stanchions E. The seats C' rest on the side frames of compartment B and extend inward directly over the two tiers of seats below, their backs forming the lantern H of compartment B. Around the outer edge of this compartment C is built the rail C².

It will be observed that by the arrangement described the seats are thrown slightly back or inside the wheels I of the car.

10 This car may be operated by either horse, motor or cable system with slight alterations which do not affect the spirit of this invention. When, however, a motor system is used, the space K, between the platform D

15 and floor B², is designed to hold the motor. Having thus described this invention, what I claim is—

1. In a car, such as described, the combination of series of compartments having three
20 or more tiers of seats, all in alignment, one above the other and facing alternately in opposite directions and with their backs and fronts of alternate seats standing inward from the wheels, substantially as set forth.

2. In a car, such as described, the combination of series of compartments having three
25 or more tiers of seats, all in alignment, one above the other and facing alternately in opposite directions, and with the lowermost compartment comprising a floor having thereon side seats extending in the lineal axis of
30 the car and end seats on depressed portions, on a level with the aforesaid seats, an intermediate contracted compartment having side seats, and an uppermost compartment also
35 having side seats, the backs of the lowermost compartment seats extending up to and supporting the fronts of the intermediate compartment seats, and the backs of the latter
40 seats extending up to and supporting the fronts of the uppermost compartment seats, and means of access to said several compartments, substantially as set forth.

THOMAS EDWARD POPE.

Witnesses:

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