(No Model.)

4 Sheets—Sheet 1.

O. HARRIMAN.

RAILWAY CAR.

No. 424,475. Patented Apr. 1, 1890.

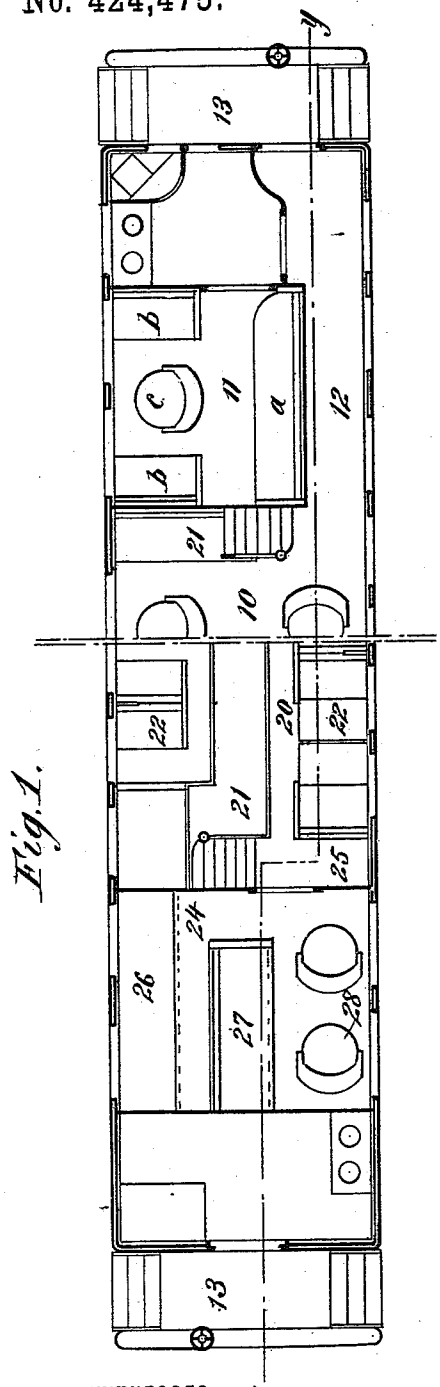


Fig. 1.

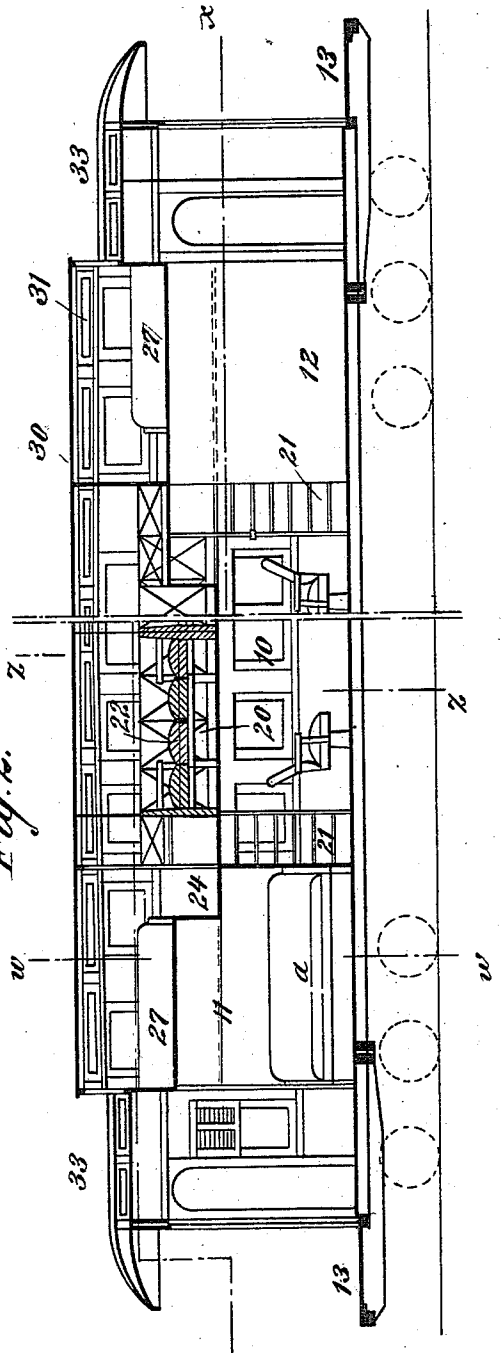


Fig. 2.

WITNESSES:

Donn Twitchell

E. Sedgwick

INVENTOR:

O. Harriman

BY

Munn & Co

ATTORNEYS.

N. PETERS. Photo-Lithographer, Washington, D. C.

(No Model.) 4 Sheets—Sheet 2.

O. HARRIMAN.

RAILWAY CAR.

No. 424,475. Patented Apr. 1, 1890.

Fig. 4.

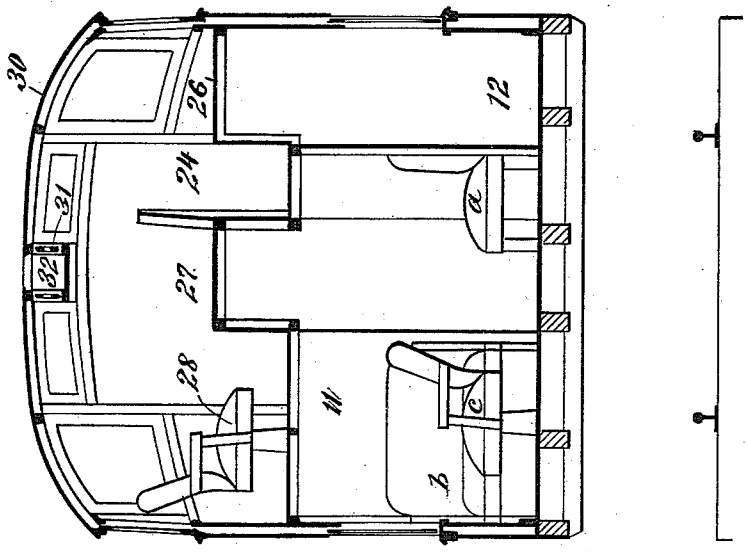
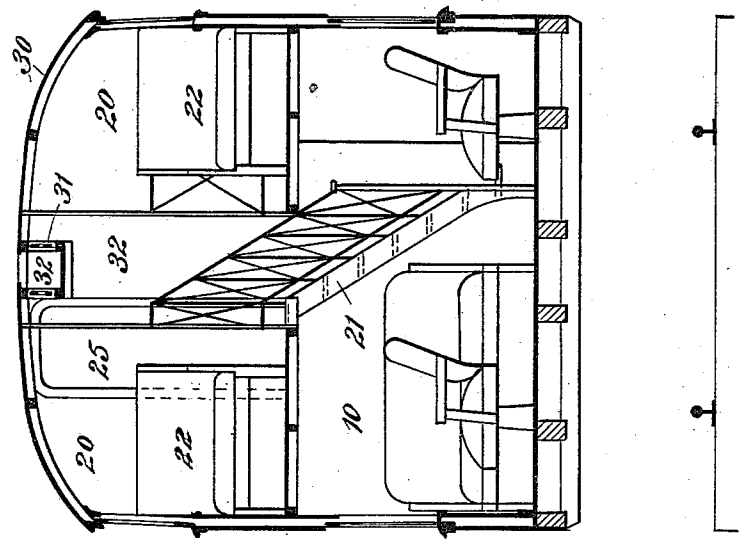


Fig. 3.



WITNESSES:

Donn Twitchell

C. Bedgwick

INVENTOR:

O. Harriman

BY Munn & Co

ATTORNEYS.

N. PETERS. Photo-Lithographer, Washington, D. C.

(No Model.) 4 Sheets—Sheet 3.

O. HARRIMAN.

RAILWAY CAR.

No. 424,475. Patented Apr. 1, 1890.

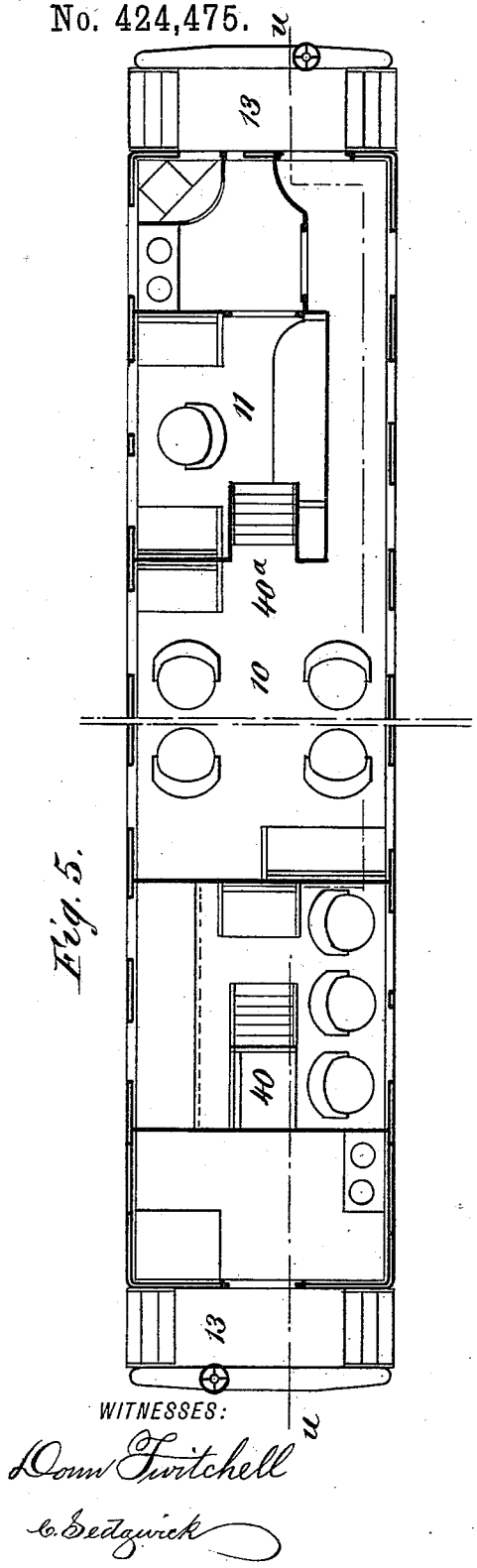


Fig. 5.

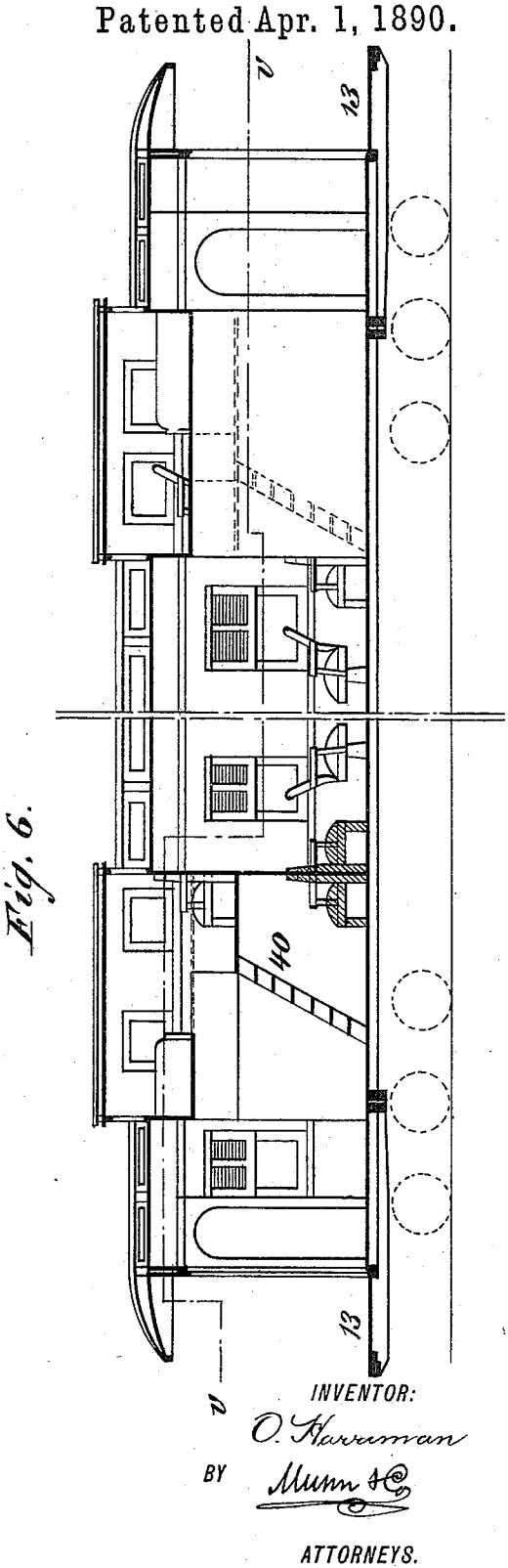


Fig. 6.

WITNESSES:

Donn Twitchell

C. Sedgwick

INVENTOR:

O. Harriman

BY Munn & Co

ATTORNEYS.

N. PETERS, Photo-Lithographer, Washington, D. C.

(No Model.) 4 Sheets—Sheet 4.

O. HARRIMAN.

RAILWAY CAR.

No. 424,475. Patented Apr. 1, 1890.

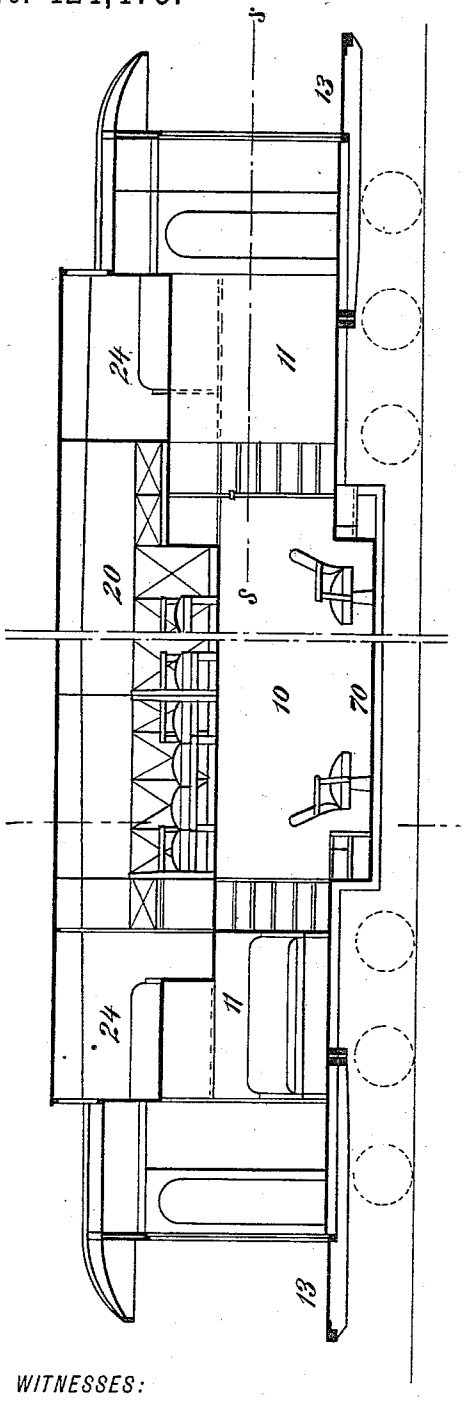


Fig. 7.

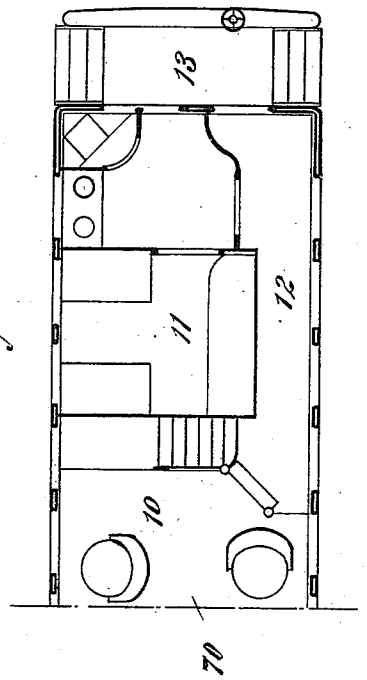


Fig. 9.

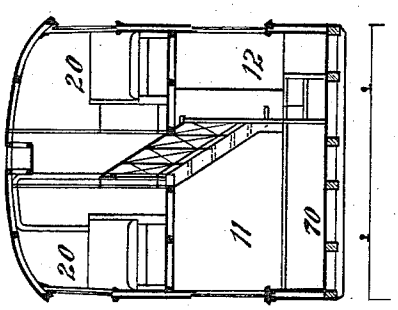


Fig. 8.

WITNESSES:

Donn Twitchell

C. Sedgwick

INVENTOR:

O. Harriman

BY Munn & Co

ATTORNEYS.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

ORLANDO HARRIMAN, OF NEW YORK, N. Y.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 424,475, dated April 1, 1890.

Application filed June 13, 1889. Serial No. 314,086. (No model.)

To all whom it may concern:

Be it known that I, ORLANDO HARRIMAN, of the city, county, and State of New York, have invented a new and Improved Railway-Car, of which the following is a full, clear, and exact description.

This invention relates to the construction of passenger-coaches for railway use, the main objects of the invention being to increase the seating and sleeping capacity of such cars, to so locate the smoking-room that tobacco fumes will not be apt to penetrate through the body of the car, and to provide for passengers a more extended view of the surrounding country than it is possible to secure with the ordinary form of single-floor car.

To the ends above named the invention consists of a car constructed substantially as hereinafter described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional plan view of a portion of a car-body, representing the same as it appears when constructed to embody my invention, the view being taken on the broken line *x x* of Fig. 2. Fig. 2 is a sectional side elevation of the car-body, the view being taken on the broken line *y y* of Fig. 1. Fig. 3 is an enlarged cross-sectional view of the car, the view being taken on line *z z* of Fig. 2. Fig. 4 is a cross-sectional view on line *w w* of Fig. 2. Fig. 5 is a sectional plan view of a modified construction, the view being taken on the broken line *v v* of Fig. 6. Fig. 6 is a sectional side elevation on line *u u* of Fig. 5. Fig. 7 is a longitudinal sectional elevation of a modified form of car. Fig. 8 is a cross-section of the same on the line *t t* of Fig. 7, and Fig. 9 is a partial plan view of the same on the line *s s* of Fig. 7.

Referring now to the construction illustrated in Figs. 1, 2, 3, and 4, 10 represents the main saloon of the car, at either end of which there are arranged compartments 11, in which the seats may be disposed as may be deemed desirable; but in ordinary cases I would provide a long longitudinal seat *a*, transverse seats *b*, and a central chair *c*. At one side of each of the compartments 11 there is a passage-way 12, which passage-way extends from the doors leading from the car-platforms 13 to the main saloon 10, toilet-rooms being arranged beyond each of the compartments 11, any desired arrangement of toilet-rooms being adopted.

At the sides of the car and above the saloon 10, I arrange galleries 20, that are reached by stairways 21, the galleries being provided with ordinary single seats, or with seats 22, which may be folded out to form single berths. Directly above the compartments 11 are arranged compartments 24, that are entered through doors 25 from the galleries 20. The arrangement of the flooring of the compartments 24 is somewhat novel, inasmuch as head room is required for the passages 12, and to secure this head room I form seats 26 along one side of the compartments 24 directly over the passages 12; and in order that head room may be secured in the compartments 11, I provide the compartments 24 with central seats 27, this arrangement being best shown in Fig. 4, and in addition to the seats 26 and 27 the compartments 24 are provided with seats 28.

To secure the necessary head room in the galleries and in the compartments 24, I carry the car-roof 30 upward to the height of the ordinary ventilating-dome, the ventilating-windows 31 being, however, arranged to open into a trough-like structure or open-topped channel 32, which is open to the surrounding atmosphere, the bottom of the trough-like structure or channel 32 being inclined from the center of the car downward toward either end of the car, so that all gathered water will be discharged onto the end-roof sections 33, as will be readily understood from an inspection of Fig. 2.

From the construction above described it will be seen that the seating capacity of the car is materially increased, while the exterior of the car-body is not extended beyond the required limits; and it will also be seen that the smoking-compartments—viz., the compartments 24—are removed from the body of the car, and that from the galleries an extended view of the surrounding country may be secured.

In Figs. 5 and 6 I illustrate a construction

wherein the galleries are dispensed with, access to the compartments 24 in this case being secured by stairways 40, which lead up from the compartments 11, or by stairways 40^a, which lead up from the main saloon 10, the inclosing-walls of the stairways 40^a extending into the compartments 11. This construction provides for the isolation of the smoking-compartments and provides an increased seating capacity.

In Figs. 7, 8, and 9 I illustrate a construction wherein the flooring of the main saloon is carried downward below the level of the flooring of the compartments 11, thus giving increased head room, this lowered flooring being shown at 70, and in this case I would also lower the flooring of the galleries. In carrying out the idea illustrated in said figures the lowered flooring should be brought as close as possible to the car-trucks, it being of course understood that sufficient room should be left to provide for the necessary turning of the trucks.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A car provided with upper end compartments extending across the car, and upper side galleries extending between said end compartments, substantially as described.

2. A car provided with upper and lower end compartments, the flooring of said upper compartments being cut away and recessed to form seats in said compartments, and head room for passages at the sides of the lower compartments, substantially as described.

3. A car provided with upper and lower end compartments and longitudinal galleries, the flooring of the upper end compartments being cut away and recessed to form seats in said compartments, and head room for passages at the sides of the lower compartments, substantially as described.

ORLANDO HARRIMAN.

Witnesses:
E. M. CLARK,
C. SEDGWICK.