

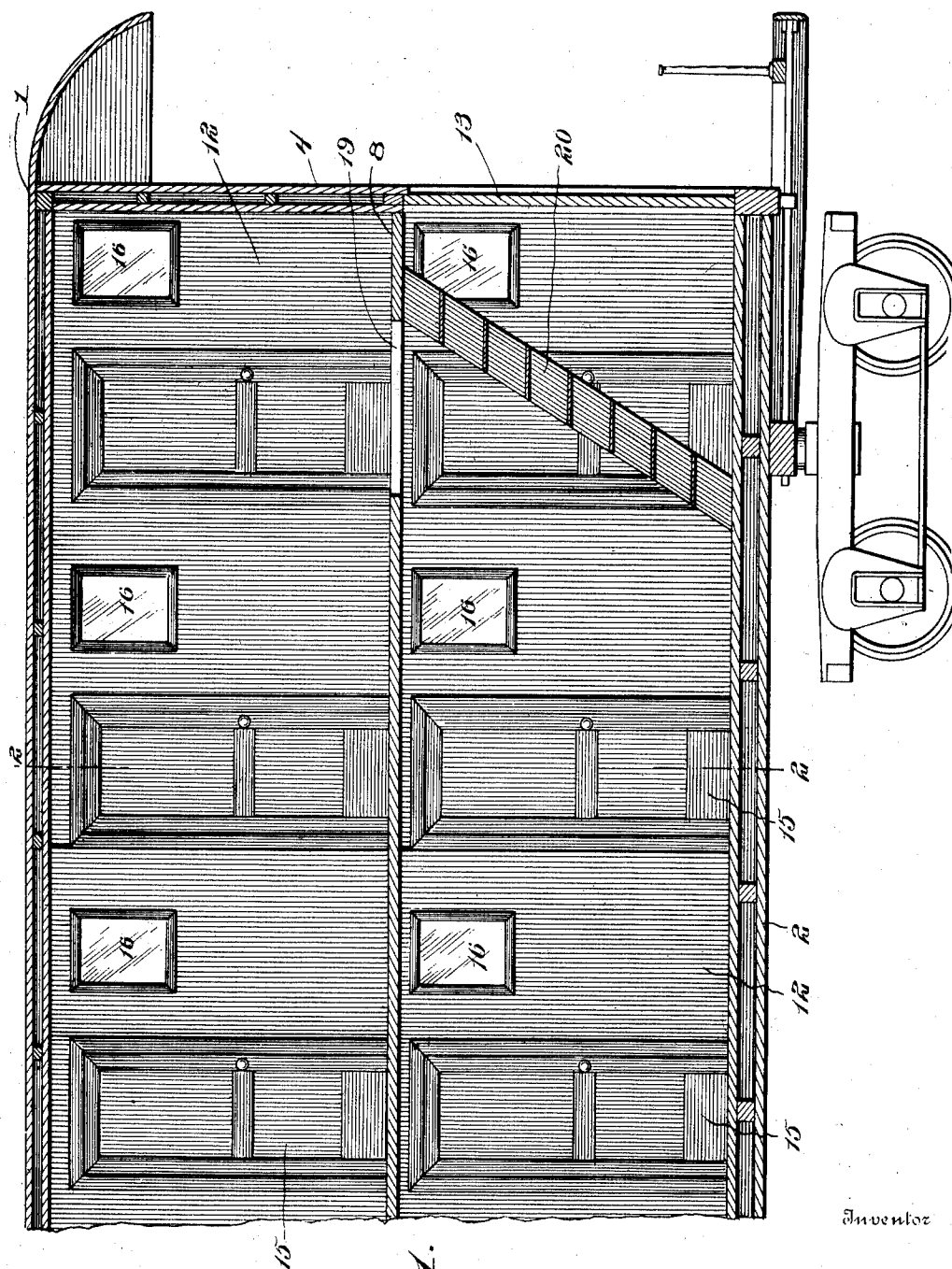
No. 864,614.

PATENTED AUG. 27, 1907.

W. A. CRAWFORD-FROST.  
RAILWAY CAR.

APPLICATION FILED DEC. 12, 1906.

2 SHEETS—SHEET 1.



Witnesses

*Louis R. Heinrichs*  
*A. S. Elmore*

*Fig. 1.*

By

*William A. Crawford-Frost,*  
*Victor J. Evans*  
Attorney

Inventor

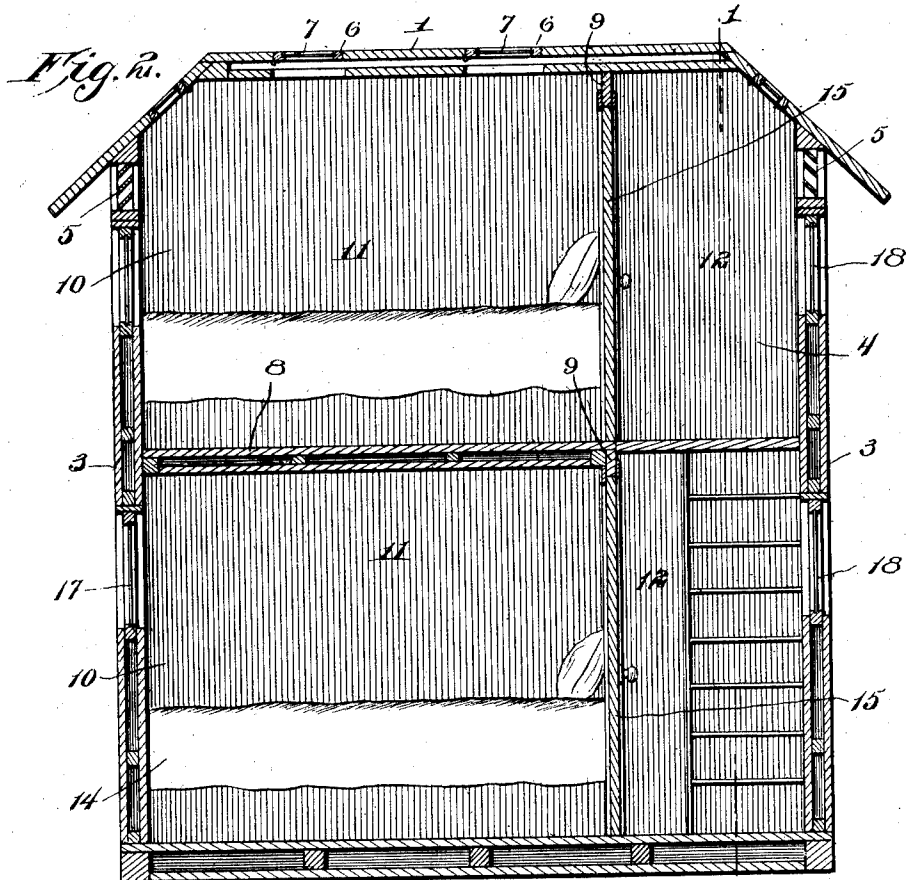
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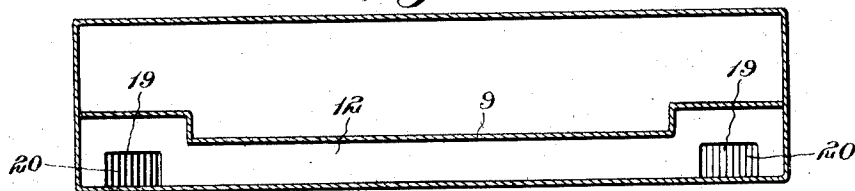
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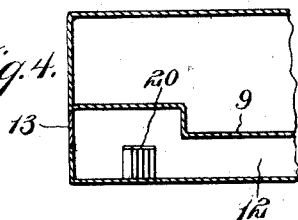
2 SHEETS—SHEET 2.



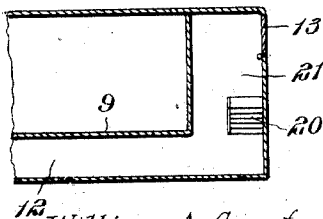
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



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# UNITED STATES PATENT OFFICE.

WILLIAM A. CRAWFORD-FROST, OF BALTIMORE, MARYLAND.

## RAILWAY-CAR.

No. 864,614.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed December 12, 1906. Serial No. 347,525.

*To all whom it may concern:*

Be it known that I, WILLIAM A. CRAWFORD-FROST, a citizen of the United States, residing at Baltimore, in the county of Baltimore City and State of Maryland, have invented new and useful Improvements in Railway-Cars, of which the following is a specification.

This invention relates to railway cars of the type known as sleepers, being directed especially to the interior construction and arrangement of the car, and has for its objects to provide a comparatively simple, inexpensive construction under which the car will present an upper and a lower series of individual berth compartments or staterooms, which in use will insure privacy of the occupants, one whereby the passenger accommodating capacity of the car is materially increased, and one wherein the passengers and attendants may pass freely to and from the various staterooms of both the upper and lower series.

A further object of the invention is to provide a car of the type described which may be readily utilized either as a day or sleeping coach, one wherein a proper ventilation may be attained, and one wherein provision is made for free passage from one car to another of a train.

With these and other objects in view, the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings: Figure 1 is a vertical sectional view taken longitudinally through a portion of a car on the line 1—1 of Fig. 2. Fig. 2 is a vertical, transverse section taken on the line 2—2 of Fig. 1. Fig. 3 is a horizontal section taken at a point above the second floor and showing the parts on a reduced scale. Fig. 4 is a similar view taken above the first floor, showing the arrangement at one end of the car. Fig. 5 is a view similar to Fig. 4, showing a modified embodiment of the invention.

Referring to the drawings, it will be seen that the car which is of ordinary form and material comprises a top 1, bottom 2, side walls 3 and end walls 4, all of the usual hollow or double-walled formation provided with intervening air spaces, there being provided in the side walls 3 beneath the eaves of the car suitable ventilators 5 and in the top 1 hinged ventilators 6 having glass or other transparent panels 7 forming skylights.

The interior of the car is divided by means of a central, horizontal floor or partition 8 into upper and lower stories, which latter are subdivided by vertical partitions 9 and 10 into berth spaces or staterooms 11 and halls or passageways 12, which latter extend longitudinally from end to end of the car, at the ends of which and leading from the lower passageways 12 are doors 13 through which communication may be had between the several cars of a train.

The sleeping compartments or staterooms 11 which contain sleeping berths 14 are provided with doorways

opening into the passages 12 and normally closed by doors 15, the staterooms being lighted by windows 16 and 17 let into the partitions 9 and opposite wall 3 of the car, while the hallways 12 are lighted by windows 18 arranged in the adjacent car wall 3.

Leading from the first to the second floor of the car through openings 19 formed in the floor 8 are stairs 20 arranged at the ends of the lower hallway 12 and to extend longitudinally of the car, as shown.

In practice, access may be had to the car through the end doors 13, as usual, which open into the lower passageway from which entrance into the lower staterooms may be had through the several doors 15 and to the upper hall by way of the stairs 20, it being understood that the various staterooms of the upper series may be entered from the upper hallway 12 through the several doors 15. During the daytime the several doors and windows may be opened to permit free circulation of air through the car, while the compartments may, when desired, be closed to insure privacy of their occupants. It will be understood in this connection that the compartments or staterooms may, if desired, be equipped with chairs in lieu of the sleeping berths or with berths which may, during the day, be converted into chairs or seats, while the space beneath the stairs may be utilized as linen closets or the like.

In Fig. 5 there is shown a slightly modified embodiment of the invention, wherein the hallways 12 terminate in transverse end passages 21 in which the stairs 20 are arranged to extend in a direction transversely of the car. In other respects, the interior construction of the car is identical with that above described.

Having thus described my invention, what I claim is:

1. A railway car having an inner longitudinal partition extended from floor to roof and forming a berth space and a longitudinal hall space disposed at one side of the car, a central horizontal partition subdividing the room and hall space into upper and lower stories, the said central horizontal partition being formed at its opposite ends with openings, stairs leading up to said openings, said stairs being arranged at the ends of the lower hallway and adapted to extend longitudinally of the car.

2. The herein described railway car comprising a longitudinal partition extended from floor to roof and forming a berth space and a longitudinal hall space disposed at one side of the car, windows for said berth and hall space, ventilators for said berth and hall space, a central horizontal partition subdividing the room and hall space into upper and lower stories, said central horizontal partition being formed at its opposite ends with openings, stairs leading up to said openings, said stairs being arranged at the ends of the lower hallway and adapted to extend longitudinal of the car.

In testimony whereof, I affix my signature in presence of two witnesses.

WILLIAM A. CRAWFORD-FROST.

Witnesses:

GEORGE W. MANLY,  
JAMES T. MENIKEN.