This invention relates to vehicle constructions which while particularly designed as an improvement in compartment car constructions, is not necessarily limited to this particular use as it is to be understood that the construction may apply generally to conveyances of all types.

The principal and outstanding object of the present invention is to provide within the limits of the width and height of a standard car structure, a plurality of readily accessible compartments affording separate seating and sleeping accommodations in addition to closet space and lavatory room.

The invention furthermore comprehends a compartment conveyance or vehicle including a portion intermediate its ends and between the wheels or trucks, having an underslung floor below the usual floor level whereby to increase the distance between the roof and the floor level without increasing the head room of the conveyance, whereby superimposed tiers of compartments may be provided each of which effects sufficient head room for the average sized passenger.

The invention aims as a still further object to provide a compartment conveyance as heretofore set forth in which laterally spaced longitudinally extending upper and lower corridors are provided at opposite sides of the conveyance for gaining access to the various compartments.

Further objects of the invention reside in the features of simplicity of the construction, economy of production, and the general efficiency obtained therefrom.

With the above recited and other objects in view, reference is had to the following specification and accompanying drawings in which there is exhibited one example or embodiment of the invention which is in no way intended as a limitation upon the scope of the appended claims as it is to be clearly understood that variations and modifications which properly fall within the scope of said claims may be resorted to when found expedient.

In the drawings—

Figure 1 represents a longitudinal sectional view through a railway car constructed in accordance with the invention, the section being taken approximately on the line indicated at A—A in Fig. 2;

Fig. 2 is a sectional plan view taken approximately on the line indicated at B—B in Fig. 1;

Fig. 3 is a transverse sectional view taken approximately on the line indicated at C—C in Fig. 1 and looking in the direction indicated by the arrows;

Fig. 4 is a similar view taken approximately on the line D—D of Fig. 1.

Referring to the drawings by characters of reference, the conveyance or vehicle, illustrated for example as a railway car, is of a standard length, width and height and includes at the opposite ends of its body, floor sections 10, said floor sections being disposed on the usual or normal level. The body further includes the usual roof 12 extending throughout the length thereof, the same being disposed above the road-bed or rails the usual distance. At the intermediate portion of the body between the end floor sections 10, an intermediate floor section 13 is provided which is underslung and disposed on a plane or level below the floor sections 10 to afford an increased distance between it and the roof 12. At the medial portion of the body the same is horizontally sub-divided between the underslung floor 13 and the roof 12 by partitions 14 and 15, the former extending inwardly from one side wall 16 and the latter extending inwardly from the opposite side wall 17. The partitions 14 and 15 terminate, respectively, in laterally spaced relation to the side walls 17 and 16. The intermediate portion is further sub-divided vertically by partition walls 18 and 19, which are equidistantly spaced from the side walls 16 and 17, respectively, and which are in turn spaced from each other. This construction defines a plurality or tier of upper compartments 20 adjacent the side wall 16 alongside of which extends longitudinally, a corridor 21, and defines a plurality or tier of lower compartments 22 adjacent the side wall 17, and between which and the wall 16 a longitudinal corridor 23 is provided. The upper compartments 20 are further defined by transverse vertical partitions 24 and the lower compartments are further defined by transverse vertical partitions 25. The floor 26 of the upper corridor 21 is disposed below the horizontal partition 14 directly over the sub-divisions 27 of the lower compartments 22 which are employed as a bed or sleeping accommodation and said corridor floor 26 is above the level of the end floor sections 10, access being gained thereto by steps, a ramp, or other similar means 28. The underslung floor 13
constitutes also the floor of the lower corridor 23, and due to the fact that it is disposed below the level of the end floor sections 10, access is gained thereto by steps, a ramp, or other suitable means 29. The ceiling of the lower corridor 23 is formed by the horizontal partition 14, and the subdivisions 30 of the upper compartments, which serve as a bed or sleeping accommodation, are arranged directly over the ceiling of the lower corridor 23. Within the upper compartments 20, suitable space is provided for a seat 31 and for closet space 32 and a lavatory 33, while similar accommodations for a seat 34, closet room and a lavatory 36 are provided in each lower compartment. In the partition 19, doorways 37 are provided for gaining access from the upper corridor 21 to the compartments 20, while in the partition 18 doorways 38 are provided for gaining access from the lower corridor 23 to the lower compartments 22. The remaining space at the ends of the conveyance between the floor sections 10 and the roof, may be subdivided in any suitable manner as this forms no part of the present invention.

From the foregoing it will thus be seen that a compartment conveyance construction has been devised which allows for the superimposition between the ends of the conveyance of upper and lower tiers of compartments with upper and lower corridors traversing said compartments to gain access thereto and this without increasing the usual head room or width of a standard conveyance construction.

What is claimed is:

1. A compartment conveyance construction, including a portion intermediate its ends and between the wheels, having an underrun floor for increasing the distance between the usual floor level and the roof to afford sufficient height for defining upper and lower tiers of compartments, the said intermediate portion having laterally spaced longitudinally extending upper and lower corridors at opposite sides of the conveyance for gaining access, respectively, to the upper and lower compartments.

2. A compartment conveyance construction, including a portion intermediate its ends and between the wheels, having an underrun floor for increasing the distance between the usual floor level and the roof to afford sufficient height for defining upper and lower tiers of compartments, the said intermediate portion having laterally spaced longitudinally extending upper and lower corridors at opposite sides of the vehicle for gaining access, respectively to the upper and lower compartments, said upper and lower corridors having at the opposite ends, ascending and descending means leading from the usual floor level sections.

3. In a compartment vehicle including floor sections disposed at the usual level at the opposite ends over the wheeled trucks, an intermediate portion between said ends having an underrun floor for increasing the distance between it and the roof, laterally spaced longitudinally extending upper and lower corridors at opposite sides of the vehicle, and transverse vertical partitions between the corridors in the opposite walls of the vehicle, said corridors having doorways for gaining access to the compartments.

4. A compartment vehicle including a body having sections over the wheeled trucks at the opposite ends, provided with floor sections on the usual level, said body having an intermediate portion provided with an underrun floor increasing the distance between it and the roof, and laterally spaced longitudinally extending upper and lower corridors at opposite sides of the vehicle, the upper corridor having a floor above the normal floor level and below the ceiling level of the lower corridor, the lower corridor having the ceiling above the normal floor level and above the floor level of the upper corridor.

5. A compartment vehicle including a body having sections over the wheeled trucks at the opposite ends, provided with floor sections on the usual level, said body having an intermediate portion provided with an underrun floor increasing the distance between it and the roof, laterally spaced longitudinally extending upper and lower corridors at opposite sides of the vehicle, the upper corridor having a floor above the normal floor level and below the ceiling level of the lower corridor, the lower corridor having the ceiling above the normal floor level and above the floor level of the upper corridor, and steps at opposite ends of the corridors respectively leading up from the normal floor level sections and downwardly therefrom.

6. A compartment conveyance construction, including a portion having upper and lower tiers of compartments, said portion also having laterally spaced, longitudinally extending upper and lower corridors at opposite sides of the conveyance for gaining access respectively to the upper and lower compartments.

7. A compartment conveyance construction, including a portion having upper and lower tiers of compartments, said portion also having laterally spaced, longitudinally extending upper and lower corridors at opposite sides of the conveyance for gaining access respectively to the upper and lower compartments, the upper corridor having a floor below the ceiling level of the lower corridor and the lower corridor having a ceiling above the floor level of the lower corridor.

ERIC GUGLER.