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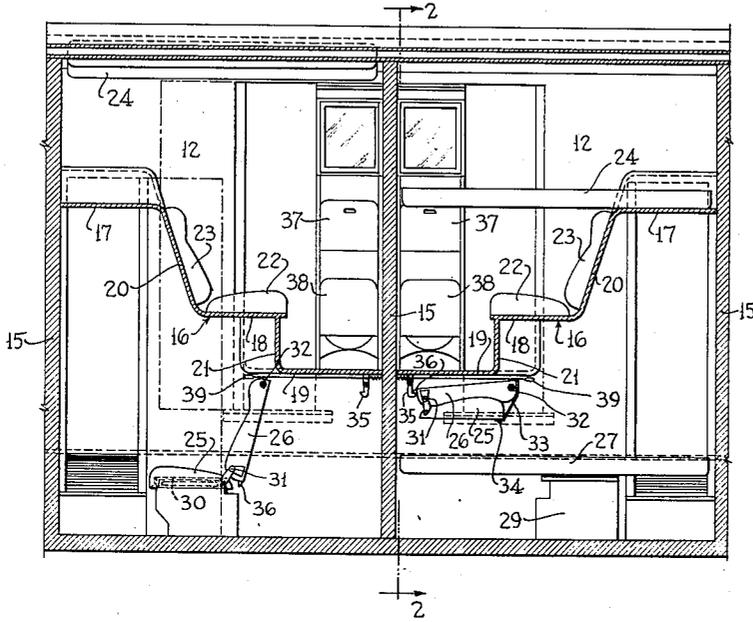
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2,548,294

ROOM ARRANGEMENT FOR SLEEPING CARS

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FIG. 1



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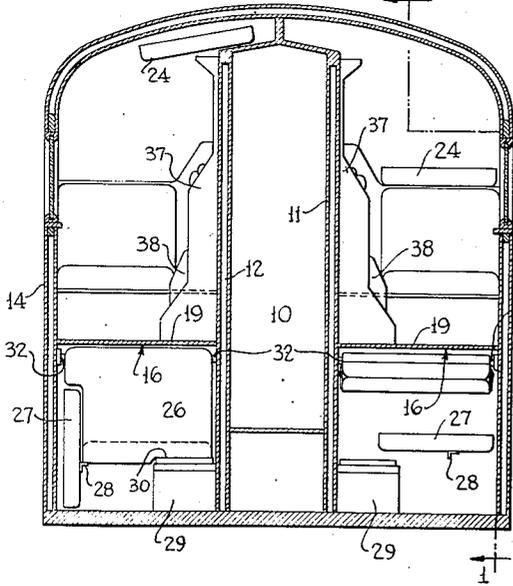


FIG. 2

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ROOM ARRANGEMENT FOR SLEEPING CARS

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8 Claims. (Cl. 105—315)

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The invention relates to sleeping cars and, more particularly, to the room arrangement of such cars.

The invention is especially concerned with the arrangement of convertible sleeping car rooms disposed along one side of a center aisle and having a bed extending along substantially the full length of the room and where the room in question is one of a pair of longitudinally-overlapping such rooms.

A main object of the invention is the provision of a simplified arrangement of the seat and seat back and bed in the rooms, which facilitates the support of the seat and seat back in the use position and permits it to be readily moved to a stowed position when it is desired to move the bed to use position from its stowed position.

Other and further objects and advantages and the manner in which they are attained will become evident from the following detailed description when read in connection with the accompanying drawings forming a part of this specification.

In the drawings:

Figure 1 is a longitudinal vertical sectional view through a railway car, the section being taken substantially along the line 1—1 of Figure 2 looking toward the aisle side of the adjacent superposed pairs of rooms equipped according to the invention; and

Figure 2 is a transverse sectional view through the railway car, the section being taken substantially along the line 2—2 of Figure 1.

The room arrangement to which the invention has been applied is that shown in copending application Serial No. 24,034 filed of even date herewith and entitled *Sleeping Car With Superposed Rooms*, showing superposed rooms arranged on opposite sides of a center aisle 10 and between the longitudinally extending aisle walls 11 and 12 and the adjacent car side walls 13 and 14. In the drawings, Figure 1, one pair of superposed rooms, the pair shown at the right, is made up as bedrooms, and the pair at the left, as sitting rooms. Each pair of rooms is defined by an aisle wall, as 11, a car side wall, as 13, and a pair of spaced transverse walls 15 interconnecting the car side and aisle walls and defining the ends of the pair of rooms. The rooms of a pair are separated by a generally horizontally extending partition 16 interconnecting the side, aisle and transverse walls of the pair of rooms. This partition has an upper horizontal portion 17 extending longitudinally inwardly from one transverse wall 15 a distance

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sufficient to provide standing-height space in the lower room, an intermediate horizontal portion 18 and a lower horizontal portion 19 extending inwardly horizontally from the opposite transverse wall 15 and providing standing-height space in the upper room.

The three vertically offset portions 17, 18 and 19 thus divide the rooms lengthwise into a standing-height section, a sitting-height section and a less-than-sitting-height section, these sections being reversely arranged for the superposed rooms. The adjacent ends of the upper and intermediate horizontal portions of the partition 15 are interconnected by a generally vertically extending but inclined portion 20, and the adjacent ends of the intermediate and lower horizontal portions are interconnected by a generally vertically extending portion 21.

In the upper room the seat 22 and its back 23 are disposed on the intermediate horizontal portion 18 and against the inclined vertical portion 20 facing the standing-height space of the room. The bed 24, when in use position, extends horizontally substantially the length of the room with one end disposed on the upper horizontal portion 17. It may be moved to stowed position adjacent the ceiling, as shown at the left of the figures. Since the arrangement in the upper room forms no part of the invention, further description thereof is omitted.

The invention is particularly concerned with the arrangement of the appointments in the lower room, and this will now be described in detail.

In the sitting-height space of the lower room are arranged the seat proper 25 and seat back 26 facing the standing-height space of the room. The bed 27, which extends substantially the length of the room, is a fixed-length made-up bed and is normally stowed, when the room is made up as a sitting room, along the car side wall, as shown at the left of Figure 2. When the bed is in this position, the seat 25 finds its support on a bracket 28 affixed to the bottom of the bed and a hopper 29 disposed under the seat adjacent the aisle wall. The bottom of the seat frame has a recess 30 therein into which the top of the hopper is received; the front margin of this recess abuts the front edge of the hopper and the rear margin of the recess abuts the rear edge, so that longitudinal movement of the seat in use position is prevented by this interlocking engagement with the hopper.

To facilitate the movement of the seat and seat back out of the path of movement of the

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bed and to allow the latter to be moved to the horizontal use position shown at the right of the figures, the seat and seat back are hinged together at 31 and the seat back is hinged adjacent its top, at 32, to the adjacent side and aisle walls. To move the seat and seat back to stowed position out of the path of movement of the bed, the seat proper 25 is lifted to first disengage it from the hopper and is then folded against the seat back 26 where it may be secured by a suitable strap or straps 33 which may be secured to the bottom of the seat through a snap fastener 34 or the like. After the seat and seat back are so secured in folded-together relation, they may be together swung about the hinges 32 upwardly until they lie generally parallel to the lower horizontal portion 19 of the dividing partition or ceiling 15 of the room where a spring-pressed latch 35 automatically engages a keeper 36 on the seat back to lock them in this raised position. In this raised position, the bed is free to be moved from its stowed position to the horizontal use position. Suitable means for so moving it may be provided, for example, such as that shown in U. S. Patent No. 2,504,769, issued April 18, 1950, for "Sleeping Car Arrangement," in the name of Michael Water.

When the bed is in the use position, ample space for the occupant is provided between the stowed seat and seat back and the top of the bed. As shown in Figure 2, the bed is less than the full width of the room, so as to provide standing space for the occupant alongside the bed for raising and lowering it. Other accessories, such as a combined folding washbasin and cabinet, not shown, are also provided in the lower room. The corresponding combined washbasin and cabinet for the upper room is indicated by the numeral 37, see Figure 1. For the upper room, a folding hopper 38 is also included in the combination.

If desired, suitable counterbalance means may be provided to facilitate the movement of the combined seat and seat back about the pivots 32. The latch 35 is provided with a release handle 39 extending to the front of the hinged end of the back where it is readily accessible to release the seat and seat back from their stowed position to permit swinging them downwardly to the use position.

While but a single embodiment of the invention has been illustrated and described, it will be understood by those skilled in the art that changes and modifications may be made without departing from the spirit and scope of the invention.

What is claimed is:

1. In a railway sleeping car, a room defined by longitudinally extending center aisle and car side walls and spaced transverse walls interconnecting said aisle and car side walls, a floor and a stepped ceiling for the room making one end thereof of standing height and the opposite end of less-than-standing height, a full-length bed in the room extending substantially the length thereof and normally stowed in vertical position flanking the side wall, a longitudinally facing seat in the room extending substantially from the stowed bed to the aisle wall, and transversely spaced supports for said seat one disposed on the room floor adjacent the aisle and one carried by the bottom of the bed.

2. In a railway sleeping car, a room defined by longitudinally extending center aisle and car side walls and spaced transverse walls interconnecting said aisle and car side walls, a floor and a

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stepped ceiling for the room making one end thereof of standing height and the opposite end of less-than-standing height, a full-length bed in said room extending substantially from transverse wall to transverse wall of the room and normally stowed in vertical position flanking the car side wall, and a longitudinally facing seat and seat back alongside said stowed bed and extending substantially from said stowed bed to the aisle wall, said seat and its associated back being foldable upwardly against the low portion of the room ceiling in stowed position to permit movement of the bed to a horizontal use position.

3. In a railway sleeping car, a room defined by longitudinally extending car side and center aisle walls and spaced transverse walls interconnecting said car side and center aisle walls, a floor and a stepped ceiling for the room, the latter making one end of the room of less-than-standing height and the other end thereof of standing-height, a seat in the room facing the standing-height section and having a back hinged thereto and the back being hinged to the side and aisle walls adjacent the longitudinally inner end of said less-than-standing-height portion of the ceiling and below said portion of the ceiling, whereby the seat may be folded against the back and the two together swung upwardly and rearwardly to a position under said low portion of the ceiling of the room, and means for locking them in folded condition in said position.

4. In a sleeping car, a room defined by longitudinally extending car side and center aisle walls, and spaced transverse walls interconnecting said car side and aisle walls, a stepped ceiling for said room making one end of the room of standing height and the other of less-than-standing height, a seat facing longitudinally toward the standing-height portion of the room and extending substantially the width of the room, said seat having a back hinged thereto and the back being in turn hinged to the aisle and side walls below the level of said low ceiling portion so as to permit the folding of the seat generally parallel to the back and the folding of the combined seat and back upwardly and rearwardly to a substantially horizontal raised position under the low portion of the ceiling in the less-than-standing-height end of the room.

5. In a sleeping car, a room defined by longitudinally extending car side and center aisle walls and spaced transverse walls interconnecting said car side and aisle walls, a stepped ceiling for said room providing a low portion adjacent one end of the room making it of less-than-standing height in said region, and a high portion adjacent the other end of the room making it of full standing height in said region, a longitudinally facing seat in the room facing said standing-height section of the room, said seat comprising a seat proper hinged to a seat back and the seat back being hinged to the room walls below the level of the low ceiling portion, whereby the seat proper may be folded against the back and means for securing it to the back in said folded position, and the combined seat and back may be swung upwardly and rearwardly in generally parallel relation to the low-ceiling portion, and means for securing them in this position.

6. In a railway sleeping car, a room defined by longitudinally extending car side and center aisle walls and spaced transverse walls interconnecting said car side and center aisle walls, a floor and a stepped ceiling for the room, the

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latter making one end of the room of less-than-standing height and the other of standing height, a bed in the room arranged in stowed position vertically flanking the car side wall, a support bracket on the bottom of the bed, and a hopper on the room floor adjacent the aisle wall, a seat supported by said hopper and bracket and comprising a seat proper hinged to a back, the back being hinged to certain of the room walls, and means lengthwise interlocking the seat proper and hopper to prevent longitudinal movement of the seat when in use position, the seat being liftable to release the interlock and then foldable together with the back into collapsed condition below the ceiling of the less-than-standing-height end of the room and out of the path of the bed to permit the latter to be moved to horizontal use position extending substantially the full length of the room.

7. In a railway sleeping car, a room having a floor and a ceiling, a seat and seat back normally in use position adjacent the room floor, said back being hinged adjacent its upper margin, and the seat being hinged to said back adjacent the lower margin thereof, whereby the seat is foldable into generally parallel relation to and against the back, means for securing the seat and seat back in this folded relation, the seat and seat back, in this relation, being swingable

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upwardly and rearwardly about said first-named hinged connection to extend substantially horizontally in an elevated stowed position adjacent a portion of the room ceiling, and means for securing them in said stowed position.

8. In a railway sleeping car, a room having a longitudinally extending recess at one end thereof adjacent the room floor, a longitudinally facing seat and seat back disposed in use position adjacent the mouth of said recess, said seat back being hinged adjacent its top and below the top of said recess to a fixed support, and the seat being hinged to the lower margin of said back, whereby the seat may be folded against the back and the combined seat and seat back swung, in folded condition, upwardly and rearwardly to an elevated stowed position adjacent the top of said recess.

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REFERENCES CITED

The following references are of record in the file of this patent:

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