Aug. 28, 1956 G. W. GOBRECHT 2,760,443

PRIVATE ROOM ACCOMMODATIONS FOR VEHICLES

Filed June 4, 1953 2 Sheets-Sheet 1

FIG. 1

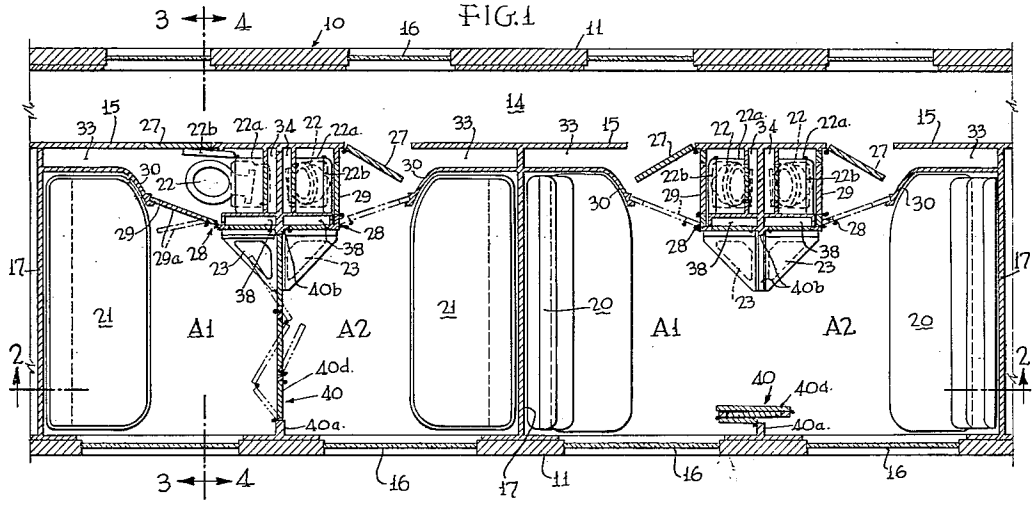


FIG. 2

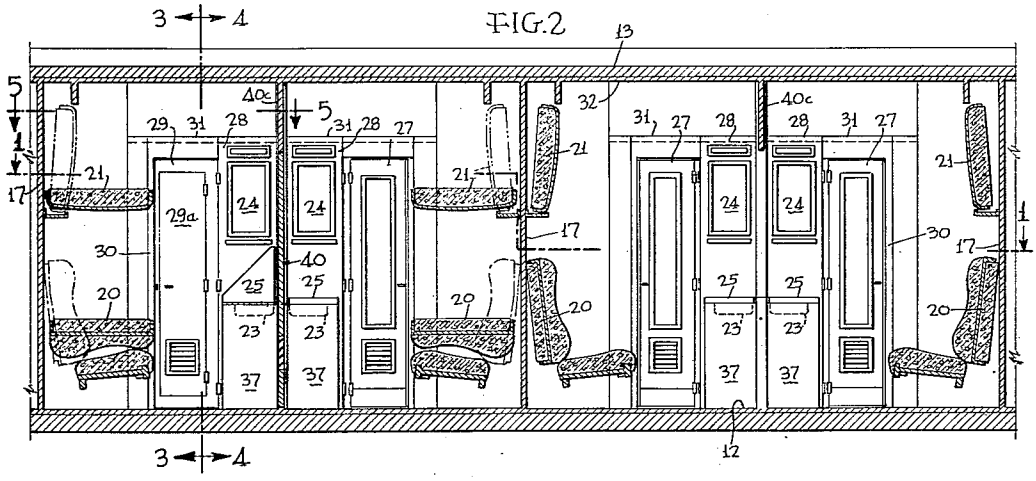
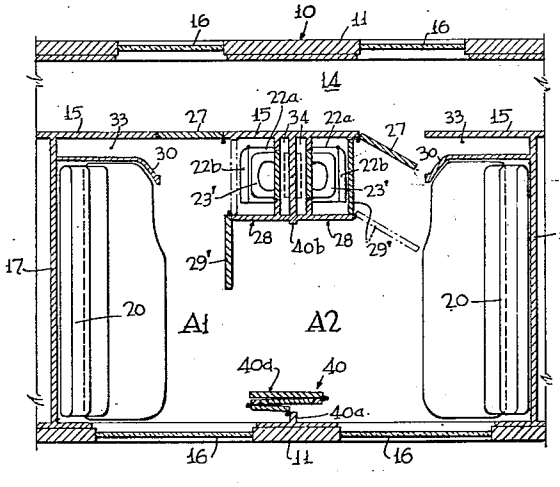


FIG. 6



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PRIVATE ROOM ACCOMMODATIONS FOR VEHICLES

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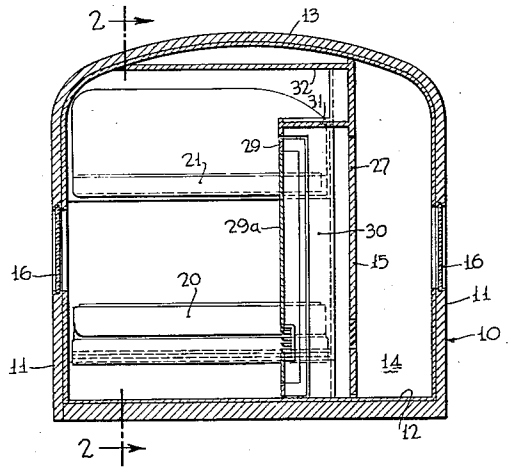


FIG.3

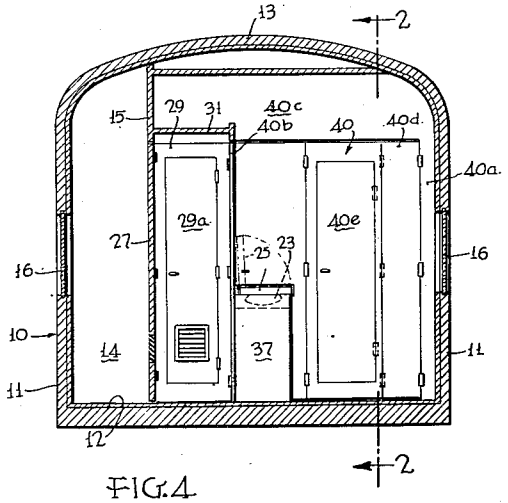


FIG.4

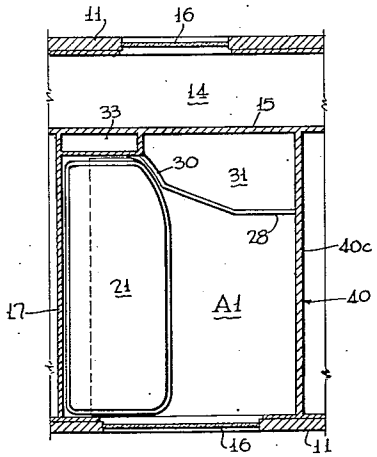


FIG.5.

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PRIVATE ROOM ACCOMMODATIONS FOR VEHICLES

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12 Claims. (Cl. 105—315)

This invention relates to private room accommodations for vehicles, especially to communicating bedrooms for railway cars, and has for an object the provision of improvements in this art.

In the patent to Parke, 2,309,665, there is shown a railway car having private bedrooms each equipped with a convertible couch-bed, an upper edge-hinged foldable bed, a toilet or hopper, and a wash basin. Two reversely identical rooms in the patented arrangement can be thrown together as a suite by folding up a hinged partition or by opening a door in the partition which at other times forms a separation between rooms.

It is a particular object of the present invention to provide a private enclosure for the toilet when in use, the toilet in the prior patented arrangement being merely concealed in a small cabinet when folded up in the non-use position and having no separation from the compartment space when used.

Another object is to provide a wash basin which is accessible from the room just outside the toilet enclosure so that the toilet and basin may be used at the same time by different passengers.

Another object is to provide an enlargeable toilet enclosure which may be fully closed off from the room for use in the enlarged condition at times, as when the two rooms are thrown together as a suite, or when one room is used for joint occupancy by two passengers.

Another object is to provide a duplex basin fixture at the folding partition and to provide a folding partition which fits closely against the basin fixture between basins and against the toilet enclosure to provide complete separation between rooms when the partition is used as a separating wall between them.

Another object is to provide interlocking means between the toilet and a room entrance door to keep the room entrance door closed when the toilet is available for use.

The above and other objects and advantages of the invention will be apparent from the following description of an exemplary embodiment, reference being made to the accompanying drawings thereof, wherein:

Fig. 1 is a plan view of a portion of a railway sleeping car having room accommodations embodying the present invention, the view being taken on the line 1—1 of Fig. 2;

Fig. 2 is a longitudinal vertical section and elevation taken on the line 2—2 of Figs. 1, 3 and 4;

Fig. 3 is a transverse vertical section and elevation taken on the line 3—3 of Figs. 1 and 2;

Fig. 4 is a transverse vertical section and elevation taken on the line 4—4 of Figs. 1 and 2;

Fig. 5 is an upper level plan view taken on the line 5—5 of Fig. 2;

Fig. 6 is a plan view of a modification.

The invention is shown to be embodied in a railway sleeping car **10** having side walls **11**, a floor **12**, a roof **13**, an aisle **14**, an aisle partition wall **15**, windows **16**, and a plurality of transverse partitions **17**, dividing the

space between the aisle wall **15** and one of the side walls **11** into a plurality of spaces for pairs of companion rooms A1 and A2. As here shown with the fixed lower beds and side hinged upper beds, the partitions **17** are made as permanent walls without communicating means but if the beds are foldable according to one known type of combination unit, the partition **17** may be foldable or be provided with a communicating door.

The rooms A1, A2 are reversely identical and in each there is provided a lower couch-bed or convertible sofa-bed **20** of known type, as in Patent 2,309,665, an upper bed **21** hinged along the long side to fold up to a non-use position, also as in the patent just referred to, a toilet or hopper **22** of a known folding type, as for example that shown in the patent to Anderson, 2,188,562, a basin **23**, and a mirror **24** above the basin. The basin preferably has a folding cover **25**. Each room is provided with an aisle entrance doorway which is closed by an aisle door **27**. Preferably, as shown, door **27** is hinged on the edge adjacent the toilet **22** and swings inward to open. This conceals the toilet in case the door should be open, even if the toilet did not have other enclosing means. The arrangement has other advantages as will be noted hereinafter.

The toilet or hopper is of the folding type which is adapted to be moved from a vertical stowed position to a lower use position. Several types of folding toilet units are available on the market. One is known as a "Combolet" which has a simple folding hopper movable by hand or power and a folding basin and cabinet and mirror above it. Another is that shown in Patent 2,188,562, referred to above, in which the toilet is mounted in a small cabinet which has a front door, the toilet being moved up and down when the door is moved between closed and open positions. This cabinet is relatively deep, about 16" over the closed door, and will permit space above it for a fixed basin 23' (Fig. 6), with a basin cover and a cabinet **34** and a mirror above the basin. The latter type of toilet unit is shown and comprises a small unit enclosure or cabinet **22*a*** having a door **22*b*** hinged at the aisle side to swing outwardly over the main aisle entrance doorway. It will be seen that the aisle door must be closed before the toilet cabinet door can be opened and that when the cabinet door is open it prevents opening of the aisle door until the cabinet door is closed.

When the cabinet door **22*b*** is swung open it causes the toilet to swing out and down to the use position. The toilet cabinet unit may, as shown, be housed within a toilet enclosure **28** of full standing height. A doorway in the toilet enclosure **28** is normally closed by a door **29**.

A vestibule wall **30** extends inward for a short distance from the aisle end of the beds. The vestibule enclosure or toilet annex serves to enlarge the space in front of the toilet when the door **29** is swung from its primary position at the toilet enclosure doorway to a secondary position in which it closes a doorway at the inner part of the vestibule partition. The door **29** shown in Figs. 1 to 5 is provided with an inner door **29*a*** which can be swung outward to provide easy entry into the vestibule space.

The vestibule toilet enclosure and the smaller toilet enclosure proper are covered overhead by a common subceiling **31** which provides a shelf below the main ceiling **32** of the room for stowing luggage. A wardrobe **33** is provided at the aisle end of the beds within the vestibule enclosure and the wardrobe may have its own door or may be left open to the vestibule space.

In each room (Figs. 1 to 5) and immediately outside the toilet enclosure a basin **23** is accessible for use separately from the toilet, the basin having below it a cabinet

37 extending to the floor, this lower cabinet preferably being provided with shelves and one or more doors. A cabinet 38 is provided above the basin for towels, carafe, or the like.

A transverse partition 40, including a fixed part 40*a* at the outer wall, a fixed part 40*b* between the basin cabinets, a top fixed part 40*c* and a folding part 40*d*, is arranged between the paired rooms. When the part 40*d* is folded the two rooms form a suite. A door 40*e* is provided in one of the panels of the folding part 40*d*.

The form shown in Fig. 6 provides the same accommodations as that shown in Figs. 1 to 5 except that the basin 23′ is located inside the toilet enclosure instead of outside. However, the private vestibule enclosure is still provided. The door 29′ in Fig. 6 is made to swing out, full width, past the side of the bed to permit easy access into the vestibule space instead of having an inner door as in Figs. 1–5. The bed is suitably reduced in width to provide swinging clearance for the door. The jamb for the door may be arranged anywhere desired along the side of the bed, the transverse wall from the end of the bed extending up as far as necessary to reach the jamb. The vestibule may narrow toward the wardrobe yet still provide adequate space in front of the toilet. For appearance and more ample space in front of the toilet it may be preferred to have the vestibule enclosure extend straight across the room, that is, parallel to the aisle and side walls, in which case the door jamb will be at a distance from the end of the bed and the vestibule wall will extend up from the end of the bed correspondingly.

It is thus seen that the invention provides a private toilet enclosure as a vestibule which can be used when needed but which may be largely eliminated at other times to provide the maximum useful space in the room. A wash basin is provided, which, in the first form, is accessible within the room outside the private toilet enclosure, yet is disposed at the side of the toilet enclosure where pipe connections may be conveniently made. Also the toilet and doors are so arranged that the aisle and vestibule doors must be moved toward positions to conceal the toilet when in use, and the aisle door is held closed by a door associated with the toilet when the toilet is in use.

While certain embodiments of the invention have been described by way of illustration, it is to be understood that there may be various embodiments within the general scope of the invention.

What is claimed is:

1. In a passenger vehicle having side walls, floor, and roof, the combination therewith of a longitudinal side aisle having an aisle partition wall on one side, a plurality of transverse walls dividing the space between the aisle wall and a side wall into a plurality of separate room spaces, a bed in a room adjacent a transverse wall, the bed in horizontal use position extending along the transverse wall, an aisle door in the aisle wall at one side of the bed, enclosure means at the aisle end of the bed comprising a part of a larger toilet enclosure, a smaller toilet enclosure at the aisle wall on the side of the aisle door opposite the bed, a toilet enclosure door which in one position completes said smaller toilet enclosure and in another position forms with said smaller toilet enclosure a partial bed enclosure means and larger toilet enclosure separated from the main room space, and a basin in the room at the side of the toilet enclosure distant from the aisle wall.

2. In a passenger vehicle having side walls, floor, and roof, the combination therewith of a longitudinal side aisle having an aisle partition wall on one side, a plurality of transverse walls dividing the space between the aisle wall and a side wall into a plurality of double room spaces, bed accommodations at each transverse wall, an aisle door for each room alongside the bed, a toilet enclosure for each room at the aisle wall on the side of the aisle door opposite the bed, partition means including movable parts between the bed and toilet enclosure forming a vestibule

space at the aisle door which includes the toilet enclosure and which provides a private toilet space separated from the rest of the room, a basin in each room at the side of the toilet enclosure opposite the aisle wall, and a partition between the basins closing the space between the toilet enclosures and aisle wall and the side wall, at least part of said last-mentioned partition being movable to permit the two rooms to be thrown together as a suite.

3. In a passenger vehicle having side walls, floor and roof, the combination therewith of a longitudinal side aisle having an aisle partition wall on one side, a plurality of transverse walls dividing the space between the aisle wall and a side wall into a plurality of separate room spaces, a bed in a room which in the horizontal use position extends along a transverse wall, an aisle door for said room alongside the bed position, a toilet enclosure in said room at the side of the door opposite the bed position, a vestibule enclosure inside the aisle door, the vestibule enclosure including one wall of said toilet enclosure, and a door movable from a first position closing said toilet enclosure from said vestibule to a second position closing said vestibule from said room.

4. In a passenger vehicle having side walls, floor, and roof, the combination therewith of a longitudinal side aisle having an aisle partition wall on one side, a plurality of transverse walls dividing the space between the aisle wall and a side wall into a plurality of separate room spaces, a bed in a room which in the horizontal use position extends along a transverse wall, a wardrobe at the aisle end of the bed, an aisle door for said room alongside the bed position, said aisle door being hinged at the side opposite the bed to swing inwardly into the room, an enclosed toilet in the room at the side of the aisle door opposite the bed, a swingable toilet door forming part of the toilet enclosure mounted to swing outward from the front of the toilet toward the aisle door, enclosure means forming an outer enclosure around said enclosed toilet, enclosure means forming, with part of said outer toilet enclosure, a yet larger toilet enclosure or vestibule enclosure inside said aisle door which includes within its area said outer toilet enclosure, said vestibule enclosure means including a swingable part which in one position forms a closure for an opening in said outer toilet enclosure means and which in another position forms a closure for an opening in the vestibule enclosure between the bed and the outer toilet enclosure means.

5. In a passenger vehicle having side walls, floor, and roof, the combination therewith of a longitudinal side aisle having an aisle partition wall on one side, a plurality of transverse walls dividing the space between the aisle wall and a side wall into a plurality of separate room spaces, a bed in a room which in the horizontal use position extends along a transverse wall, a wardrobe between the aisle wall and the end of the bed, a toilet in the room at the aisle wall and the transverse wall of the room opposite the wardrobe, an aisle door in the aisle wall between the wardrobe and toilet, the aisle door being hinged to swing into the room in front of the toilet, a transverse toilet enclosure wall in front of the toilet and having a doorway therein, a longitudinal vestibule wall at the side of the toilet away from the aisle wall extending to the side of the bed and enclosing the wardrobe end of the bed and having a doorway therein, an inner door movable from a first position covering the doorway of said toilet enclosure wall to a second position covering the doorway of the vestibule wall, the transverse wall at the toilet enclosure side of the room including a movable part providing communication with the adjacent room on that side, and a basin at the communicating transverse wall alongside the toilet and outside the vestibule wall.

6. In a passenger vehicle having side walls, floor, and roof, the combination therewith of a longitudinal side aisle having an aisle partition wall at one side, a plurality of transverse walls dividing the space between the aisle wall and a side wall into a plurality of separate room

spaces, an aisle door for each room, a toilet enclosure at the aisle wall on one side of the aisle door, a bed in the room located at a distance from the toilet enclosure sufficient to permit passage of the occupant between the bed and the toilet enclosure, partition means for separating the toilet enclosure from the rest of the room, said partition means including a movable closure in the passage between the bed and toilet enclosure, one transverse partition wall extending outwardly from said toilet enclosure, and a basin in said room outside said toilet enclosure and located at the juncture of the transverse wall and toilet enclosure.

7. In a passenger vehicle having side walls, floor, and roof, the combination therewith of a longitudinal side aisle having an aisle partition wall at one side, a plurality of transverse walls dividing the space between the aisle wall and a side wall into a plurality of separate room spaces, an aisle door for each room, a toilet enclosure at the aisle wall on one side of the aisle door, a bed in the room located at a distance from the toilet enclosure sufficient to permit passage of the occupant between the bed and the toilet enclosure, partition means for separating the toilet enclosure from the rest of the room, said partition means including a movable closure in the passage between the bed and toilet enclosure, one transverse partition wall extending outwardly from said toilet enclosure, and a basin in said room outside said toilet enclosure and located at the juncture of the transverse wall and toilet enclosure, the partition wall which extends from said toilet enclosure including means providing communication between two adjacent rooms.

8. In a passenger vehicle having side walls, floor, and roof, the combination therewith of a longitudinal side aisle having an aisle partition wall at one side, a plurality of transverse walls dividing the space between the aisle wall and a side wall into a plurality of separate room spaces, an aisle door for each room, a toilet enclosure at the aisle wall on one side of the aisle door, a bed in the room located at a distance from the toilet enclosure sufficient to permit passage of the occupant between the bed and the toilet enclosure, partition means for separating the toilet enclosure from the rest of the room, said partition means including a movable closure in the passage between the bed and toilet enclosure, one transverse partition wall extending outwardly from said toilet enclosure, and a basin in said room outside said toilet enclosure and located at the juncture of the transverse wall and toilet enclosure, the partition wall which extends from said toilet enclosure having a hinged part which is movable to provide communication between the two adjacent rooms.

9. In a passenger vehicle having side walls, floor, and roof, the combination therewith of a longitudinal side aisle having an aisle partition wall at one side, a plurality of transverse walls dividing the space between the aisle wall and a side wall into a plurality of separate room spaces, an aisle door for each room, a toilet enclosure at the aisle wall on one side of the aisle door, a bed in the room located at a distance from the toilet enclosure sufficient to permit passage of the occupant between the bed and the toilet enclosure, partition means for separating the toilet enclosure from the rest of the room, said partition means including a movable closure in the passage between the bed and toilet enclosure, one transverse partition wall extending outwardly from said toilet enclosure, and a basin in said room outside said toilet enclosure and located at the juncture of the transverse wall and toilet enclosure, the partition wall which extends from said toilet enclosure having a hinged part which is movable to provide communication between two adjacent rooms, there being a basin on each side of the partition which extends from the toilet enclosure.

10. The compartment arrangement as set forth in claim 8, further characterized by the fact that oppositely identical rooms are arranged on opposite sides of the partition with the hinged part, that beds are arranged on transverse walls distant from said communicating wall and that toilet enclosures and basins for the rooms are provided on opposite sides of said communicating wall.

11. In a passenger vehicle having side walls, floor, and roof, the combination therewith of a longitudinal side aisle having an aisle partition wall at one side, a plurality of transverse walls dividing the space between the aisle wall and a side wall into a plurality of separate room spaces, an aisle door for each room, a toilet enclosure in each room at the aisle wall including movable means to separate it from the rest of the room for private occupancy, a movably mounted bed in each room, one of said transverse walls having movable portions to provide communication between two adjacent rooms, and a basin on each side of the plane of the movable transverse wall portion at the toilet enclosure, the basins at the two sides of the wall being arranged together as a pair on the outboard side of the toilet enclosures so that the basins and toilets of the rooms are separated for independent private use at the same time.

12. In a passenger vehicle having side walls, floor, and roof, the combination therewith of a longitudinal side aisle having an aisle partition wall on one side, a plurality of transverse partition walls dividing the space between the aisle wall and a side wall into a plurality of separate room spaces, the aisle wall having a doorway and door for each room, transverse bed accommodations located adjacent and extending along a transverse wall in a room, a toilet located adjacent the other transverse wall in the room and also adjacent the aisle wall at a distance longitudinally from said bed accommodations, means forming a small enclosure for said toilet in the corner between the aisle wall and said other transverse wall which leaves a passage space between the small toilet enclosure and bed from the aisle door into the room, enclosure means forming with part of the small toilet enclosure a larger toilet enclosure in the form of a vestibule inside the aisle door, said vestibule including within its area the space embraced by said small toilet enclosure, said larger toilet enclosure being formed in part by movable partition means extending across the passage space between the bed and small toilet enclosure, and a basin in the room outside and immediately adjacent the small toilet enclosure at the side of the small toilet enclosure distant from the aisle wall.

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