

No. 619,174.

Patented Feb. 7, 1899.

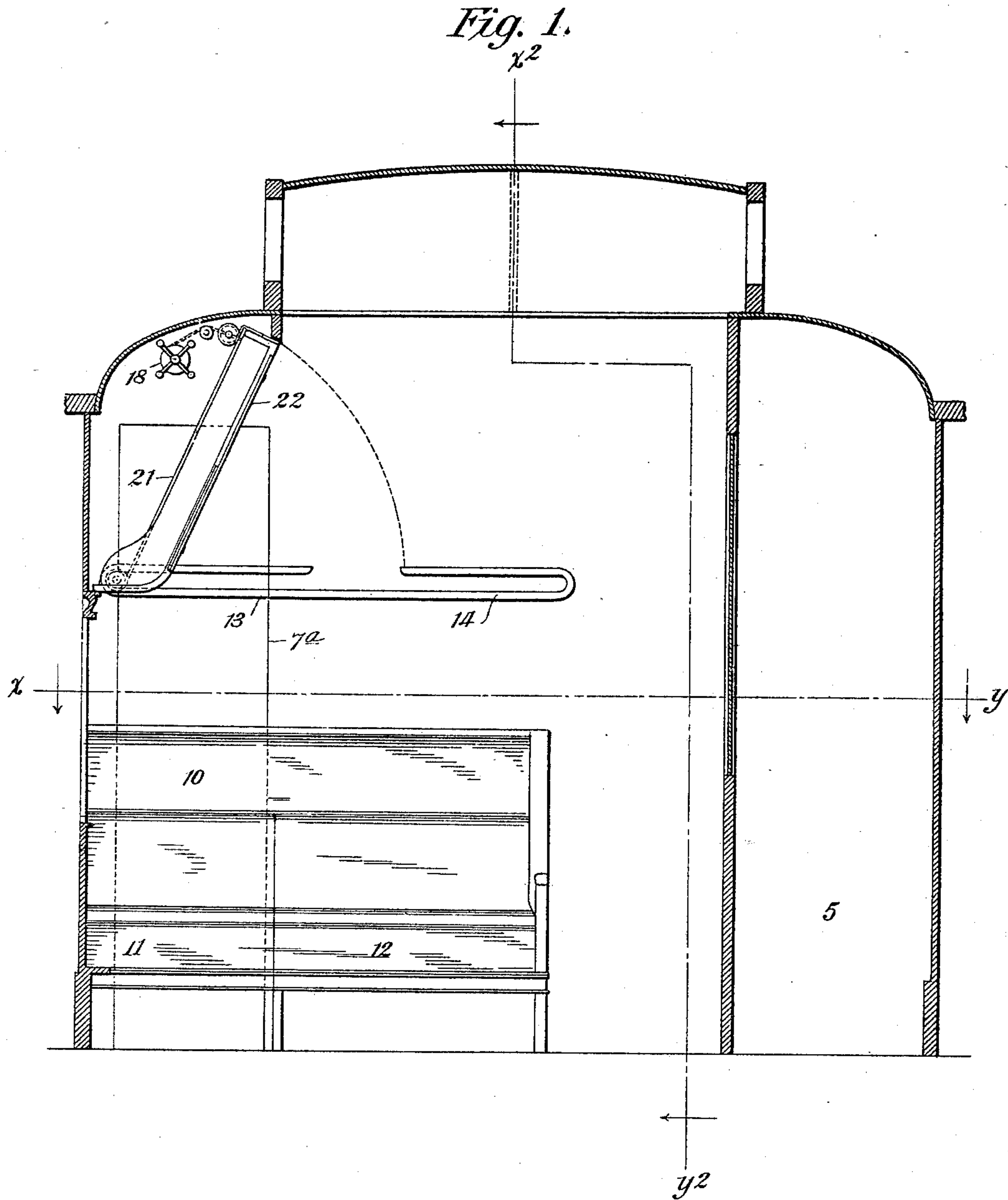
H. C. HASKINS.

SLEEPING CAR.

(Application filed May 26, 1898.)

(No Model.)

5 Sheets—Sheet 1.



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No. 619,174.

**H. C. HASKINS,
SLEEPING CAR.**

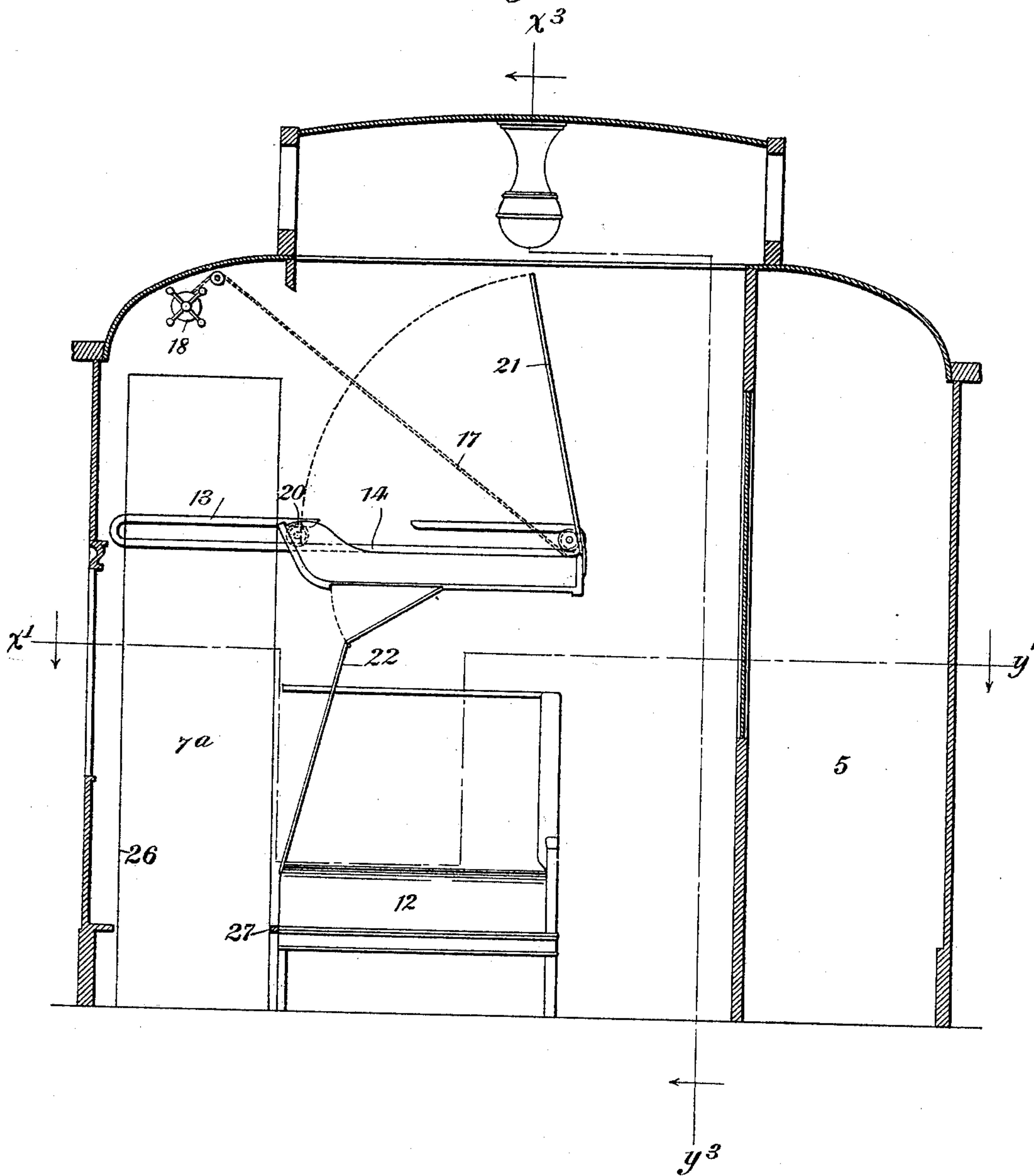
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Fig. 2.



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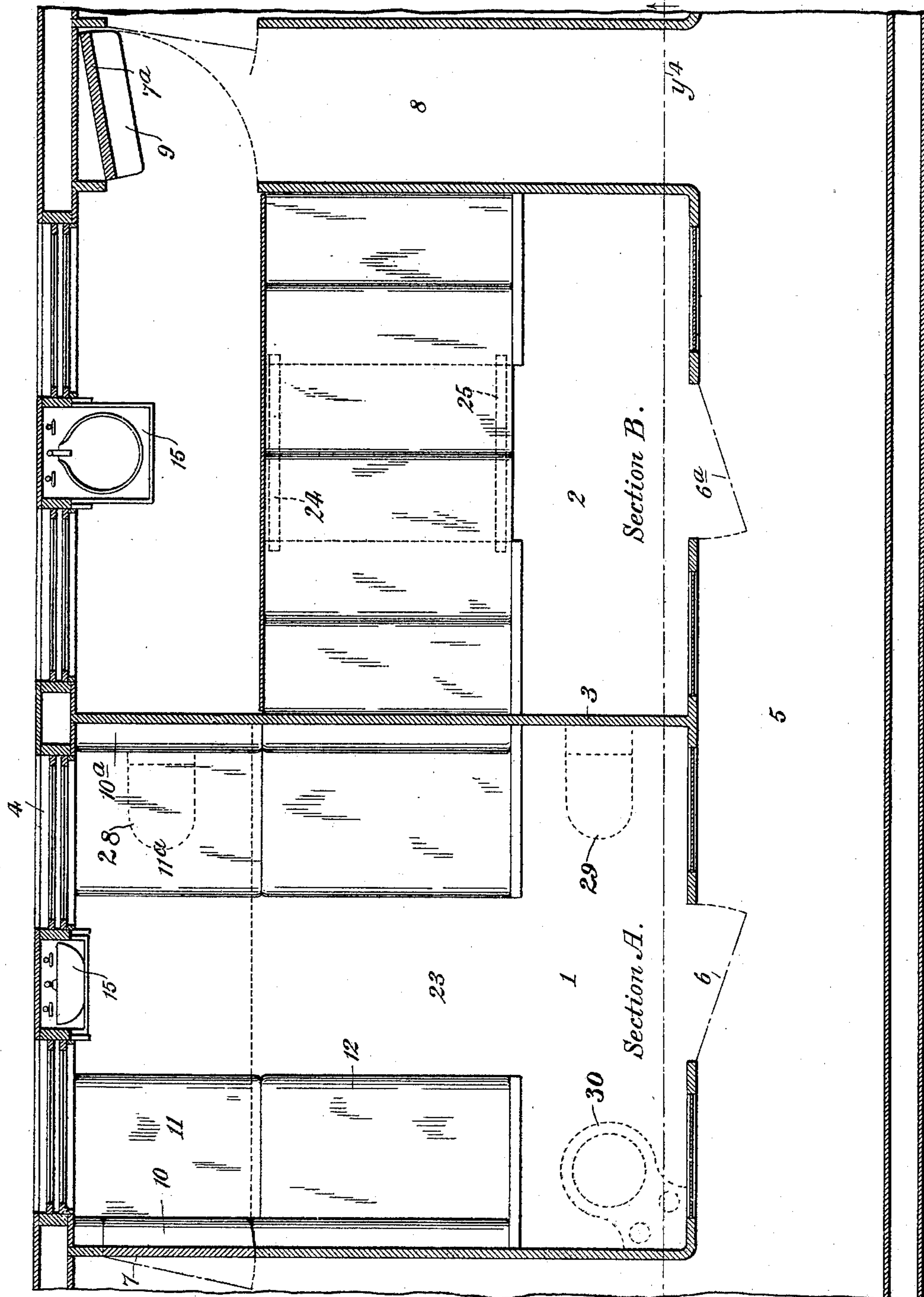
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Fig. 3,

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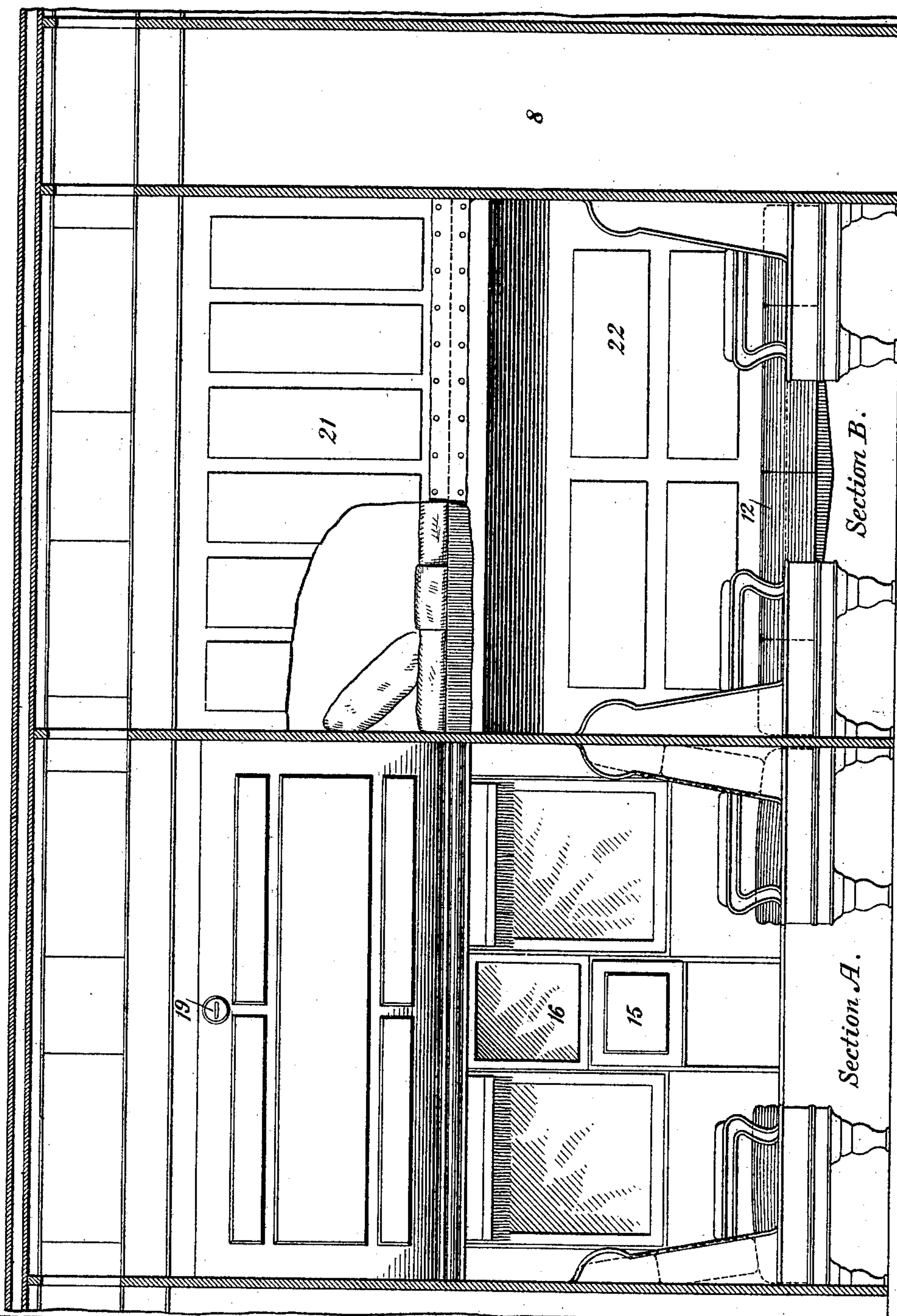
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5 Sheets—Sheet 4.



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Fig. 4.

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No. 619,174.

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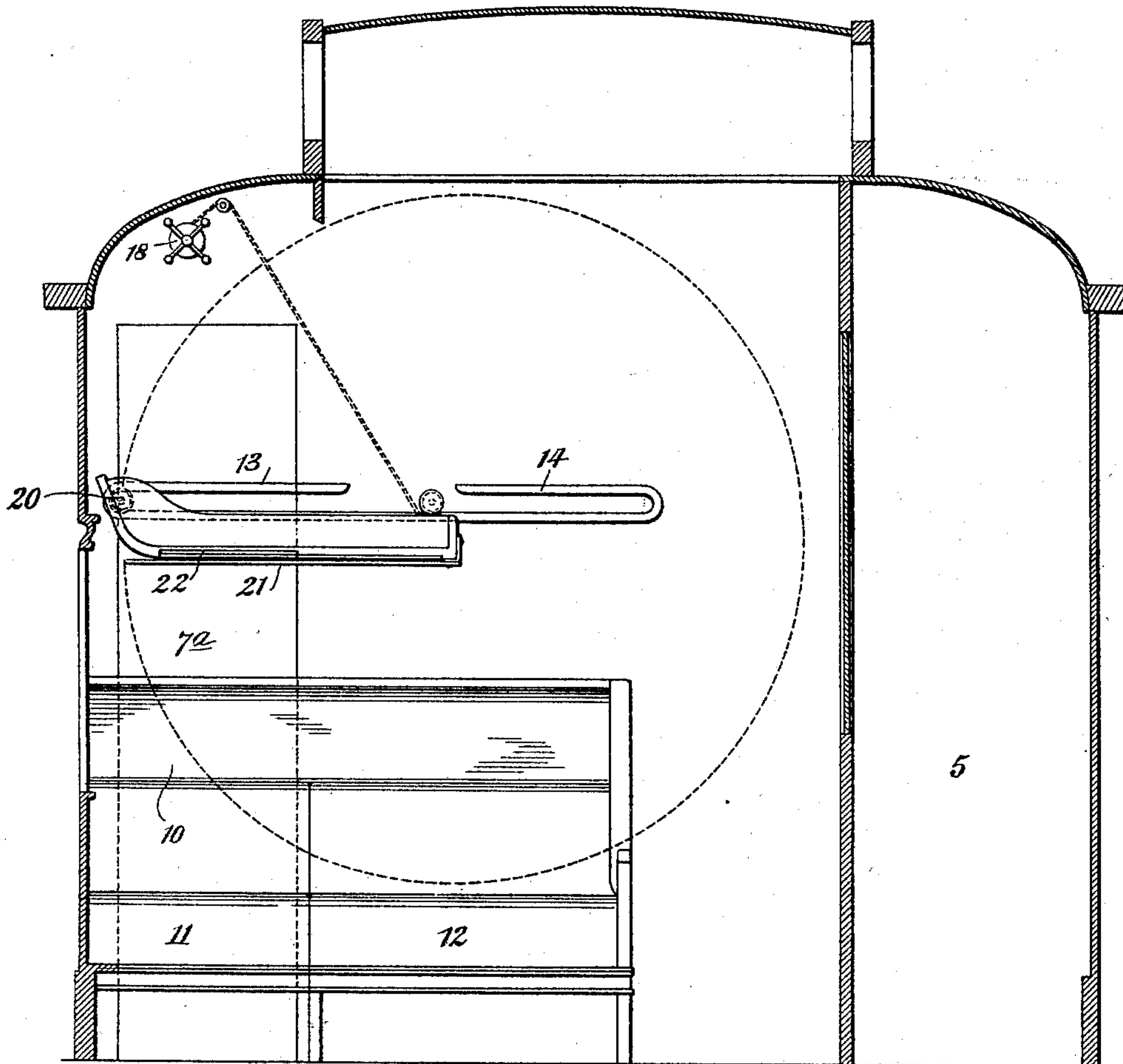
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(Application filed May 26, 1898.)

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5 Sheets—Sheet 5.

Fig. 5.



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UNITED STATES PATENT OFFICE.

HARRY C. HASKINS, OF NEW YORK, N. Y.

SLEEPING-CAR.

SPECIFICATION forming part of Letters Patent No. 619,174, dated February 7, 1899.

Application filed May 26, 1898. Serial No. 681,842. (No model.)

To all whom it may concern:

Be it known that I, HARRY C. HASKINS, a citizen of the United States, and a resident of New York, county of New York, State of New York, have invented certain new and useful Improvements in Sleeping-Cars, of which the following is a specification.

This invention relates to sleeping-cars, the object of the invention being to permit each compartment or state-room of a compartment-car to be subdivided into two independent sleeping-rooms, each provided with conveniences of independent access from the aisles or corridors of the car and with sufficient room for dressing, thus greatly economizing space and permitting a maximum number of sleeping-rooms to be provided for each car.

A further object is to permit each compartment to be arranged as a single room having an upper and a lower berth. Thus such a compartment may be used in common by two or more parties or may be subdivided, so as to provide absolute privacy for the occupants of the several berths.

In carrying out the invention a car is subdivided into a series of state-rooms, which in day service resemble the state-rooms of the standard Pullman palace-car now in use. Each state-room is provided with an upper berth or bunk adapted to fold against the side wall of the car above the window-line, extending along the compartment longitudinally of the car and during day service occupying an inclined position, the upper side of the berth resting against or near the roof of the car. On the floor, extending transversely of the car, are two seats or sofas facing each other a sufficient distance apart for knee-room and extending from the side wall of the car any desired distance along the compartment-partitions. The compartments are arranged in pairs, a dividing wall or partition extending from the outer wall of the car to a wall extending longitudinally of the car, between which and the opposite wall of the car is a corridor or aisle for the use of passengers in passing through the car or gaining access to the several compartments. Each compartment is provided with two doors, one of which opens upon the corridor just referred to and the other of which opens upon a side aisle or corridor formed between adjacent pairs of

compartments. This latter door is blocked in day service by the seat or sofa above referred to. The sofa is made sectional, the cushioned backs and seats being formed in two or more pieces. The frame from the door into the lateral corridor to the end of the sofa is stationary or fixed, and the upholstered back and seat is provided with removable sections 10 11, which rest upon cleats on the sofa-frame and the side wall of the car, as shown at 26 27, and which may be used at night or removed and placed on the floor in space 23, (see Figure 3,) so that when in day service the door is closed the sofa is complete from the window to its inner end; but in night service the portion adjacent to the window or side wall of the car may be removed, thus freeing the door and forming an entrance. My invention also provides for independent washbasins and closets for each sleeping-room. The door leading from the side corridor, upon which part of the framework of the sofa is mounted, is provided with rails or guides to permit convenient shifting of the upper berth, which may be first lowered to a horizontal position and then drawn out on the rails (part of the latter being secured to the door above mentioned and part to the end wall of the compartment) to a central position in the compartment, after which two movable partitions, one extending from the rear of the upper berth to the roof and the other connecting the upper and lower berths, may be fixed in place, thus subdividing the compartment into two chambers, one accessible from the main corridor and the other from the side corridor. The door from the side corridor, which was obstructed during the day, is cleared by the change of position of the upper berth and the movable parts of the sofa, so as to afford an entrance for night use. With the construction thus organized the compartment may, if desired, be made up into a single sleeping-room with an upper and lower berth, access to which may be had through the door into the main corridor, and the mode of making up the berths for such use is precisely analogous to that which obtains in the usual Pullman service; but when a compartment is to be subdivided for the use of independent occupants the movable sections of the two sofas are removed, wooden trusses be-

ing placed across the space between the frames of the fixed sections and the cushioned seats and backs being arranged to form a mattress, the upper berth is drawn on the guide-rails to a position central in the compartment, and the partitions set to form two chambers from floor to roof, in one of which is the lower berth and in the other the upper berth. My invention therefore comprises a compartment-car having a movable upper berth normally resting against one wall of the compartment and adapted to be moved to a central position and chairs, seats, or sofas occupying a position beneath the upper berth, with means for completing from the floor or the lower berth to the roof a dividing-wall in the compartment, forming two sleeping-rooms containing, respectively, an upper and lower berth.

The invention comprises also other features of novelty, which will be hereinafter more fully described, and will be definitely indicated in the claims appended to this specification.

In the accompanying drawings, which illustrate the invention, Fig. 1 is a transverse section of a compartment-car embodying my improvements, showing the parts arranged for day service. Fig. 2 is a corresponding view to Fig. 1, showing the parts arranged for night service. Fig. 3 is a horizontal section of part of a car on two different section-planes, section A being taken on the plane xy of Fig. 1, looking down, and section B being taken on the plane $x'y'$ of Fig. 2, looking down. Fig. 4 is a vertical section on two planes, section A being on the plane x^2y^2 of Fig. 1, looking in the direction of the arrows, and section B being on the plane x^3y^3 of Fig. 2. Fig. 4 shows in sectional elevation two adjacent state-rooms, one arranged for night service and the other for day service, as would be seen on section x^4y^4 of Fig. 3; and Fig. 5 is a sectional view showing a state-room with upper and lower berths arranged in a single state-room.

As seen from Fig. 3, 1 and 2 represent adjacent rooms or compartments provided with a fixed wooden partition 3. These rooms extend from the side walls 4 of the car transversely across the car a distance to admit of a corridor 5 extending lengthwise of the car of sufficient width to permit comfortable movements of passengers. In each compartment is provided two doors, one of which, as 6 6^a, opens upon a longitudinal corridor, and the other, as 7 7^a, opens upon a transverse corridor 8, formed between adjacent pairs of compartments. The doors 6 6^a may be of any usual construction. The doors 7 7^a, however, are intended only for night use, and they carry a shelf or cleat, as seen at 9, adapted to form a continuation of the framework of the sofa or chair, so that when the door is closed, as shown in section A of Fig. 3, the cleat will form a support for the removable cushions 10 11 of a sofa 12, extending from

the outer wall of the car any desired distance along the compartment. The upper part of the door 7 7^a carries a part 13 of a rail, (see Fig. 2,) upon which bears a roller mounted in the lower corner of the upper berth. The continuation of this rail 14 is mounted on the compartment-partition. Upon the fixed partition dividing each pair of compartments is mounted a corresponding rail similar in all respects to that indicated by 13 and 14, except that it is formed in one piece. Along the outer wall of the car and between the sofas may be placed a folding washbasin 15 and a mirror 16 above the same, if desired. Secured to the outer ends of the upper berth are straps 17, each connected to a spring counterbalance 18 at the ends of the berth to permit easy management. The upper berth is provided with a latch 19, by which it may be locked in the position shown in Fig. 1 during day service. At night it can be swung or lowered to a horizontal position, as indicated by the dotted line in Fig. 1, and then drawn forward into the middle of the compartment, such movement being rendered easy by the rollers 20, which run in the rails secured to the end walls of the compartment. The upper berth is supplied with thin paneled boards or partitions nearly or quite the length of the upper berth, capable of completing the dividing-wall between the two sections of the compartment. One of these boards is indicated at 21, and may swing by a strap or hinge to a position (indicated in Fig. 2) extending upward to a point close to the roof of the car. It can also be swung around in a complete circle, as shown by the dotted line in Fig. 5, to the position indicated by 21, same figure, when the upper berth is to be made up against the wall of the car, with the lower berth beneath and both in the same room. The lower section 22 of the partition may be formed in two pieces hinged together and to the outer side of the upper berth and capable of folding into the recessed face of the same in its day position, as indicated in Fig. 1, being secured in its folded position by any suitable device. When opened up, as shown in Fig. 2, it rests upon a shoulder in the frame of the sofa, forming the lower berth, and may be latched in that position. While I prefer to use the movable board partitions above described, my invention is not limited thereto, as I may employ a flexible wooden partition similar to desk-tops, or roll-curtains, or other suitable devices for forming the dividing-wall between the two rooms. With the construction thus described it will be seen that the upper berth in its daylight position obstructs the side door 7 7^a, but when moved forward to its night position the door is cleared for use.

The seats or sofas may be made into a wide berth or a narrower berth may be formed by using only one section of the seats and backs. The former will be preferable where the state-room is not to be subdivided, in which case the upper berth may or may not be made up.

If made up, it will form an upper berth in the same room with the lower berth. When, however, the compartment is subdivided, both berths occupy a central position in the main compartment and stand in a vertical plane one over the other. The arrangement of the upper berth has already been described. To form the lower berth, the upholstered seats of either or both sections are pushed together and the backs lowered, thus forming a soft bed-bottom, as indicated at section B of Fig. 3. To form a substantial support for the upholstered seats, removable wooden trusses 24 25 may be arranged to bridge the frames of the fixed sections of opposite sofas, as indicated at section B in Fig. 3. This mode of making up the bed is similar in all respects to that which obtains in the ordinary sleeping-car service. No further description, therefore, is thought necessary. During the day the bedding can be stored behind the closed upper berth in the ordinary manner. Each of the subdivisions of the main compartment may be provided with a water-closet or hopper 28 29, if desired, the one on the outside of the car being formed under the cushioned seat 11^a and that of the inner room being placed at one side of the door. The washbasin of the inner room may be placed at 30. It will thus be seen that a much greater number of independent sleeping-rooms may be provided than is possible with the ordinary compartment system of construction now in common use and still each passenger may have more conveniences than are at present obtainable, being given absolute privacy in dressing and undressing and all necessary toilet conveniences and having, moreover, independent means of access to and from his room.

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

1. A compartment for a sleeping-car having a movable upper berth folding against one of the compartment-walls for day service and movable to an intermediate position in the compartment for night service, a lower berth in a vertical plane below the night position of the upper, adjustable partitions so constructed as to connect the sides of the two berths at night and extend from the rear of the upper berth to the car-roof, and independent entrances to the two sleeping-rooms thus formed.

2. A compartment for a sleeping-car having a folding upper berth movable along guides mounted on the compartment-walls to a central part of the compartment, a lower berth in the central part of the compartment, partitions for connecting the berths and forming two independent sleeping-rooms in the compartment, and independent entrances to the sleeping-rooms.

3. A compartment for a sleeping-car provided with a movable upper berth and a convertible lower berth, means for making them

into berths against the wall of the car, or centrally in the compartment, and adjustable vertical partitions to subdivide the compartment into two sleeping-rooms with independent entrances and each containing a berth.

4. A compartment for a sleeping-car provided with a movable upper berth normally folded against the sides of the compartment and movable to a central position in the compartment between two entrances, and adjustable partitions for dividing the compartment into two independent rooms.

5. A sleeping-car having a plurality of compartments arranged in pairs, a main corridor through the car, side corridors to each compartment, entrances communicating with the main and side corridors, respectively, and means for subdividing each compartment into two independent sleeping-rooms accessible, respectively, from the two entrances.

6. A compartment for a sleeping-car having a movable upper berth normally folded against the outer car-wall but movable to a central part of the compartment for night use, a lower berth below the night position of the upper when moved, said lower being convertible into seats for day use, removable partitions dividing the compartment into two independent bed-rooms, and separate entrances to the bed-rooms.

7. A compartment for a sleeping-room having a movable upper berth normally folded against the outer car-wall but movable to a central part of the compartment for night use, a lower berth below the night position of the upper when moved, said lower being convertible into two seats on the sides of the compartment for day use, removable partitions dividing the compartment into two independent bed-rooms, and entrances on two adjoining sides of the compartment for the two rooms one being blocked during the day by the converted seat.

8. A compartment for a sleeping-car having a folding upper and a convertible lower berth on the outer car-wall, means for shifting the berths to a central position in the compartment, adjustable partitions making the compartment two independent sleeping-rooms containing the respective berths, and separate entrances for the two sleeping-rooms.

9. A compartment for a sleeping-car having a movable upper berth normally folded against the wall but movable to a central part of the compartment for night use, a stationary lower berth below the night position of the upper berth when moved, said lower being convertible into two seats on opposite sides of the compartment for day use, removable partitions dividing the compartment into two independent bed-rooms, independent entrances for the two bed-rooms, and rails on the compartment-walls for permitting the upper berth to be shifted, one of said rails having one section secured to one of the doors.

10. A compartment for a sleeping-car having a folding upper berth normally folded

against a compartment-wall, but movable to
a central position, a convertible lower berth,
and folding partitions on the sides of the
berth nesting in the berth during day service
5 and so constructed as to connect the berths
at night and divide the compartment into in-
dependent bed-rooms.

In testimony whereof I have hereunto sub-
scribed my name this 24th day of May, A. D.
1898.

HARRY C. HASKINS.

Witnesses:

ROBT. H. READ,

ALICK G. MACANDREW.