

(No Model.)

E. G. ALLEN.
SLEEPING CAR.

No. 445,870.

Patented Feb. 3, 1891.

Fig. 1.

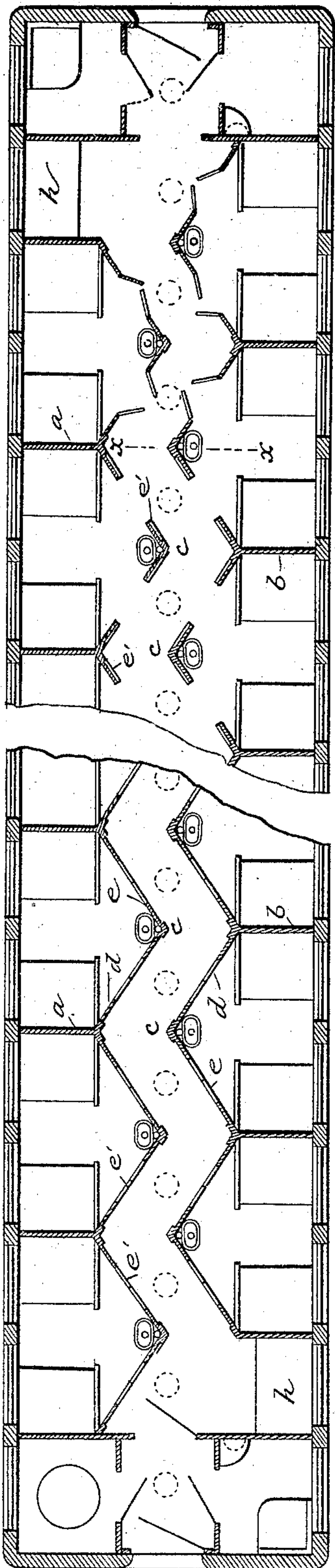


Fig. 4.

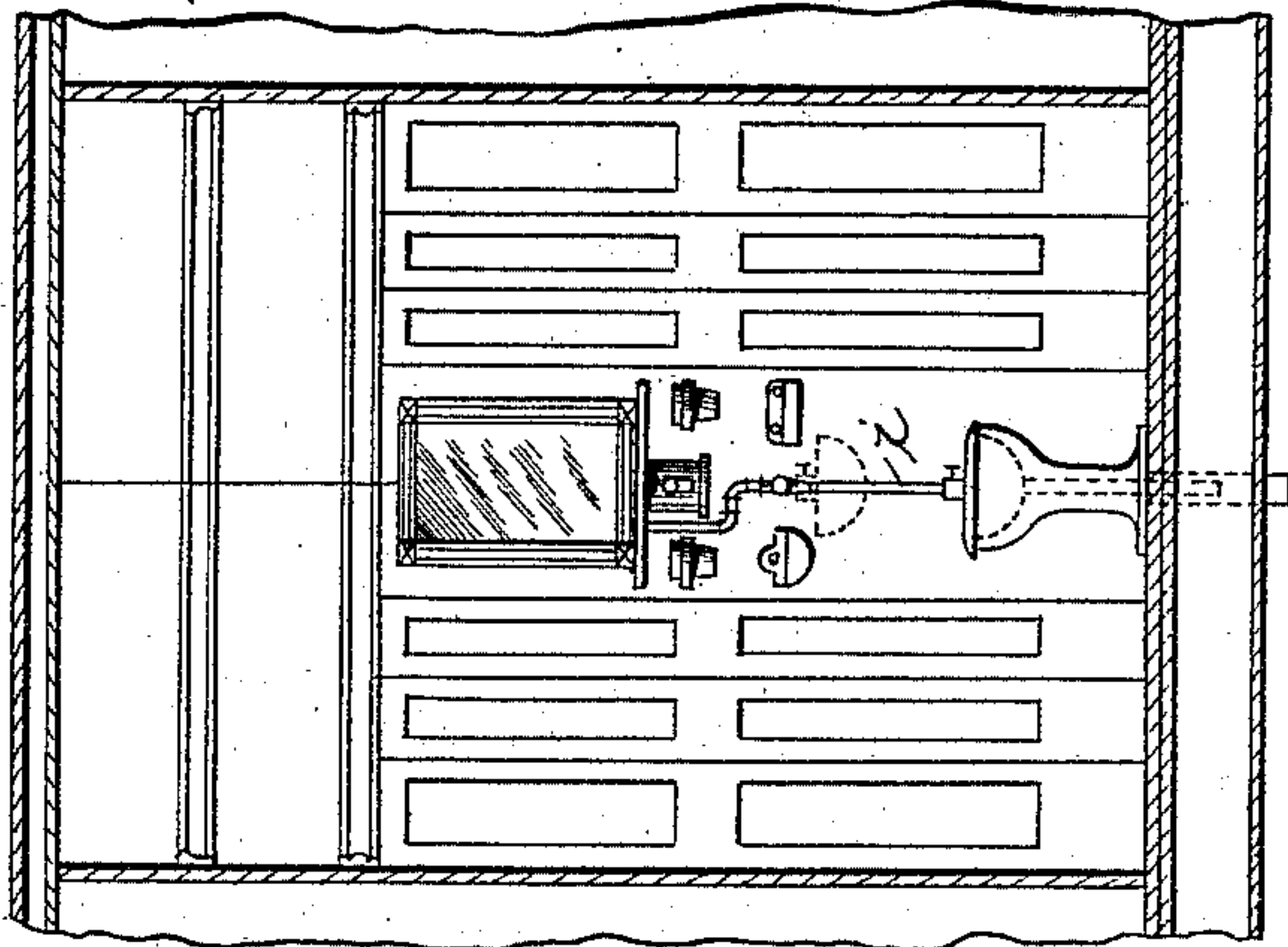
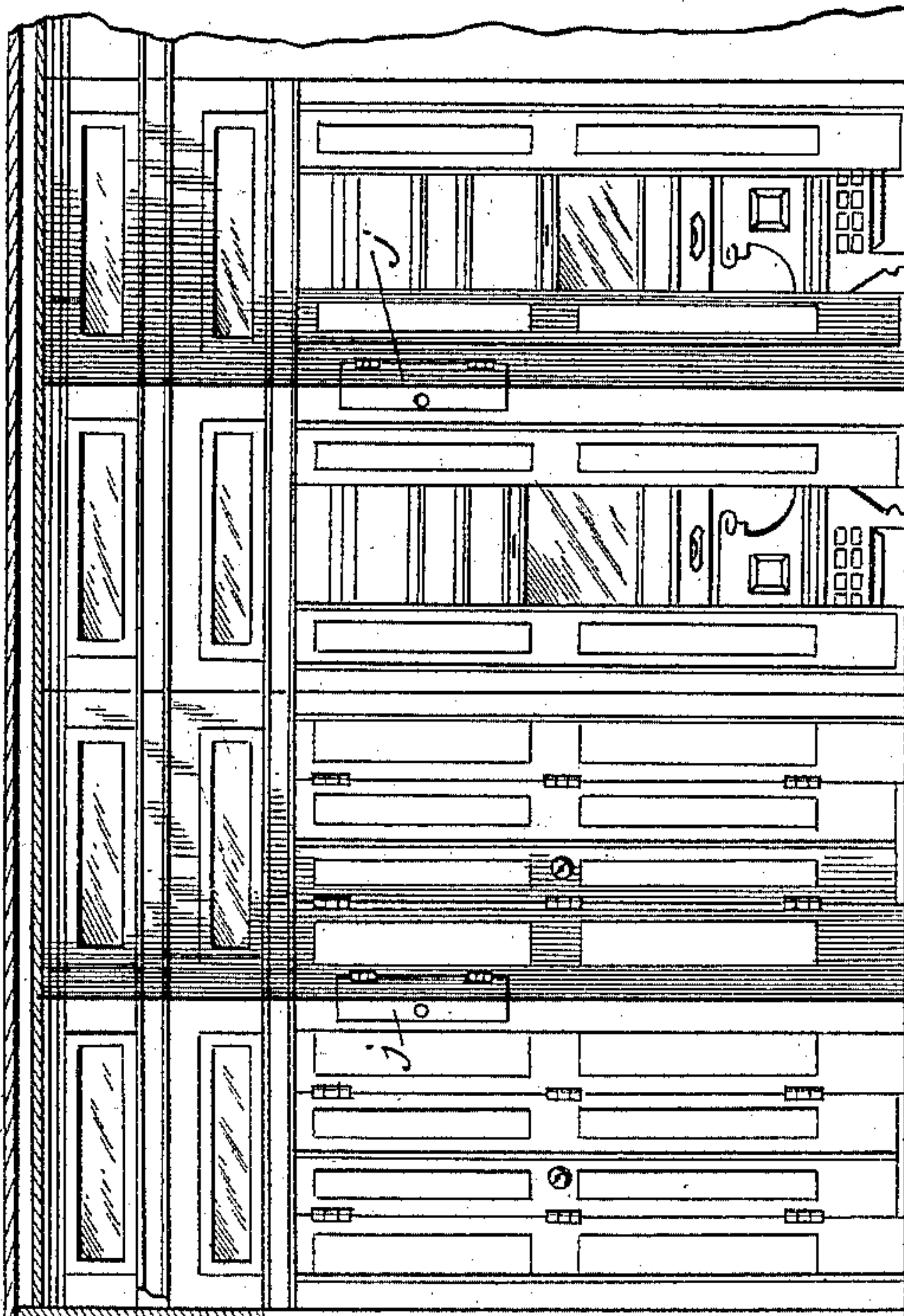


Fig. 2.



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ELBRIDGE G. ALLEN, OF NEW HAVEN, CONNECTICUT.

SLEEPING-CAR.

SPECIFICATION forming part of Letters Patent No. 445,870, dated February 3, 1891.

Application filed June 23, 1890. Serial No. 356,395. (No model.)

To all whom it may concern:

Be it known that I, ELBRIDGE G. ALLEN, a citizen of the United States of America, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Sleeping-Cars, of which the following is a specification.

My invention is an improvement upon the railway-car which is the subject of an application filed by me on the 18th day of March, 1890, No. 344,297, and its object is to provide a car with a series of compartments which shall take up a minimum amount of space, but at the same time provide ample facilities for dressing and toilet purposes within each compartment. I have shown the car as provided with closed compartments alone; but it will be understood that I may utilize one or more of the compartments, if desired, in any ordinary car or in connection with the ordinary open sections of the Pullman system, if this be found desirable.

In illustrating my present invention as applied to a car throughout, I have in mind the convenient and advantageous arrangement of the closed compartments, enabling me to increase the ordinary carrying capacity of the car while at the same time adding very materially to the comfort and convenience of the occupants of the car.

In the accompanying drawings, Figure 1 is a sectional plan view of the car provided with my improved arrangement of compartments. Fig. 2 is an elevation of the front of one of the compartments. Fig. 3 is a view on the line xx of Fig. 1, and Fig. 4 is a side elevation, with the wall of the compartment in section, of the lavatory. Fig. 5 is a detail view of the corner of the compartment.

As in my former application, it is my intention in the present case to have the car to which my invention is applied of ordinary construction, and this may contain all the known improvements to add to the comfort and safety of the occupants. The berths may be similar to those of the ordinary Pullman cars, but instead of having the sections open I arrange a closed compartment for each section, as shown.

Permanent end walls $a b$ are provided to take the place of the ordinary backs of the

Pullman seats, and thus remaining in place at all times render unnecessary the use of the removable partitions now in use between the ordinary Pullman sections. The inside wall of the car forms one side wall of the compartment, and the opposite side wall is formed by partitions which extend at an angle to the line of the car from the permanent end partitions $a b$ to the point c , where these partitions meet, forming an angular space between these partitions and the line of the berths. Similar compartments are arranged along the entire side of the car and on the other side a series of like compartments, the only difference being as to the position of the compartments, those upon one side being arranged diagonally opposite those on the other, as by this means the V-shaped extension of the inner side walls of one compartment comes directly opposite the V-shaped depression formed by the receding partitions $d e$ of the opposite compartments. Thus a zigzag passage-way is provided along the center of the car between the compartments, giving ample room, while the line of partitions afford support to those walking along the length of the car during the passage of the train.

The angular partitions forming the inner side walls of the compartments are provided with a door or doors, as shown, and I prefer to provide double doors, a set in each angular wall, as shown at e' , and in this case I provide a recess f in the face of the partition on the aisle side of a depth equal to the thickness of the door, so that during the day-time, or when privacy is not desired, the doors may be swung back into this recess, which will bring them flush with the line of the partitions and thus they will be out of the way entirely. It will be seen, also, that should all of the doors be swung back in this manner practically open sections are provided, and the occupants of the seats will have an unobstructed view through the windows on the opposite side of the car, as the doors in opposite berths are substantially in line and also in line with the ordinary position of the occupant of the seat.

I do not limit myself to the use of swinging doors, as shown, as I may provide sliding doors of any improved construction, or I may have portieres or curtains, and instead of

having doors in each position of the inside walls of the compartments a single ordinary door may be sufficient.

I have aimed to add as much as possible to the comfort of the occupant of each compartment, and with this end in view I have provided means by which the occupant or occupants of each compartment may make a complete toilet without leaving their compartment. In the angle formed by the meeting of the partitions of the inside wall of the compartment I arrange a basin, which has sliding connection on a water-pipe or rod *i* by means of a set-screw and collar, so that it may be raised to a proper position when in use, and when not in use it is adapted to be lowered until it fits within a hopper, as shown in Figs. 3 and 4, over which an upholstered cover may be placed to conceal the basin from view, and at the same time provide a seat. The end of the hopper opens through the bottom of the car, and the basin is provided with a rubber tube, so as to discharge its contents through the hopper opening. The faucets for the water may have a swivel-connection with their pipes, so as to be swung back out of the way when not in use, and thus offer no obstruction to any one desiring to use the seat formed by the cover of the hopper. Above the faucets I provide a shelf for a water-cooler, and in front of this a mirror may be used, and below the mirror are the ordinary supports for glasses and toilet articles. A small door *j* may be arranged at the meeting point of the partitions in line with the water-cooler, so that it may be removed and replaced without disturbing the occupants of the compartment.

The car may be finished as to interior decorations and appointments in any desired manner.

As every compartment is provided with a lavatory, it will be seen that no lavatory is necessary at the end of the car, and thus this space is utilized in adding another compart-

ment to the car. At each end of the car a half-section will be left, and this may be utilized as a sofa-seat, as shown at *h*.

I claim as my invention—

1. In a sleeping-car, a closed compartment having end walls and an inner side wall formed by partitions extending from the end walls at an angle to the line of the car, substantially as described.

2. In a sleeping-car, a closed compartment having end walls and an inner side wall formed by partitions extending from the end walls at an angle to the line of the car, and a lavatory arranged within the compartment in the angle formed at the meeting-point of the partitions, substantially as described.

3. In a sleeping-car, a closed compartment having permanent end walls and an inner side wall formed by partitions extending at an angle from the end walls, with door-openings formed centrally of each partition, substantially as described.

4. In a sleeping-car, a series of closed compartments on one side of the car, with a series of like compartments on the opposite side, the compartments upon one side being diagonally opposite the compartments on the other side and a zigzag passage between, substantially as described.

5. In a sleeping-car, a closed compartment having end walls and an inner side wall formed by partitions extending at an angle to the line of the car, a discharge-hopper arranged in the angle formed by the partitions, a vertically-adjustable basin adapted to fit within the hopper, and a seat to cover the same, substantially as described.

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

ELBRIDGE G. ALLEN.

Witnesses:

ELIAS E. PRATT,
HURLBUT A. IVES.