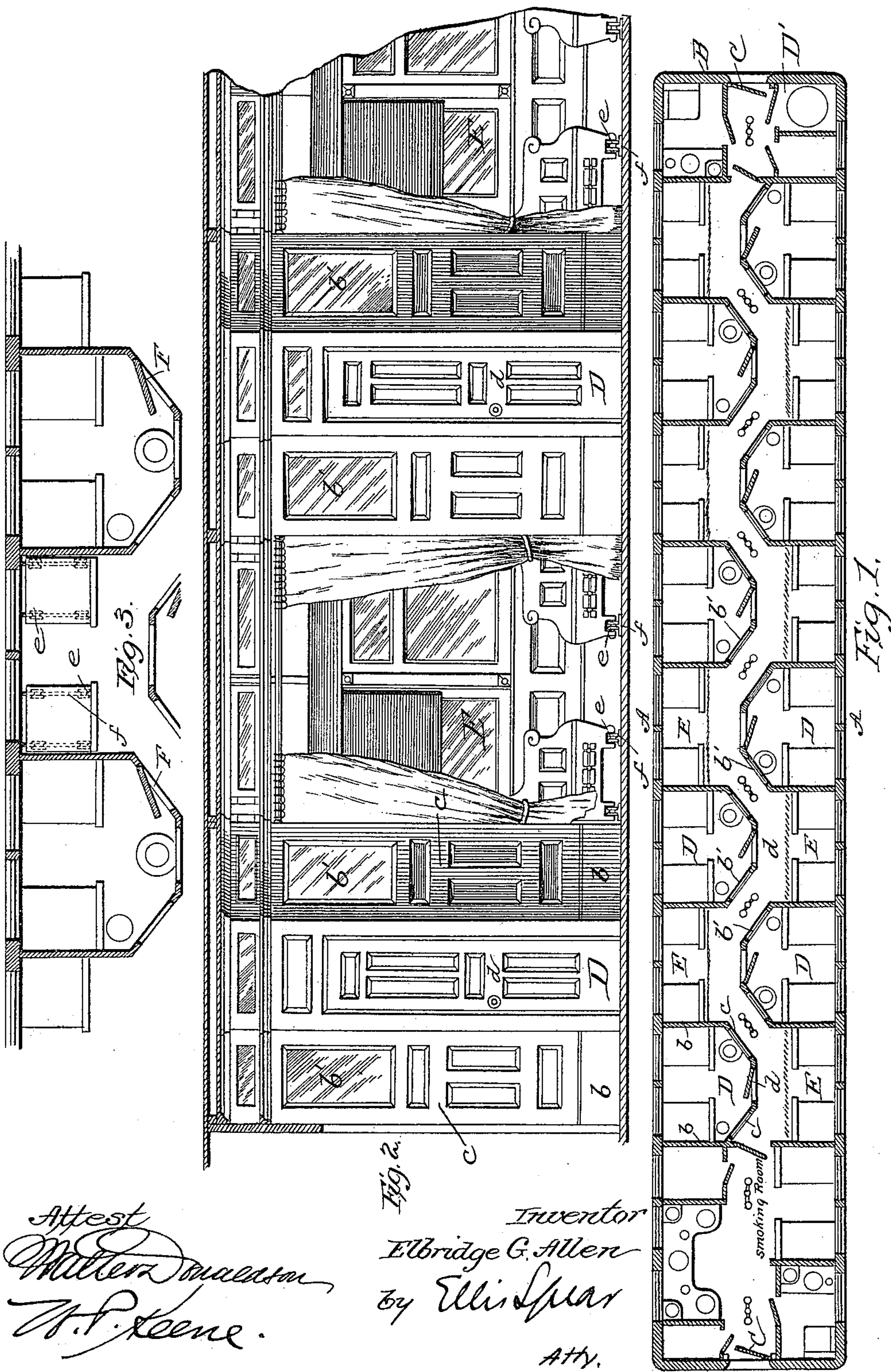


(No Model.)

E. G. ALLEN.
SLEEPING CAR.

No. 440,295.

Patented Nov. 11, 1890.



Attest
Miller
W. F. Keene.

Inventor
Elbridge G. Allen
by Ellis Spear
Att'y.

UNITED STATES PATENT OFFICE.

ELBRIDGE G. ALLEN, OF NEW HAVEN, CONNECTICUT.

SLEEPING-CAR.

SPECIFICATION forming part of Letters Patent No. 440,295, dated November 11, 1890.

Application filed March 18, 1890. Serial No. 344,297. (No model.)

To all whom it may concern:

Be it known that I, ELBRIDGE G. ALLEN, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Sleeping-Cars; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement in railway-cars of the class designated as "sleepers," and consequently relates to the interior arrangement, whereby greater comfort and privacy is secured without diminishing the capacity of the car as to the number of occupants which are carried in an ordinary Pullman car of a certain length. The lack of proper dressing-room has been a serious inconvenience to the occupants of the ordinary Pullman cars, so much so that a demand for better facilities has been partially met, so far as the traveling public is concerned, by the compartment-cars provided with a passage along one side of the car and with a series of complete staterooms or chambers along the other side; but in a car of the latter type so much space is taken up as to seriously diminish the carrying capacity of the car, which proves an objection to the railway companies, thus preventing the universal adoption of this style of car. Further than this, the compartment-car is objectionable for the reason that while it affords decided advantages to couples over the ordinary sleeper it does not provide means for isolated individuals, as in the case of a lady and gentleman traveling alone. Hence it is the object of my invention to provide in one car the compartment system combined with the ordinary Pullman berth or berths and to so arrange the berths and compartments as to utilize all the available space of the car without diminishing its ordinary carrying capacity, to provide for the comfort of the occupants of the compartments in dressing, as well as to give more room to the occupants of the berths for the same purpose than they have ordinarily had, and at the same time avoid the obstruction of the passage-way.

In the accompanying drawings, Figure 1 represents a plan view of the car in section, showing the relative arrangement of the compartments and open sections with their berths

and the ordinary end compartments. Fig. 2 represents an elevation, enlarged, of the car upon one side of the passage-way, this elevation being broken away at the ends. Fig. 3 is a detail view.

The car which I have shown as containing my improved construction of closed compartments and open sections is of the ordinary make, and it will be understood that I do not limit myself as to the construction of the car itself, but desire it to be understood that my improvements may be applied to a car throughout, or it may be found desirable to equip a section of the car with one or more of my improved compartments and sections, the remainder of the car being of any ordinary or improved arrangement.

The side walls of the car are represented at A, and the end walls at B, with a centrally-arranged door at each end, as at C. At one end is a compartment D', which is made to contain the heater, and adjoining this is a second compartment which may be used as a locker, and upon the opposite side of the passage a toilet-room may be provided, these compartments being as ordinarily arranged. At the opposite end upon one side of the car is arranged the ordinary toilet-room for men and on the opposite side the necessary lockers.

Between two of the locker-compartments I arrange the wash-stand for the men, provided with its central portion cut out, so as to afford ready access to it, with one bowl in the middle and end wash-bowls, so as to facilitate the making of toilets of the occupants of the car.

Opposite the wash-stand I provide an ordinary upper and lower berth as now used in the Pullman system, and this section, together with the passage-way between it and the wash-stands and lockers, may be used as a smoking-room, a door *a* separating this part of the car from the main portion.

Upon one side of the car, at D, I have shown my improved compartment, which is provided with end walls *b b*, extending from the floor to the ceiling of the car and slightly beyond the outer line of the berths, which are of the ordinary type as now used in the Pullman sleepers. From the end walls *b* paneled sections *c* extend at an angle toward the center of the car, being connected at their outer

ends to a central section *d*, which contains a door-frame and door. This provides a dressing-space of sufficient width to allow the occupants to dress in entire privacy and with every degree of comfort, while in the contracted portions of the space I arrange a wash-bowl upon one side and a stool or chair or other article of furniture upon the other. Ample room is provided for the required purposes without occupying too much of the valuable space in the car, and the beds are arranged lengthwise of the car instead of crosswise, as in the ordinary compartment-car.

As I have stated, while a compartment-car affords superior advantages to an ordinary Pullman, yet in the case of parties traveling alone a compartment is not desirable unless the whole compartment can be purchased, and this of course adds to the expense. I have therefore provided for such cases, and in doing so I am enabled to utilize more advantageously the space of the car so as not to diminish the ordinary carrying capacity of the car of a certain length. Directly opposite, therefore, the compartment which I have just described I have provided an ordinary Pullman section, as shown at E, and the occupant is protected from the passage-way at night by a pair of curtains or portières extending along between the side walls of the adjacent compartments, thus requiring but little effort on the part of the porter to place the section in proper condition. I prefer to have but a single berth in this section, which will thus add to the convenience of the occupant, and it will be seen that as the compartment opposite contains a dressing-room within its walls the passage-way is free to be utilized by the occupant of the single berth and much greater privacy is obtained than at present, for the reason that the opposite compartment is closed across its front. In case, however, it is desired to carry a greater number of people in a car of a given length, the open sections opposite the compartments may contain two berths, an upper and lower, as in the ordinary Pullman car. Adjacent to the open section and on the same side is a compartment, and opposite this compartment on the other side of the car is a Pullman section, and so on throughout the car, the compartments alternating with the open sections on both sides of the car. By the arrangement of the alternately-placed compartments with angular corners a central passage-way is provided throughout the car, and the open sections are protected by the permanent side walls of the adjacent closed compartments. The car may be lighted in the ordinary way by centrally-positioned lamps, as shown, and the closed compartments may be provided with glass panels in the angular portions, as at *b'*, so as to be thoroughly lighted from the car-lamps.

I do not, however, limit myself to the location of the lamps nor to any particular means of lighting the car or compartments.

The compartments and the sections may be finished off in any ornamental way, and may be provided with ordinary racks and hooks for holding wearing-apparel or other articles. The closed compartments not only add to the comfort of the occupants, but by being provided with wash-bowls reduce the number who are obliged to use the wash-room at the end of the car, and thus incidentally adds to the comfort of those who occupy the open sections.

When an upper and lower berth are provided for the open sections, I prefer to arrange two sets of curtains—one set for the lower berth and an independent set for the upper—and a like arrangement is provided for the berths of the closed compartments. The permanent end walls of the closed compartments effectually prevent all injurious drafts and add greatly to the comfort and privacy of the passengers when the car is used as a day-coach.

Instead of providing the compartments with the door in the center of the front partition, I may arrange it in the angle at the corner, as shown at F, and this location is specially desirable on account of the position of the open section, as it relieves the occupant of that section to a greater extent from annoyance by the occupants of the compartment.

I do not limit myself to the relative position of the compartments and open sections, as it may be found desirable to arrange the compartments along one side and the open sections along the other, though I prefer the arrangement shown, on account of the central aisle or passage.

As at present arranged, the ordinary Pullman couches lie close to the side wall of the car and prevent the folding or tucking in of the bedclothes on that side, resulting in the sleeper being easily uncovered and rendered uncomfortable and liable to contract a cold. I aim to overcome this difficulty and at the same time to compensate for the necessary reduction in width of my berths by making the berths movable toward the center of the car, thus allowing them to be withdrawn from the side of the car. One seat may be movable independent of the other, or both may move together, and for this purpose I provide the legs of the seats with rollers or casters *e*, adapted to tracks *f* and having fastening devices—such as hooks and staples—to hold the seats securely in the two positions. I do not limit myself, however, as to the particular means shown for adjusting the seats. It will thus be seen that when it is desired to occupy the berths they may be drawn out and secured and just as easily moved back against the wall of the car, so as to increase the amount of passage-room.

I claim as my invention—

1. In a sleeping-car, a closed compartment on one side of the car, having corner-panels extending at an angle to the line of the car,

with an open section on the opposite side and a passage-way between, substantially as described.

5 2. In a sleeping-car, a series of closed compartments and a series of open sections, the open sections alternating with the closed compartments, and with a central passage-way between the two sets of compartments and sections, substantially as described.

10 3. In a sleeping-car, a closed compartment provided with a berth or berths, with a second compartment diagonally opposite, and a passage-way between the two formed by the walls of the compartments, extending at an
15 angle to the line of the car, substantially as described.

4. In a sleeping-car, a closed compartment provided with a berth or berths, a second closed compartment diagonally opposite, a
20 passage-way between formed by the walls of

the compartments, extending at an angle to the line of the car, doors arranged in the angular walls of the compartments, and open sections opposite the compartments, substantially as described.

25 5. In a sleeping-car, a pair of seats arranged opposite each other and adapted to be made into a berth, said seats having limited movement away from the side walls of the car in a line at right angles thereto, and locking
30 means for holding the seats in position, substantially as described, and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of
35 two subscribing witnesses.

ELBRIDGE G. ALLEN.

Witnesses:

ELIAS E. PRATT,

HURLBUT A. IVES.