(No Model.)

G. B. ST. JOHN.

SLEEPING CAR.

No. 262,144. Patented Aug. 1, 1882.

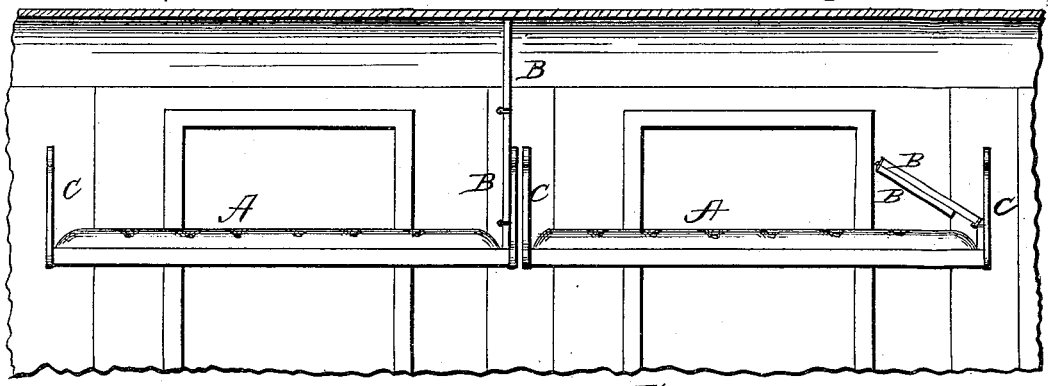

Fig. 1

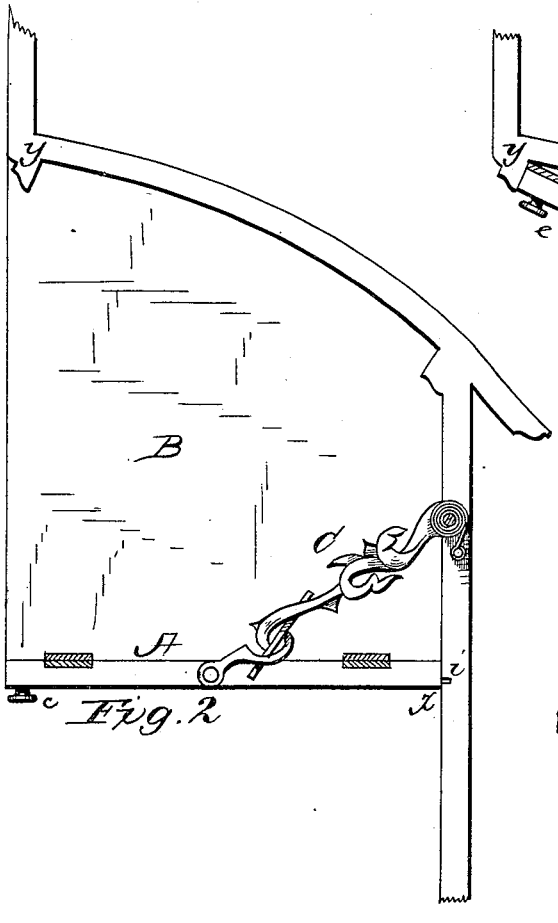

Fig. 2

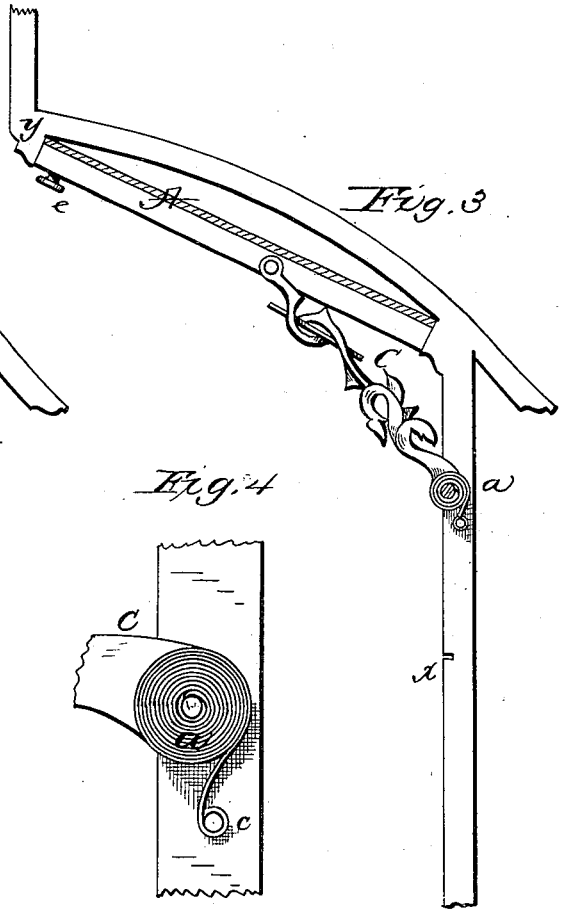

Fig. 3

Fig. 4

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UNITED STATES PATENT OFFICE.

GARLAND B. ST. JOHN, OF CEDAR RAPIDS, IOWA.

SLEEPING-CAR.

SPECIFICATION forming part of Letters Patent No. 262,144, dated August 1, 1882.

Application filed December 30, 1881. (No model.)

To all whom it may concern:

Be it known that I, GARLAND B. ST. JOHN, of Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Sleeping-Cars, of which the following is a specification.

My invention relates to the upper berths of sleeping-cars, and has for its object certain improvements in the manner of suspending and adjusting them, and in the partition between them.

It consists in suspending the berth by its ends on arms pivoted to the side of the car and adapted to swing up or down as the berth is raised or lowered, and in attaching to the end of the berth a partition the outline of which corresponds to the part of the car over the berth, and which may be folded down upon the berth when the same is raised to its position in the ceiling of the car.

In the accompanying sheet of drawings, Figure 1 represents a front view of the invention. Fig. 2 an end view of the same when in position as a berth; Fig. 3, the same elevated to the ceiling, and Fig. 4 a section of the arm which supports the same.

The berth A is similar in form to the berth in general use. It may be upholstered and used simply as a couch, or provided with mattress and bedding and made up into a bed. Instead of hanging the berth to the side of the car by hinges attached to the side of the berth, I suspend it from the ends of a movable arm, C, by pivots at the ends of the berth and at or near the center thereof. This arm has a free vertical movement, permitting the berth to be lowered to the position shown in Fig. 2 or elevated to that in Fig. 3. To counterbalance the weight of the berth and render it easier to raise the same, the pivotal end of the arm is provided with a strong spring, *a*. This may be the simple helical spring shown or such other style as shall accomplish the same result. When lowered to position for use the berth is secured and lateral or other vibration prevented by entering the small projecting lug *i* into a suitable socket formed in the side of the car. A button, *e*, holds it in place when elevated to the position shown in Fig. 3. My object in constructing the berth and adjusting it in this manner is to give a greater amount of room, light, and ventilation to the upper portion of the car. When the side of the berth is hinged to the side of the car, either the berth must be placed near the ceiling or else a large portion of the upper part of the car will be taken up by the berth when not in use. In order to give the occupant sufficient room, it must be hung some distance below the ceiling. Taking the drawings as an example, the whole space between *x* and *y* would be closed up by the elevated berth if it were hinged at the former point. By suspending it on the arm C the whole berth is elevated to the ceiling, out of the reach of passengers' heads and above the tops of the windows. The arm may be of fanciful design, and thus make an ornamental bracket, adding to the beauty of the interior of the car.

The office of the arm C is twofold. It not only holds the berth, when down, in the same way that any arm or even a chain or rope would do, but acts as a pivot upon which to adjust the berth to its upper and lower positions. The arm is pivoted to the side of the car midway between these two extreme positions of the berth. Even if there were no spring to counterbalance the weight of the berth, the arm would still be necessary in order to change the berth's positions with any degree of ease. Being pivoted at the side of the car and the berth being pivoted at the ends of the arm, the operator is enabled, by canting the berth slightly, to push it to its place in the top of the car, while the connection of the arm with the car and also with the berth serves as a guide to assist in adjusting the latter to its proper position. This is a very important point, as this arm supports and also acts as a fulcrum upon which to swing the berth up and down. Practically it supports the berth when down and braces it when up.

The further improvement consists in attaching to one end of the berth a partition, B, which serves as head-board for one and foot-board for the next berth. This is hinged to the berth, so as to drop down upon it when not in use and occupy the same space when

raised to the ceiling. As shown in Fig. 2, it conforms to the shape of the upper part of the car, and may be a single piece or made to fold doubly, as shown in Fig. 1. Besides its great convenience in operation, it possesses the advantage of making the upper berths entirely independent of the lower ones. The partition in common use rests on the back of the lower seat, thus making upper and lower berths dependent upon each other. Add to this the inconvenience in handling as compared with the one herein described, and the utility of the latter will be seen.

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

1. In a sleeping-car, the berth A, suspended on the movable arm C, which is pivoted to its ends and at the sides of the car, midway between the two extreme positions of the berth, to act as a support and also as a fulcrum upon which to swing the berth up and down, substantially as set forth.

2. In a sleeping-car, the combination of berth A, arm C, and spring *a*, substantially as and for the purpose set forth.

3. The combination of berth A, partition B, and movable arm C, substantially as and for the purpose set forth.

GARLAND B. ST. JOHN.

Attest:
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