

J. T. & D. R. LEIGHTON.
Sleeping-Cars.

No. 154,496.

Patented Aug. 25, 1874.

fig 1

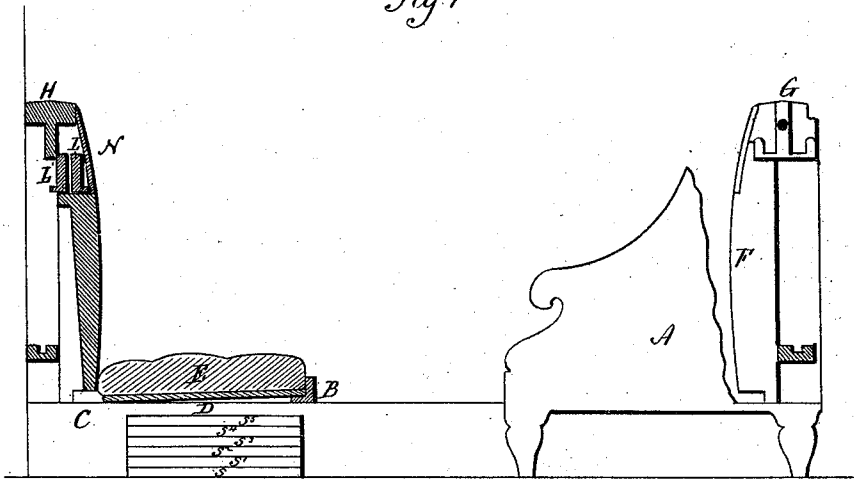
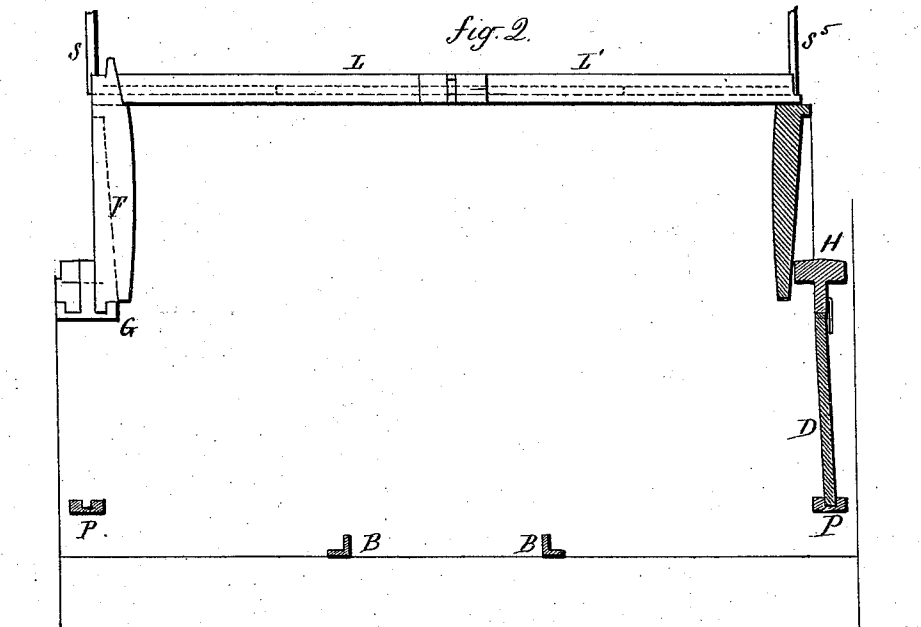


fig 2



Witnesses

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Dominicus R. Leighton
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By Atty

John D. Earle

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fig 3

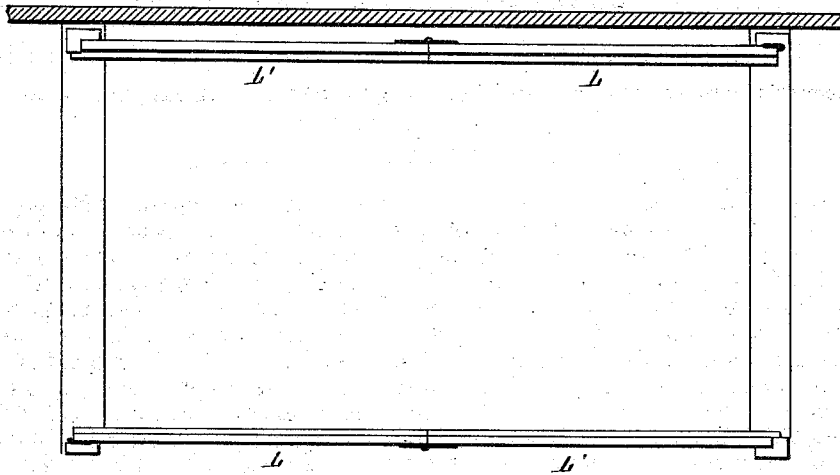
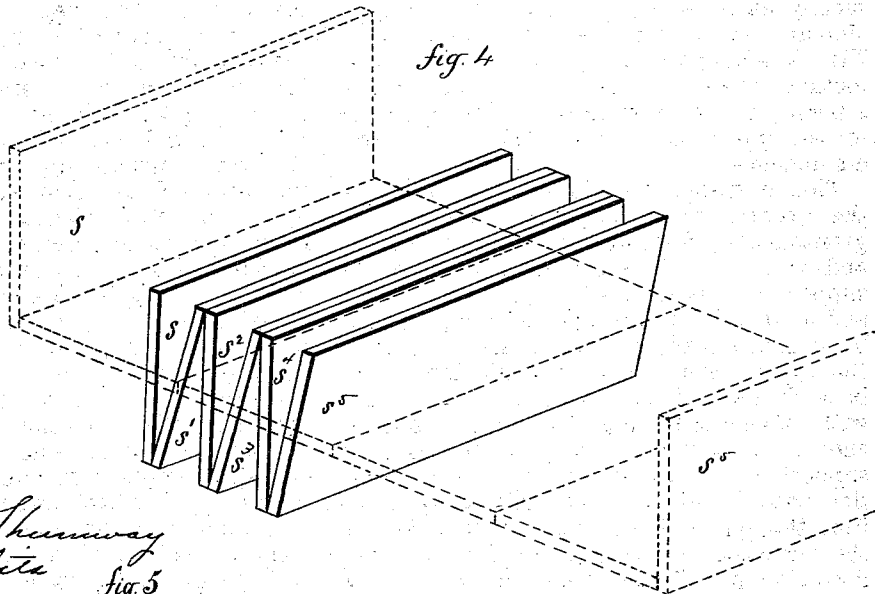


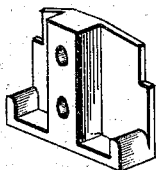
fig 4



Witnesses.

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fig 5



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UNITED STATES PATENT OFFICE.

JAMES T. LEIGHTON AND DOMINICUS R. LEIGHTON, OF NEW HAVEN, CONN.

IMPROVEMENT IN SLEEPING-CARS.

Specification forming part of Letters Patent No. **154,496**, dated August 25, 1874; application filed July 6, 1874.

To all whom it may concern:

Be it known that we, JAMES T. LEIGHTON and DOMINICUS R. LEIGHTON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Sleeping-Cars; and we do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, an end view of one of the seats, a portion broken away to show the back in place, and a transverse section of the second or facing seat as when in use by day; Fig. 2, a similar view as arranged for night travel; Fig. 3, a longitudinal or horizontal section, looking down upon the upper couch; Fig. 4, a perspective view of the bottom and divisions for the upper couch; Fig. 5, one of the sockets detached.

This invention relates to an improvement in the invention for which Letters Patent were granted to us November 5, 1873, No. 145,664, and particularly to the arrangement for the support and construction of the upper couch; and it consists, first, in constructing the seat-back frames with the hinged bars which form the upper couch sides, near the top of the back-frame, and providing the seat-frames with sockets at the top, into which the lower ends of the back-frame may be set, so as to support the back-frame in that elevated position, that the hinged bars may be extended from the upper edge of one elevated back to the corresponding edge of the other, and thus form a support for the upper couch; second, in the employment of a removable bottom or floor for the seat, which forms a support for the cushion by day and a partition between the lower couches by night; third, in forming the bottom for the couch in several strips hinged together, the end strips turned up and secured to form the partitions between the upper couches, all as more fully hereinafter described.

The seat-frames or ends A are made in substantially the usual manner. Along the front of each seat is a bar, B, and between this and the back-bar C a floor, D, is laid, which con-

sists of a thin board sufficient to support the cushion E of the seat. The back-frame of the seat is constructed independent of the seat-frame. F is the end piece of the back-frame, which sets down upon the bar C at the bottom, and lies back against the socket G, as seen in Fig. 1. Between this socket, which will be hereafter described, and a corresponding socket at the other end of the seat, a bar, H, extends, which forms the top rail of the seat-frame. The ends of the back-frame lie against their respective socket at the top. At the upper edge of the back-frame the hinged bars L L are attached, one end of one bar hung to the back and the second bar to the first bar, so that they may be folded back upon the back-frame, as seen in Fig. 1, and are there covered by a cap, N, which sits upon the top of the back-frame and extends up to the top rail H and conceals the bar L. In this condition the seats are used for day travel, but for night or sleeping couches the covers N are removed, the back-frames lifted from their places, raised up, and the lower ends set into the sockets, as seen in Fig. 2. These sockets are formed, as seen in Fig. 5, with a cavity to receive and support the lower ends of the back-frames. The back-frames thus raised and set in place, the bars L are then swung around, the bars from one frame extending from the inner end of one frame to the inner end of the other, and the other from the outer end of the other back to the outer end of the opposite one, as seen in Fig. 3, thus the bars on one back forming the outer bar, and the bars on the other the inner bar, substantially as in our patent before referred to.

To form the partition between the lower couches, below the elevated seat-frames, we employ a seat-support, D, take it from its place beneath the cushion, and set it in a vertical position on the bar P, as seen in Fig. 2, so that the piece which forms the seat-support by day forms the partition by night. The floor for the upper couch is formed from several strips, S S¹ S² S³ S⁴ S⁵, more or less in number. These are hinged together, as denoted in Fig. 4, so that they may be folded in compact form and placed beneath the seat when not in use, as seen in Fig. 1. When required for use they are opened, as seen in Fig. 4, upon the ele-

vated bars L L and laid thereon, the two end pieces S S⁵ turned up into a vertical position and there secured, so as to form the partition between the adjoining upper couches.

As the construction of the lower couch is fully described in our patent before referred to, and has nothing to do with the present invention, it is not deemed necessary to here describe the construction, neither is it deemed necessary to describe the method of applying the bedding to make up the couch.

We claim as our invention—

1. The removable frame for the back, with the folding bars L L' near the top, combined with a socket, G, at both ends of the seat-frame to receive the lower end of the back-

frame and support the back-frame in an elevated position, substantially as set forth.

2. The removable cushion-support D, to form the support for the cushion, and the partition between the lower couches, as set forth.

3. The strips S S', &c., hinged together and combined, so as to be folded into a compact form, and extended to form the support for the couch and the partitions between the adjoining couches, substantially as described.

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Witnesses:

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