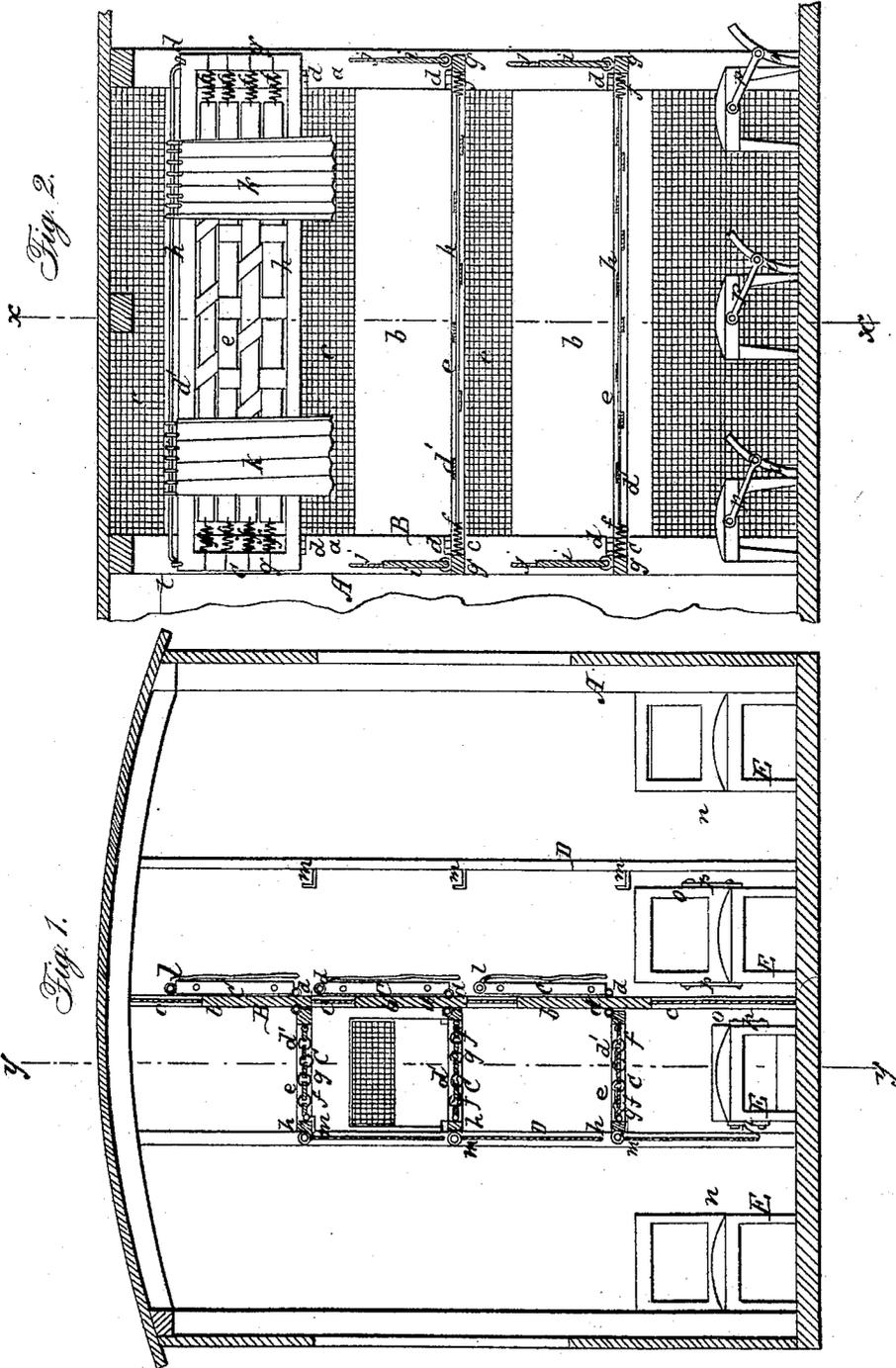


LUCE & MORRISON.
Car Seat and Couch.

No. 22,506.

Patented Jan. 4, 1859.



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UNITED STATES PATENT OFFICE.

THEO. LUCE AND JNO. H. MORRISON, OF DETROIT, MICHIGAN.

IMPROVEMENT IN RAILROAD SLEEPING-CARS.

Specification forming part of Letters Patent No. 22,506, dated January 4, 1859.

To all whom it may concern:

Be it known that we, THEODORE LUCE and JOHN H. MORRISON, of Detroit, in the county of Wayne and State of Michigan, have invented a new and Improved Railroad Sleeping-Car; and we do hereby that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a transverse vertical section of our invention, taken in the line *x x*, Fig. 2. Fig. 2 is a view of a portion of a longitudinal section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in attaching a series of folding berth-bottoms to each side of longitudinal central partition placed within the car, and using in connection with said partition and berth-bottoms a double row of single seats at each side of the car, the parts being arranged as hereinafter fully shown and described, whereby in the same car seats are obtained during the day and berths for repose at night and a passage-way allowed through the car at each side of the partition both during the night and day, or when either the seats or berths are used.

To enable those skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A represents a car-body, and B is a partition which extends from the bottom to the top of the car, and longitudinally through its center. This partition is formed by placing upright studs *a* a suitable distance apart equal to the length of the berths, and having horizontal bars *b* secured between the studs at suitable distances apart, the spaces between the bars *b* being covered with wire-cloth *c*.

To each side of the partition B (to the studs *a*) berth-bottoms C are attached by hinges or joints *d*. Three rows of berth-bottoms are represented as being attached to each side of the partition B, which is about as many as can be conveniently employed. The berth-bottoms are rectangular wooden frames *d'*, made of thin "stuff," and having a bottom made of webbing *e*, which is interlaced or woven within the frame, as shown clearly in Fig. 2, the longitudinal parts of the webbing being attached to spiral springs *f*, which are se-

cured to end pieces, *g*, of the frames *d'*, the transverse pieces of the webbing being attached directly to the side pieces, *h*, of the frames *d'*.

Each berth-bottom is provided with a head and foot piece, *i*, which may be formed of pieces of board, having wire-cloth *j* at their upper ends. The lower ends of the head and foot pieces are connected by hinges or joints to the ends of the frames *d'*, so that they may be folded down or up. Each frame *d'* is provided with a curtain, *k*, at its outer edge.

The berth-bottoms, when not in use, are folded up against the partition B, and are secured thereto by clasps *l*, the head and foot pieces being folded down or against the frames *d'*. When the berth-bottoms are to be used they are turned down to a horizontal position and sustained by pins *m* in uprights D, which extend from the bottom to the top of the car, as shown in Fig. 1, an upright, *m*, being opposite each stud *a* in the partition B.

E E E E represent four rows of seats, two rows being at each side of the car, with a passage-way, *n*, between. (See Fig. 1.) The innermost rows of seats E are in a line between the uprights D and the partition B, and are therefore underneath the lower row or tier of berths when the latter are turned down in a horizontal position. (See Fig. 1.) The innermost rows of seats, therefore, are provided with adjustable backs *o*, (see Fig. 2,) so that the backs may be lowered out of the way of the lower berths when the latter are turned down for use. The backs *o* may be arranged in any proper way to effect this object. In the drawings the backs are represented as being pivoted between the outer ends of arms *p p*, which are pivoted one at each side of each seat.

During the day, when the berths are not required, they are folded up against the partition B, and the backs *o* of the innermost rows of seats are properly adjusted on the seats for use.

The car, it will be seen, will accommodate the usual number of passengers.

At night the backs *o* of the innermost rows of seats are depressed or turned down, the berth-bottoms C are unfolded, and the curtains *k* adjusted, forming three rows or tiers of berths.

Having thus described our invention, what

we claim as new, and desire to secure by Letters Patent, is—

The folding berth-bottoms C, attached to each side of a central partition, B, within the body of the car, in connection with the double row of single seats E E at each side of the car, with a passage-way, *n*, between them, the innermost row of seats at each side of the car

being provided with falling backs, and the whole arranged substantially as and for the purpose set forth.

THEODORE LUCE.
JOHN H. MORRISON.

Witnesses:

J. S. CONKLIN,
E. S. CONKLIN.