

J. H. DOERR.

Sleeping Car.

No. 238,367.

Patented March 1, 1881.

FIG. 1

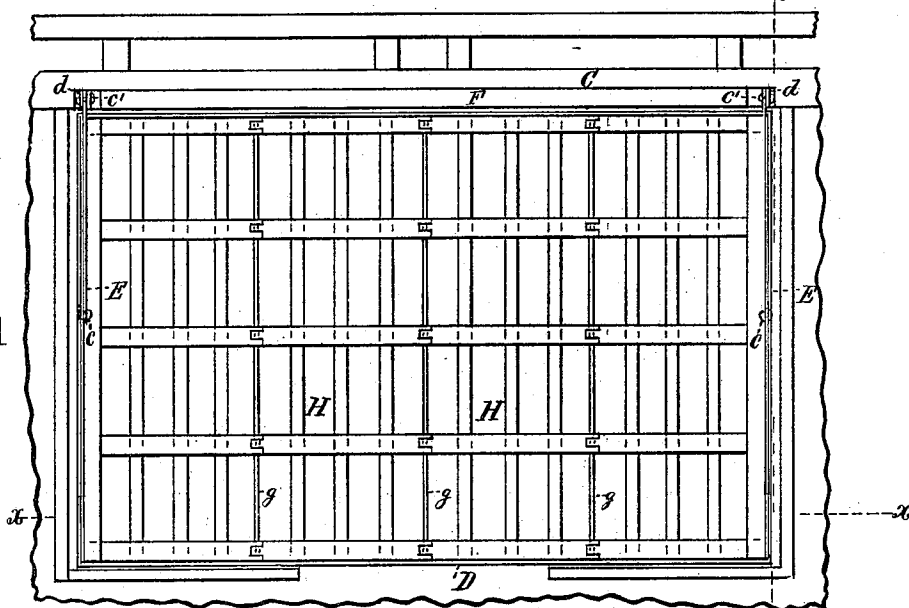
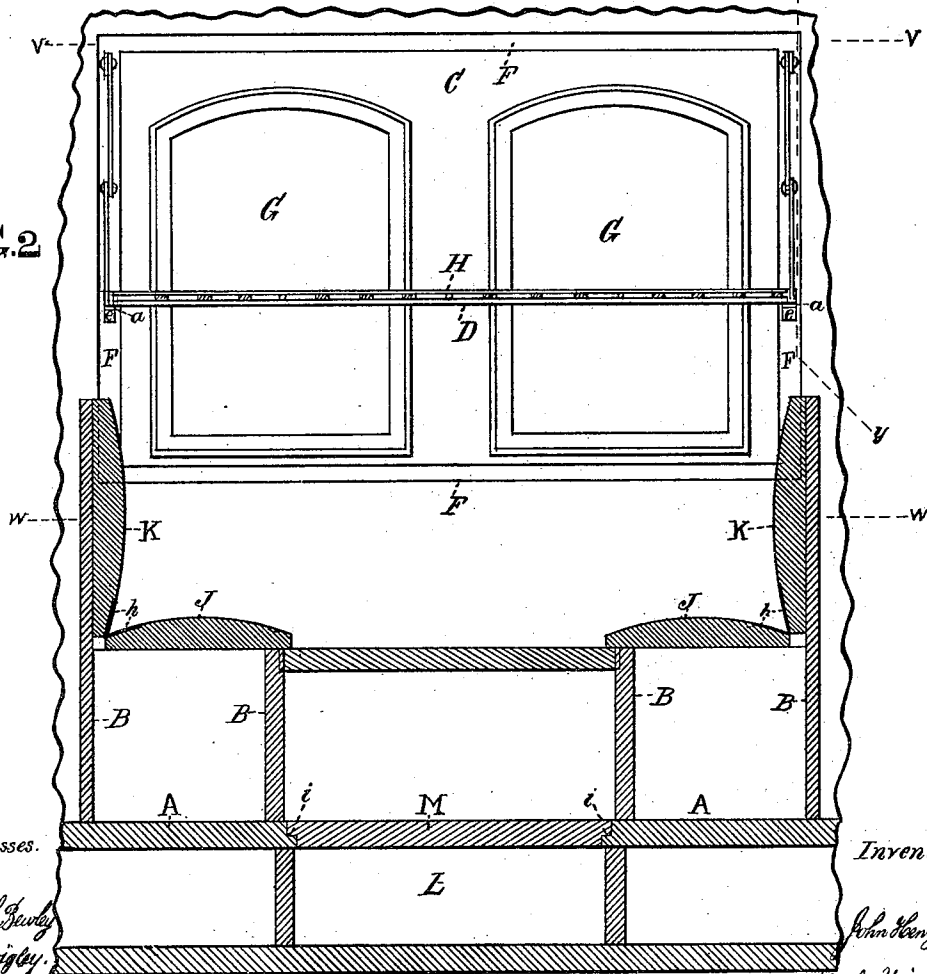


FIG. 2



(No Model.)

3 Sheets—Sheet 2.

J. H. DOERR.
Sleeping Car.

No. 238,367.

Patented March 1, 1881.

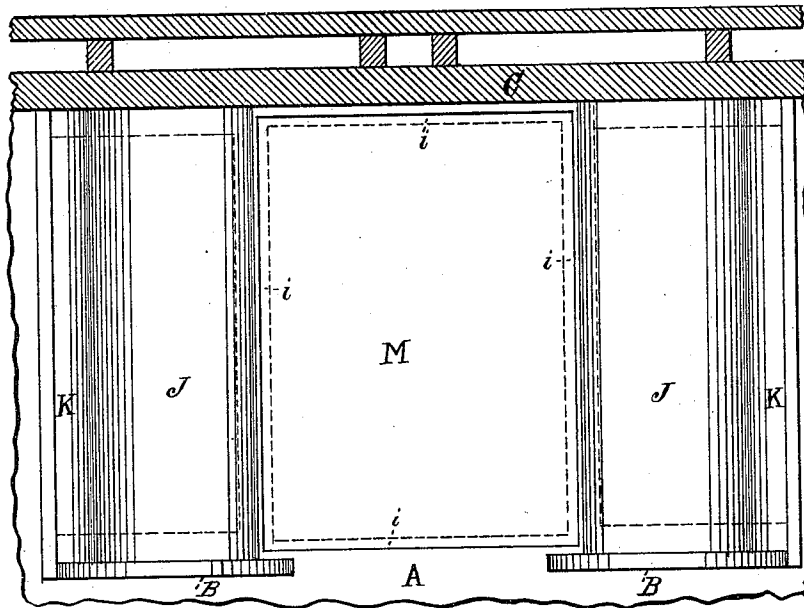


FIG. 3

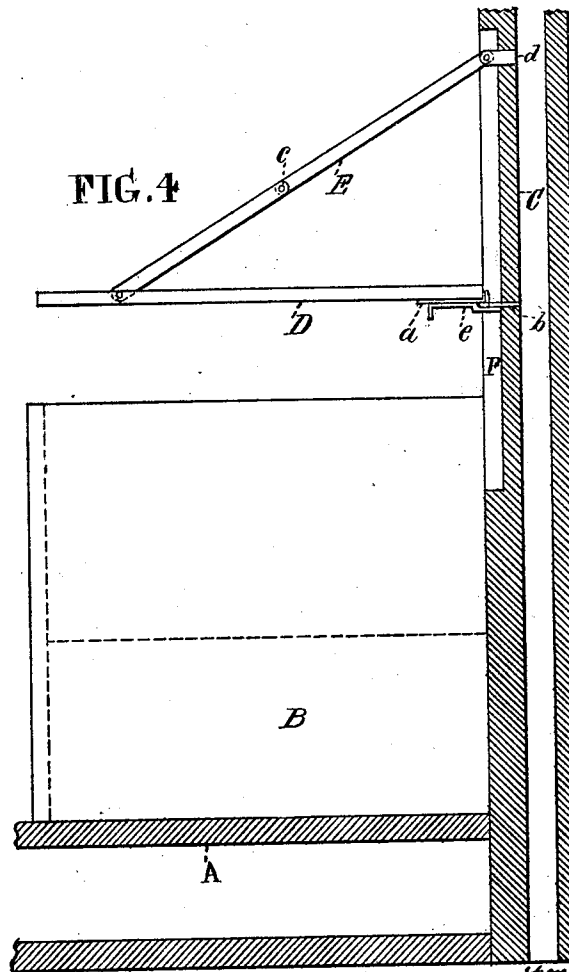


FIG. 4

Witnesses.
Thomas J. Dawley.
Ben. L. Wigley.

Inventor

John Henry Doerr.

per Stephen W. Stick, att.

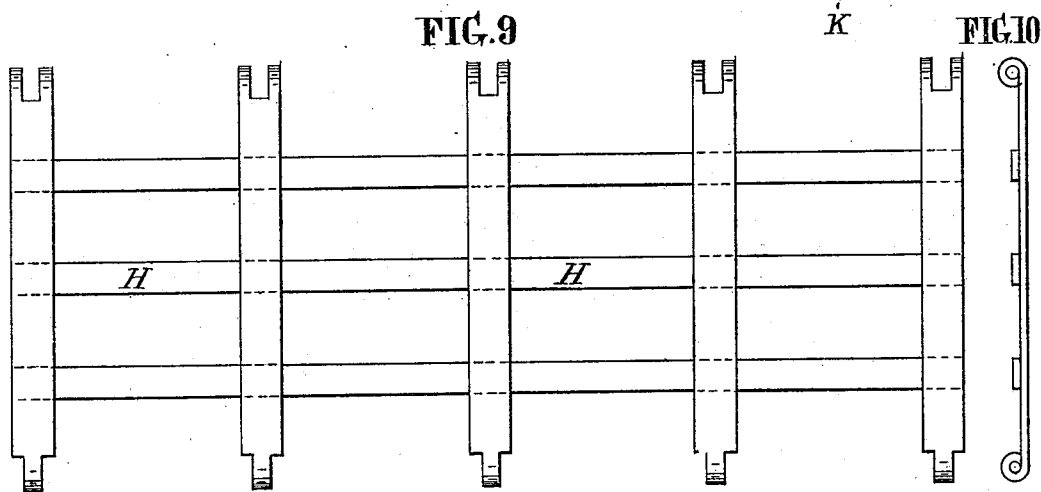
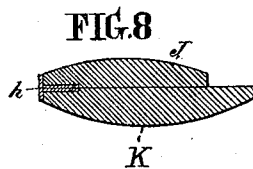
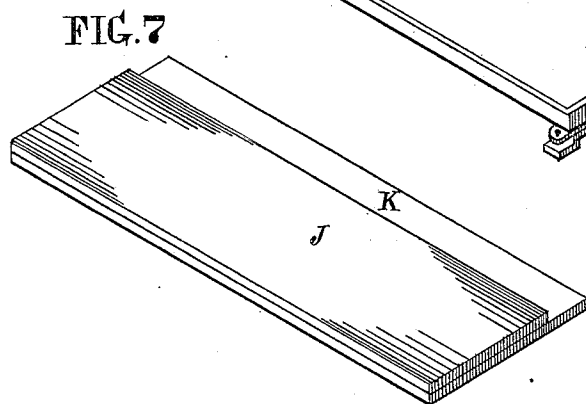
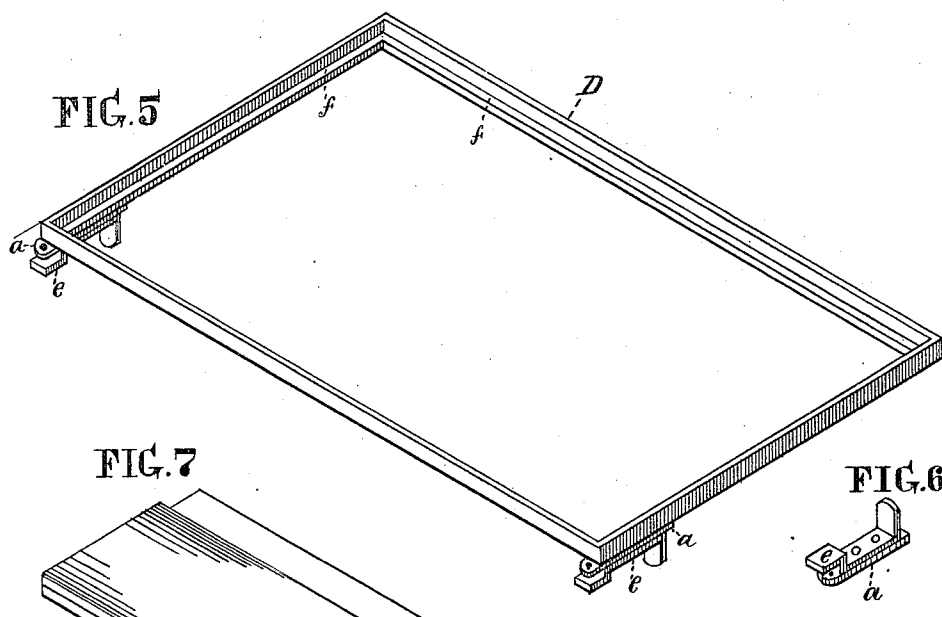
(No Model.)

3 Sheets—Sheet 3.

J. H. DOERR.
Sleeping Car.

No. 238,367.

Patented March 1, 1881.



Witnesses

Thomas J. Dewley
Ben. R. Wrigley.

Inventor

John Henry Doerr.
per Stephen Votick, atty

UNITED STATES PATENT OFFICE.

JOHN H. DOERR, OF CAMDEN, NEW JERSEY.

SLEEPING-CAR.

SPECIFICATION forming part of Letters Patent No. 238,367, dated March 1, 1881.

Application filed December 3, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY DOERR, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented a new and useful Improvement in Sleeping-Cars, of which the following is a specification.

The object of my invention is such a construction and arrangement of devices as will form means for supporting the bedding for use at night, and of stowing said devices and bedding out of the way in the day-time in an expeditious and convenient manner; and the nature of my invention is as follows: For the support of the bed-bottom I have a transferable skeleton-frame, which is adapted to surround one or two windows at the side of a car in the day-time, so as to be out of the way; and for that purpose it is provided with devices by means of which it may be swung into a continuous groove or recess around a window or windows, or, if preferred, flat against the wall, and held securely in the day-time, and be turned down and held in a horizontal position at night to receive the bed-bottom and bedding. I combine with said transferable frame a lattice-frame to support the bedding, the said frame being composed of jointed sections adapted to be folded together into a small compass to be stowed away in a convenient place when not in use.

When desirable, I construct the seat and back cushions in two pieces and hinge them at one edge, so that they may be folded flat together when used in the seat-frame, or opened to form the bottom for the lower and upper berths. In this case the cushions for the upper berth may be spread upon the lattice-frame, or be used as a substitute therefor, as may be desired.

I utilize the space between two seats beneath the floor for containing the mattresses and bedding by cutting away the floor and connecting a hatch-door with the opening thus formed.

It will be understood that the improvements above described are intended to be used at all the seats and windows of a car where the berths are required.

In the accompanying drawings, which make a part of this specification, Figure 1 is a hori-

zontal section, taken at the dotted line *vv* of Fig. 2, showing the transferable skeleton-frame D, in connection at one edge with the wall C, the frame being swung into a horizontal position and held securely at its outer edge by means of the stays E E, the lattice-frame H, for the support of the bedding of the upper berth, being in connection with said frame D. Portions of the seat-frames B B are also seen in this view. Fig. 2 is a front elevation, partly in section, at the broken line *xx* of Fig. 1. Fig. 3, Sheet No. 2, is a horizontal section at the line *ww* of Fig. 2. Fig. 4 is a vertical section at the line *yy* of Figs. 1 and 2. Fig. 5, Sheet No. 3, is a perspective view of the transferable frame D. Fig. 6 is a like view of the plate *a* and bolt *e* removed from one corner of the frame D and in a reversed position. Fig. 7 is a like view of one of the double-seat cushions J in its folded position. Fig. 8 is a cross-section through one of the hinges *h*. Fig. 9 is a face view, on an enlarged scale, of one of the middle sections of the lattice-frame H. Fig. 10 is an edge view of the same.

Like letters of reference in all the figures indicate the same parts.

A represents a portion of the floor of a car upon which the seats B B rest.

C is a portion of the contiguous wall.

D is a skeleton-frame. (Shown in detail in Fig. 5.) It is held, when in use, in its horizontal position (seen in Figs. 1 and 4) by means of its permanent eye-plates *aa* at its inner edge, the wall-hooks *bb*, with which they are connected, and the sectional stays E E, connected in pairs by means of the pivots *cc*, the stays being pivoted at one end to the plates *dd*, which project from the wall C, and at their other end to said frame D, near the outer edge thereof, all of which may be clearly seen in Fig. 4. The inner edge of the frame D is held securely in connection with the wall-hooks *bb* by means of the bolts *ee*, which are adapted to slide under the plates *aa* of the frame and catch under the shanks of said hooks when the frame is placed in its horizontal position.

F is a continuous groove or recess around the windows G G, into which said frame D may be placed when not in use, the bolts *ee* being drawn from their connection with the

hooks *b b*, and the inner edge of the frame disconnected from the hooks, so that the frame may be swung up in connection with the stays *E E*, which are folded up and are brought into
 5 said continuous groove *F* back of the frame *D*, the inner ends of the said stays having a partial turn on the pivots *c' c'*, which connect them with the wall-plates *d d*. The groove *F* may be omitted, if desired, and the transferable
 10 frame *D* brought against the wall *C*. When the frame is brought to its vertical position it is held securely by any convenient device.

H is a lattice-frame, which forms the bed-bottom for the upper berth. It is shown in
 15 connection with the transferable frame *D*, as clearly seen in Figs. 1 and 2. It rests in the rabbet *f*, the said rabbet more clearly appearing in the detached view, Fig. 5. The said frame *H* is made in sections, one of which is
 20 shown in the enlarged views, Figs. 9 and 10, the sections being connected together, as seen clearly in Fig. 1, by means of the joint-rods *g*, whereby to adapt them to be folded flat together to bring them into a small compass to
 25 be stowed away when not in use.

The seat-cushions *J* and back-cushions *K* may each be made in two pieces, so as to be folded together like a book, being connected at one edge by means of hinges *h*, of webbing or
 30 other suitable material, as shown in the cross-section, Fig. 8, when they are used on the seat-frames *B B* as cushions, their being so made adapting them to be used as bed-bottoms for the lower and upper berths. When used for
 35 the upper-berth bottom they may be either spread upon the lattice-frame *H* or take its place in connection with the frame *D*. I utilize the space under the floor beneath the
 40 seat-frames *B B* for holding the mattresses and bed-clothes, by making an opening, *L*, in the floor, and connecting therewith a trap-door, *M*, which rests in the rabbet *i*.

I have represented my improvements in connection with two seats and windows merely
 45 for illustration of the invention. It will be

understood that they are to be applied clear along each side of the car.

I claim as my invention—

1. The transferable skeleton-frame *D*, having a continuous rabbet, *f*, around its inner
 50 edge to receive a bed-bottom, and adapted to be connected with the wall of a car around one or more windows, when not in use, and to be brought into a horizontal position and held
 55 securely by any suitable means for the support of the bedding, substantially as described.

2. The combination of the transferable skeleton-frame *D* with the wall of a car around one or more windows, the frame being held in its
 60 vertical position in connection with the wall by means of the stays *E E*, wall-plates *d d*, and pivots *c' c'*, substantially as described.

3. The continuous groove or recess *F* around one or more windows, *G*, for the reception of the transferable frame *D* and stays *E E*, when
 65 said frame is not in use, substantially as described.

4. The combination of the transferable skeleton-frame *D*, having a rabbet, *f*, around its inner edge, and being provided with eye-plates
 70 *a a*, bolts *e e*, and sectional stays *E E*, with the wall *C*, having hooks *b b* and wall-plates *d d*, whereby the said frame is held in a vertical position against the wall, when not in use, and in a horizontal position for the support of
 75 the bed-bottom, substantially as described.

5. The lattice-frame *H*, made in sections connected together by means of joint-rods *g*, whereby to adapt said sections to be folded
 80 together compactly to be stowed away, when not in use, substantially as described.

6. The trap-door *M*, in combination with the opening *L* in the floor of the car between two opposite seats for the passage of bed-clothes to and from the space beneath the floor, sub-
 85 stantially as described.

JOHN HENRY DOERR.

Witnesses:

THOMAS J. BEWLEY,
 STEPHEN USTICK.