(No Model.) 2 Sheets—Sheet 1.

W. D. DOWNS.

SLEEPING CAR BERTH.

No. 542,226. Patented July 2, 1895.

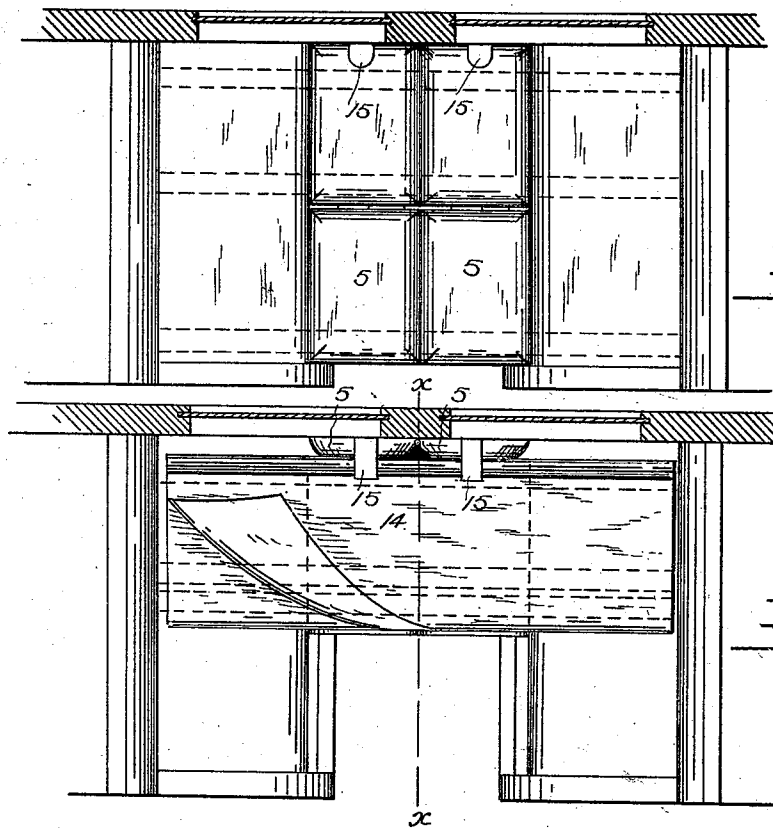

Fig. 1

Fig. 2

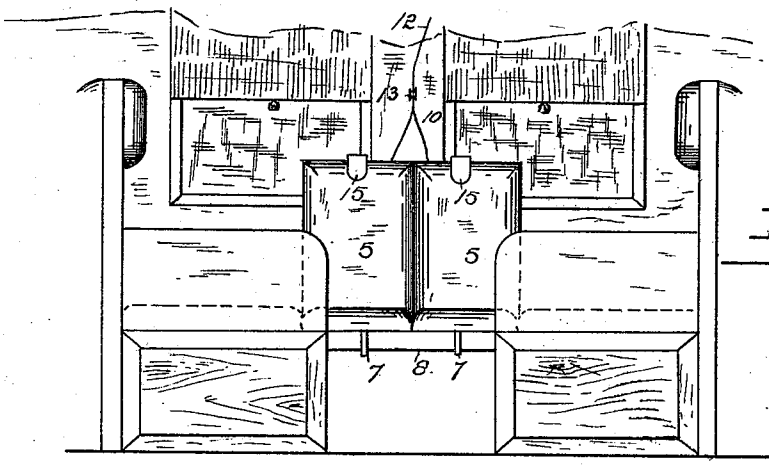

Fig. 3.

WITNESSES:

Chas. E. Dawson

INVENTOR

WM. D DOWNS.

BY

ATTORNEY

(No Model.) 2 Sheets—Sheet 2.

W. D. DOWNS.

SLEEPING CAR BERTH.

No. 542,226. Patented July 2, 1895.

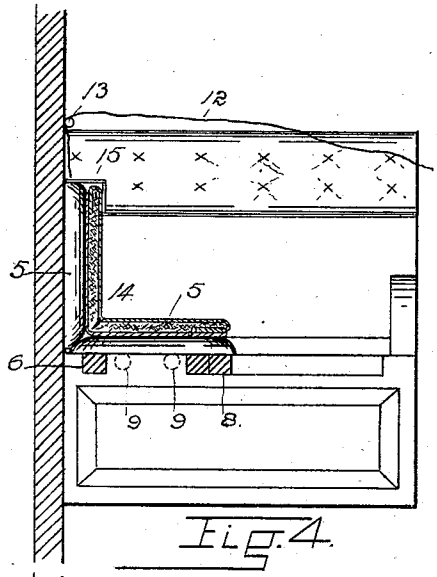

Fig. 4.

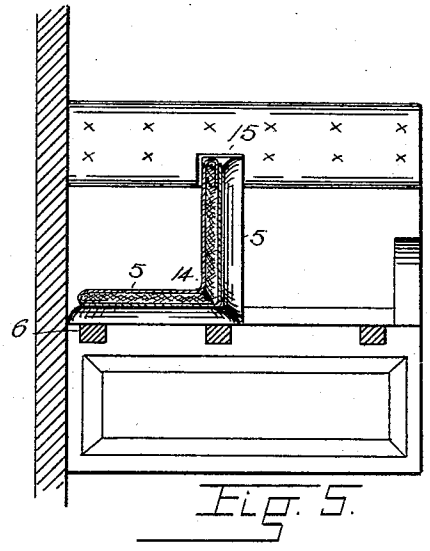

Fig. 5.

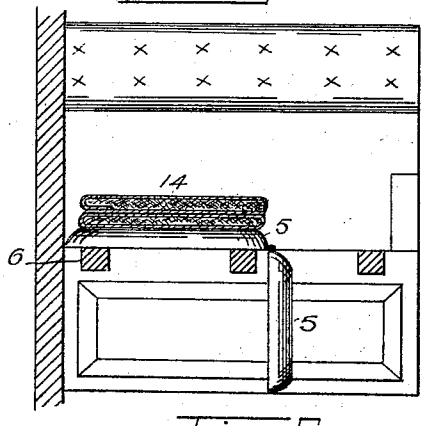

Fig. 6.

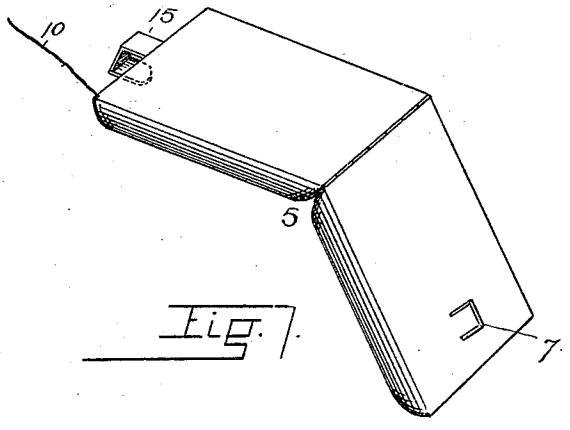

Fig. 7.

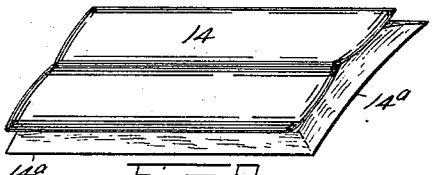

Fig. 8.

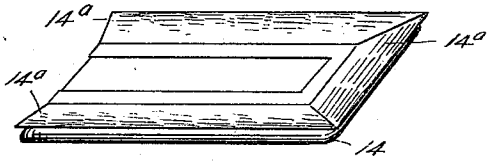

Fig. 9.

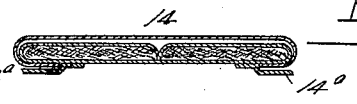

Fig. 10.

WITNESSES:

C. L. Allardet.

Chas. E. Dawson

INVENTOR

Wm. D. Downs.

BY

ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM D. DOWNS, OF DENVER, COLORADO, ASSIGNOR OF THREE-EIGHTHS TO D. WALTER EVANS AND ALBERT W. REITZE, OF SAME PLACE.

SLEEPING-CAR BERTH.

SPECIFICATION forming part of Letters Patent No. 542,226, dated July 2, 1895.

Application filed November 22, 1894. Serial No. 529,548. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. DOWNS, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Sleeping-Car Berths; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in sleeping-car berths; and it consists of the features, arrangements, and combinations hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a top or plan view of the berth with the mattress removed. Fig. 2 is a top view with the central part of the berth, together with the mattress and blankets, drawn back and folded up against the side of the car. Fig. 3 is a front view of the berth, the parts being in the same position as in Fig. 2, the mattress and blankets being removed. Fig. 4 is a section taken on the line *x x*, Fig. 2. Figs. 5 and 6 illustrate modified forms of construction. Fig. 7 is an underneath view, in perspective, illustrating the hinged back of the seat, which forms the central part of the made-up berth. Fig. 8 is a detail view, in perspective, showing the mattress in its normal position—that is, with the top uppermost. Fig. 9 is a similar view showing the mattress inverted, or with the bottom uppermost. Fig. 10 is a cross-section of the mattress.

From an inspection of the views it will be observed that the feature of this improvement consists in the construction and arrangement of the parts, whereby the central part of the made-up berth, together with the mattress and blankets or other bedding, may be so folded or manipulated that a space is left in front and between the seat-bottoms.

The object of this improvement is to give the occupants of the berth an opportunity to dress or undress with all the ease and convenience offered by the ordinary sleeping-apartment.

In my improved construction the parts which form the backs of the seats are divided, the two portions of each seat-back being hinged together. These divided seat-backs form the central part of the made-up berth. In the preferred form of construction this central portion of the berth-bottom is drawn backward and folded against the car, whereby a space is left between the seats or between the two parts of the berth-bottom on either side of the center. The mattress and bedding are moved with the hinged part of the berth, thus exposing the seats, so that they may be occupied on each side of the central space. This manipulation of the central part of the berth, together with the bedding, may be easily accomplished by the occupants of the berth.

In the use of the improvement the berth, after being made up in the ordinary way, may be adjusted as desired by the person preparing it, whereby it is made ready for the occupants, who, after preparing to retire, may readjust the parts to their normal position.

Another feature of the invention relates to the mattress, which is constructed with a flap for concealing the edges of the blankets, whereby they are removed from contact with the upholstered parts of the berth-bottom. By reason of this feature the berth may be manipulated as described without disturbing or disarranging the bedding of the made-up berth.

Having thus outlined the main features of the invention, together with their functions, I will now describe the improvement in detail, reference being had to the several views of the drawings, in which similar reference characters indicate corresponding parts.

Let the numeral 5 designate the upholstered parts which form the backs of the two seats. Each of these backs is divided, preferably, above the center, the two portions being hinged together. These two backs are placed in the center between the seat-bottoms in making up the berth. The rear portions of the two parts 5 are supported by the ordinary sliding rail 6, while the front portions of the

two backs are provided with staples or U-shaped devices 7, through which is passed a special bar 8, having its extremities suitably supported, whereby as the parts 5 are drawn backward or folded the front bar is also moved, leaving the space between the seats unobstructed.

To facilitate the manipulation of the parts 5, the framework of the berth may be provided with antifrictional rollers 9, which engage the parts 5 as they are moved back and forth. To the rear extremities of the parts 5 are attached the extremities of a cord 10, to whose central portion is made fast another cord 12, which passes over a pulley 13, attached to the side of the car.

After the berth is made up the parts may be adjusted to the position shown in Figs. 2, 3, and 4 by pulling on the cord 12. The cord 10 should be readily detachable from the parts 5, whereby they may be separated or placed in position to form the seat-backs.

While it is preferred that the parts 5 be arranged as shown in Figs. 2, 3, and 4, it will be understood that instead of drawing the parts 5 back and folding up their rear ends against the side of the car, as shown in said figures, the front ends of the parts 5 may be folded upward without disturbing their rear ends, (see Fig. 5,) or the two portions of the parts 5 may be so hinged that they may be folded downward, as shown in Fig. 6. In this case the mattress and bedding would be folded on itself from the front toward the back.

In order to facilitate the manipulation of the bedding I employ a special form of mattress 14, which, like the ordinary mattresses employed in connection with sleeping-car berths, is adapted to fold on itself. The novel feature of this mattress is the flap 14^a, attached to the bottom of the mattress and extending around the same. This flap may be formed in any suitable manner. Its function is to receive and retain the edges of the blankets and other covering, whereby the disarrangement of the bed-covering during the adjustment of the parts 5 is obviated.

The rear extremities of the parts 5 are provided with suitable devices 15, adapted to engage the rear edge of the mattress, or that farther from the aisle of the car, whereby the mattress is retained in place. Nothing is claimed on this feature, however, as it is old in the art.

Having thus described my invention, what I claim is—

1. A sleeping car berth having its central portion transversely divided, the two parts being hinged together in such a manner that the hinged seat part may be moved toward the side of the car by raising one portion thereof to a position parallel, or approximately parallel, with the car side, and suitable means attached to the hinged central portion of the berth bottom for effecting said adjustment, substantially as described.

2. A sleeping car berth whose bottom is provided with a central part transversely divided and hinged whereby it is adapted to fold, in combination with a mattress having a flap on its margin, the outer edge of the flap being free and its inner edge fast to the mattress whereby the edges of the bed clothing may be concealed, and thus removed from contact with the movable central part of the berth-bottom, substantially as described.

3. A sleeping car berth having the central part of its bottom transversely divided and adapted to fold, in combination with means for manipulating the same consisting of a cord passing around a pulley attached to the side of the car, substantially as described.

4. A sleeping car berth having a hinged central portion adapted to slide and fold, in combination with anti-frictional rollers journaled in the framework of the berth and engaging the movable central part on the under side, substantially as described.

5. A mattress having a flap on its margin, the outer edge of the flap being free and its inner edge fast to the mattress, the depth of the flap being sufficient to receive and conceal the edges of the bed clothing which are tucked between the flap and the body of the mattress, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM D. DOWNS.

Witnesses:
G. J. ROLLANDET,
CHAS. E. DAWSON.