(No Model.)

F. ANDERSON. SLEEPING CAR. 2 Sheets-Sheet 1.



Patented Dec. 17, 1895.



AND LEW & GRAHAM, PHOTO-UTHO, WASHINGTON, D.C.

(No Model.)

2 Sheets-Sheet 2.

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No. 551,705.

Patented Dec. 17, 1895.



NDREW B.GRAHAM, PHOTO-LITHO, WASHINGTON, D.C.

## UNITED STATES PATENT OFFICE.

#### FREDRICK ANDERSON, OF PULLMAN, ILLINOIS.

### SLEEPING-CAR.

### SPECIFICATION forming part of Letters Patent No. 551,705, dated December 17, 1895.

Application filed May 8, 1895. Serial No. 548, 530. (No model.)

#### To all whom it may concern:

Be it known that I, FREDRICK ANDERSON, a citizen of the United States, residing at Pullman, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sleeping-Cars, of which the following is a specification.

This invention relates to improvements in that class of railway-coaches known as "sleep-10 ing-cars;" and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts of the seats which are converted into couches or berths, when desired, as will be hereinafter more 15 fully set forth and specifically claimed.

The objects of my invention are, first, to provide seats for coaches or cars, which shall be simple and inexpensive in construction, strong and durable, and the various parts of 20 which are so constructed that they may be easily and quickly placed in position to form a compartment, with the ends closed, and the upper and lower berths, and, second, such seats the parts of which when in their normal 25 positions will occupy a small amount of space

and will present an attractive appearance. In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe 30 it, referring to the accompanying drawings,

in which—

Figure 1 is a longitudinal view, partly in section, of a portion of one compartment of a sleeping car or coach, showing the normal po-

- 35 sition of the various parts of the seats. Fig. 2 is a similar view showing the seats folded into upper and lower berths and the ends of the compartments closed by partitions. Fig. 3 is a cross-sectional view of one compart-
- 40 ment, taken on line 3 3 of Fig. 1, as the parts will appear when in their normal state. Fig. 4 is a like view taken on the same line, illustrating the parts as they will appear when the seats have been folded into berths. Fig. 5 is
  45 a sectional view of one of the folding parti-
- tion-pieces, showing it closed; and Fig. 6 is a like view thereof, showing it open.
  - Similar letters refer to like parts throughout the different views of the drawings.
- 50 A represents the side wall of the car or coach, which is provided with windows a and ventilators a', as usual. The seats are ar-

ranged crosswise of the car in the usual manner, and are provided on their ends adjacent to the aisle with legs b and arm-rests b'. The 55 cushions B, forming the backs of the seats, are pivoted at their upper ends on their sides to movable upright bars or rods C, which rods or bars operate in suitable recesses thereof in the upright portions C' of the seat-frame and 60 C<sup>2</sup> of the support at the wall A of the coach. The movable bars C are joined at their lower portions by means of a horizontal piece c, which piece rests on a spring c', employed to facilitate the raising of the back cushions and 65 said supporting-bars. Each of the uprights C' is provided with bolts d to engage the lower portion of the horizontal bar c and to assist in holding the supporting-bars C in a raised position. The bolts d are provided 70 with handles d', which are pivotally secured to the uprights, as is clearly shown in the drawings. The uprights or supports  $C^2$ , adjacent to the wall of the coach, are provided with supports  $d^2$ , or catches, which are also 75 to be used for holding the supporting-bars in a raised position. That portion of the wall of the car between the windows is provided with lugs or projections e, which are adapted to support the edge of the cushions B adja- 80 cent to the wall, the portions thereof adjacent to the aisle being provided with socketpieces e' to receive a bolt  $e^2$  for their support  $\bar{a}t$  said point. The uprights C' and  $\bar{C}^2$ are provided with vertical grooves on their adja-85 cent surfaces for the reception and guidance of the partitions or head and foot boards, which are composed of two pieces F and F', which are hinged together, and the piece F, hinged at its upper end to a piece of molding 90 G, which forms the upper rail of the back of the seat when the parts are in their normal position. The piece F' of each of the partitions is provided with an opening f near its upper end to engage a hook or catch f', se- 95 cured to the car-wall at a proper point.

By reference to the drawings it will be seen and readily understood that when the partitions are raised from their normal positions the pieces F' may be unfolded, as shown in 100 Figs. 4 and 6, and secured on the catches f'on the walls of the car, thus closing the ends of the compartments.

From the foregoing it is apparent that by

raising the cushions B and placing and securing them horizontally, as shown in Figs. 2 and 4, the upper berth will be formed thereby. In order to form the lower berth, the seat-5 cushions B' are slid back on their frames to the positions indicated in Fig. 2 of the drawings, when the additional cushions  $B^2$ , normally located under the seat-cushions, may be turned to the positions indicated in Fig. 2 of 10 the drawings. The last-named cushions B<sup>2</sup>

are pivotally secured to the sides of the seatframe and are employed as part of the lower berth.

Having thus described my invention, what 15 I claim as new, and desire to secure by Letters Patent, is-

1. The combination of the back-cushions pivotally secured at their upper ends to the movable supporting bars and adapted to be 20 secured horizontally to form the upper berth, with the supporting bars at each side of the back-cushions and bolts or catches in the

frame of the seat to secure the bars in a raised position, substantially as described.

2. The combination of the seat frames, with 25 supporting bars movably located therein, the back-cushions pivotally secured at their upper ends to said bars and adapted to be raised and secured in a horizontal position to form 30 the upper berth, catches or bolts in the frame

to secure the bars in a raised position and the partitions, for the ends of the compartments, consisting of two pieces hinged together and movably located within the seat frames, substantially as described.

35 3. The combination with the seat frames of the partitions, for the ends of the compartments, consisting of two pieces or leaves hinged together and to a transverse piece of molding and vertically movably located in 40 said frames, substantially as described.

4. The combination of the seat frames, with the supporting bars C, movably located therein and connected at their lower portions with transverse pieces c, the springs c', under said 45 pieces to assist in raising the bars, the backcushions B, pivotally secured at their upper ends to the supporting bars and adapted to be raised and secured in a horizontal position to form the upper berth, the catches or bolts in 50 the frame to secure the bars in a raised position, the partitions for the ends of the compartments, consisting of two pieces hinged together and movably located in the seat frames, the seat cushions B', and the auxiliary cush- 55 ions B<sup>2</sup>, pivotally secured to the frame of the seat and adapted to be placed in a horizontal position to form the lower berth, all constructed, arranged and operating substantially as and for the purpose set forth. FREDRICK ANDERSON.

Witnesses:

CHAS. C. TILLMAN, E. A. DUGGAN.