(No Model.) 2 Sheets—Sheet 1.

G. B. & J. M. ST. JOHN.

CAR SEAT.

No. 263,238. Patented Aug. 22, 1882.

Fig. 1.

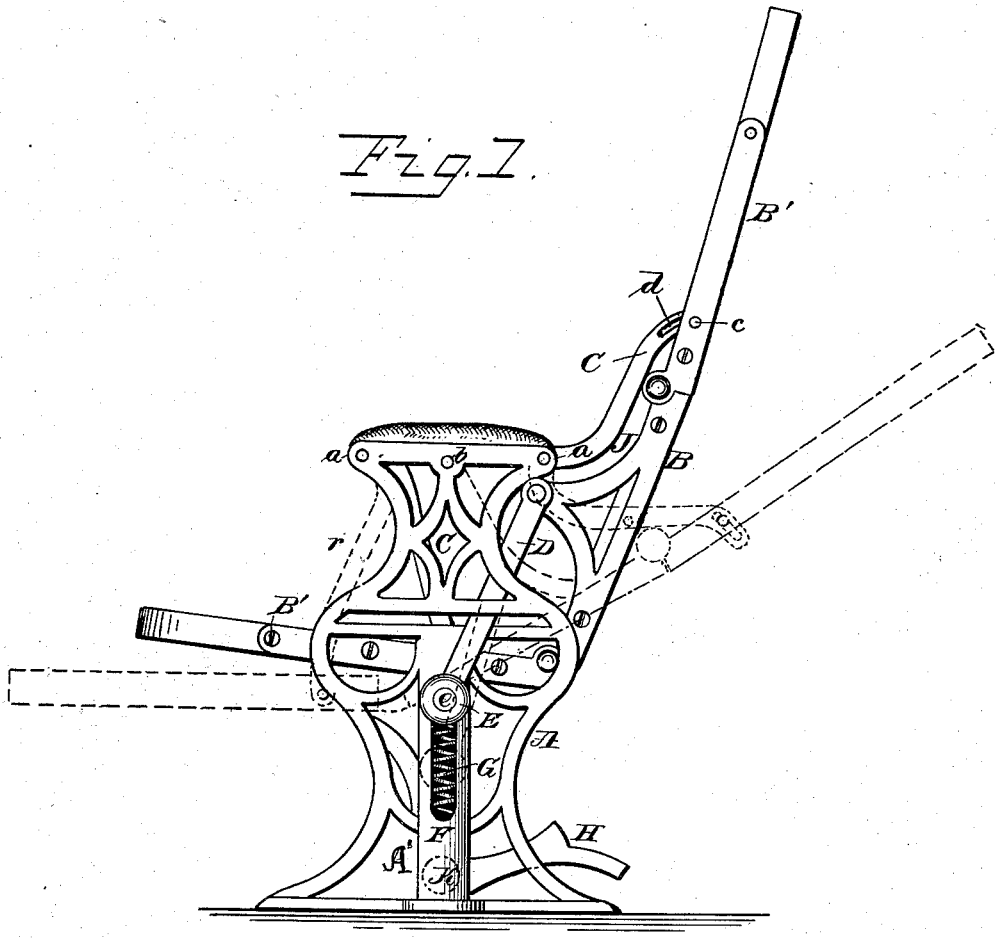
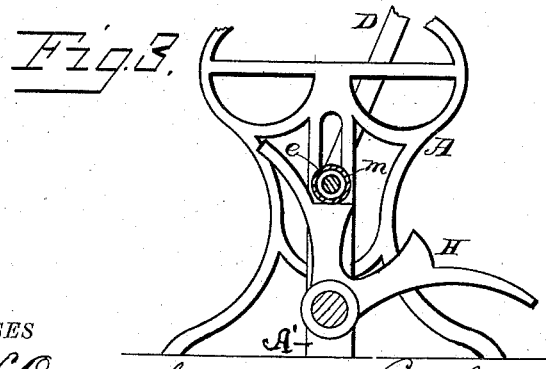


Fig. 3.



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(No Model.) 2 Sheets—Sheet 2.

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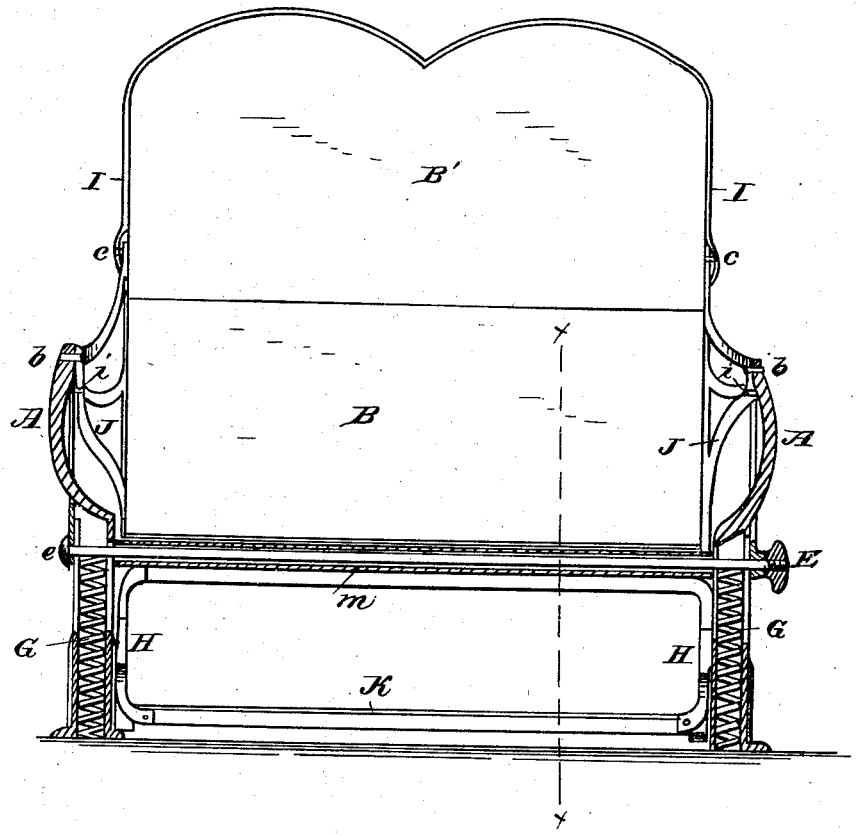
Fig. 2.



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UNITED STATES PATENT OFFICE.

GARLAND B. ST. JOHN AND JUSTUS M. ST. JOHN, OF CEDAR RAPIDS, IOWA.

CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 263,238, dated August 22, 1882.

Application filed March 31, 1882. (No model.)

To all whom it may concern:

Be it known that we, GARLAND B. ST. JOHN and JUSTUS M. ST. JOHN, of the city of Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Car-Seats, of which the following is a specification.

The invention relates to adjustable car-seats, and has for its object the construction and arrangement of the parts in such a manner that the seat may be quickly and easily adjusted to any desired position in sitting or reclining, and also such an arrangement of the foot-rest that it shall be more convenient than the device in common use, shall serve for a foot-rest in all positions of the seat, and may act as a stop to hold the seat in one or more of its reclining positions.

The invention consists in pivoting to the central upper part of supporting-standards by suitable arms the back of the seat, to which is hinged a similar section or sections adapted to be used as a seat, or a seat and head-rest when two are used, the seat and head-rest being adjusted to the proper positions by means of suitable arms attached to them and pivoted to the supporting-standards at points each side of the central pivot, the whole being adjusted to all desired positions of the seat by means of a connecting-rod pivoted to the back or its arm and fastened at any point along a vertical slot or guide in the lower part of the standard.

It also consists in providing the end of the foot-rest with a stop or stops to receive the connecting-rod in its downward stroke and prevent the seat from descending beyond an ultimate reclining position, except when the position of the foot-rest is changed and the seat reversed.

It further consists in improvements in the form of the foot-rest, all of which will be more particularly hereinafter set forth.

In the accompanying sheet of drawings, Figure 1 represents an end view of the invention; Fig. 2, a front view; and Fig. 3, a sectional view on line *x x*, Fig. 2, showing the arrangement of the foot-rest and stop.

To the central upper part of the seat-support A is pivoted the seat-back B, having arm J. To this back one or more sections, B′, similar in character, are hinged. In this application two are shown, the seat being reversible and the sections B′ B serving the purposes of seat and head-rest, and vice versa. The subject-matter of this invention applies equally well to a seat without a head-rest and not reversible or to a non-reversible seat with a smaller head-rest than is represented. These seat and head-rest sections A′ are connected at one end to the seat-standards by means of arms C C, pivoted thereto at points *a a*, each side of the center of the standard. The other end has a short slot to allow the seat in its downward movement to pass the center, where the distance between the two connecting-points is shorter than at the extreme positions, as appears by reference to the dotted lines at *r* in Fig. 1. The point of connection between the arm and the seat and head-rest sections is so placed that when the seat is in the upright position shown in Fig. 1 it is back of the vertical line intersecting the connection with the standard, and the result is that the seat is inclined in the natural position represented. As the seat descends to the reclining position indicated by the dotted lines the seat assumes a horizontal position, coming finally into line with the back as the latter reaches the horizontal.

The seat is adjusted to and fixed in any desired position by means of a connecting-rod, D, pivoted to the back or its arm C, its lower end moving freely and capable of being fastened in a slot or guide in the lower part of the standard A. In practice a very simple fastening is used. It consists in a rod, *e*, passing through the lower end of the connecting-rod and slot, and through a piece of gas-pipe placed between the standards, as shown in Fig. 2. The seat is fastened at any desired point by means of a hand-nut, E, on the end of rod *e*. The slot is made long enough so as to allow the connecting-rod to pass the center in reversing the seat, when the fastening operates in the same manner.

To counterbalance the extra weight of the back by reason of its overhanging and having two sections when the head-rest is used, the standard is provided with a spring, G. This spring may be of any suitable style; but in practice a simple coil-spring is used, operating in a chamber, F, formed in the lower part of the standard. The chamber tends to keep the spring in an upright position, and also hides

the greater part of it from sight, besides strengthening the standard.

It is generally desirable, for the convenience of the person in the next seat back, that the seat shall only descend to a certain ultimate reclining position, except in reversing. To enable this person to control the seat in front, therefore, the foot-rest H is provided with a shoulder on each of its arms, which stands directly in line with the slot in its final positions and stops the connecting-rod D in its downward stroke, as shown in Fig. 3. The shoulder on the other arm serves the same purpose when the seat is reversed. In reversing the foot-rest is thrown on its center, when the pitman is free to pass between the two arms. Improved form is also given to the foot-rest. Instead of being a straight arm hung on a center, it is made angular, as shown, thus allowing greater room for satchels and parcels under the seat. When the seat is thrown downward and forward to the reclining position the central bar, K, upon which the foot-rest is pivoted, becomes the rest for the feet.

The result of the whole arrangement is a seat compact and simple in design, neat in appearance, convenient, comfortable, and easily and quickly adjusted to any desired position in sitting or reclining.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a railroad-car seat, the support A and standard A′, having chamber F, the reversible foot-rest H, having shoulders, as described, and pivoted to said standard, and the adjustable and connecting rod D, moving in the standard, in combination with the sectional pivoted and hinged back B B′ B′, substantially as and for the purposes set forth.

2. In an adjustable railroad-car seat, the back B, having parts B′ hinged thereto, pivoted to the support A, and arm C, slotted at *d*, combined with the hollow standard A′, supporting arm D, and spring G, substantially as shown and described.

3. The back B and arm C, slotted at *d*, combined with support A, connecting-rod D, and hollow standard A′, substantially as and for the purposes set forth.

4. The combination, with the frame or support of a car-seat, of the back B, having parts B′ hinged thereto, the connecting-rods D, and slotted arm C, as set forth.

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Witnesses:
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