

(No Model.)

2 Sheets—Sheet 1.

A. M. RICHARDS & E. DINSLEY.

CAR SEAT.

No. 285,433.

Patented Sept. 25, 1883.

Fig. 1.

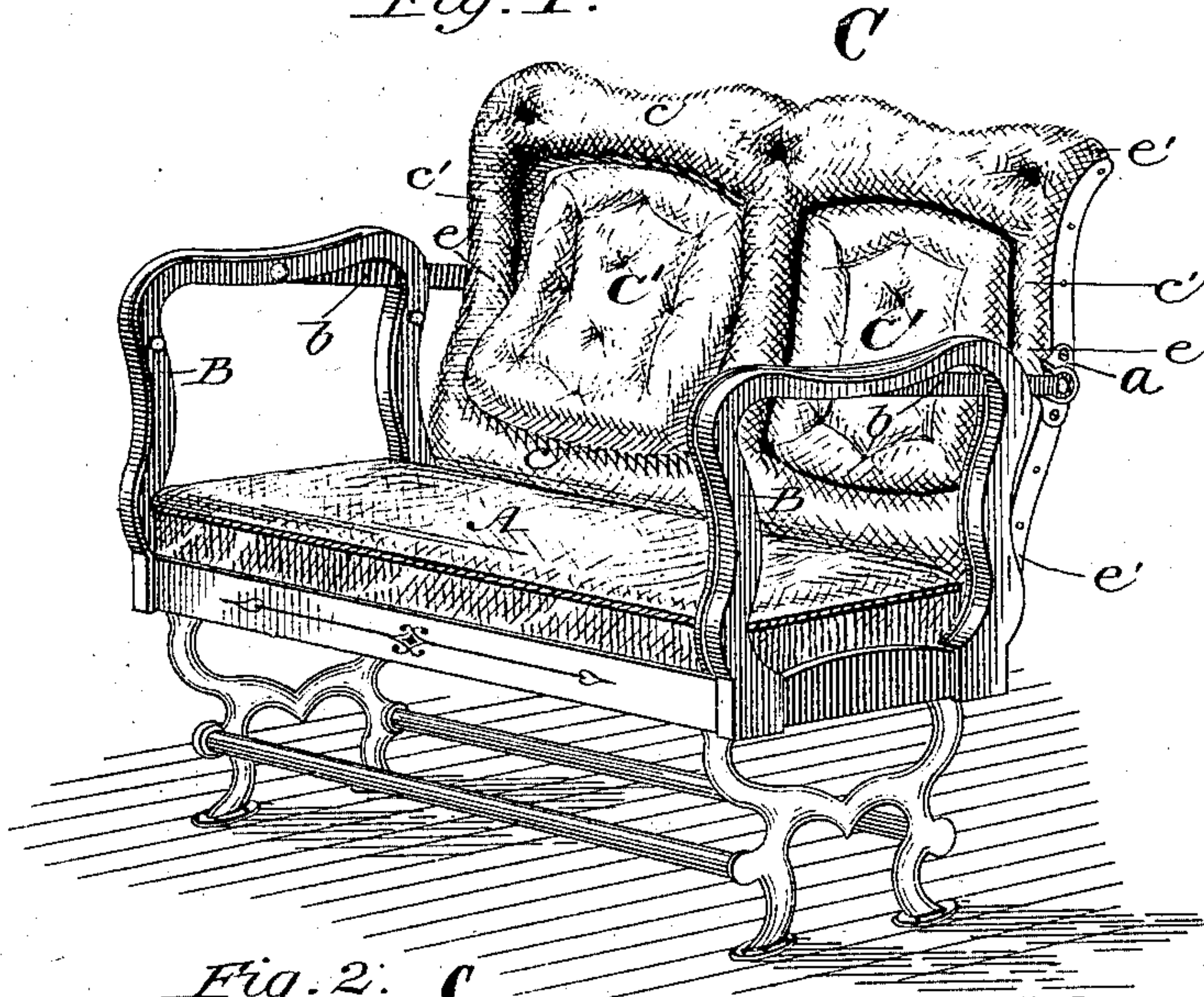
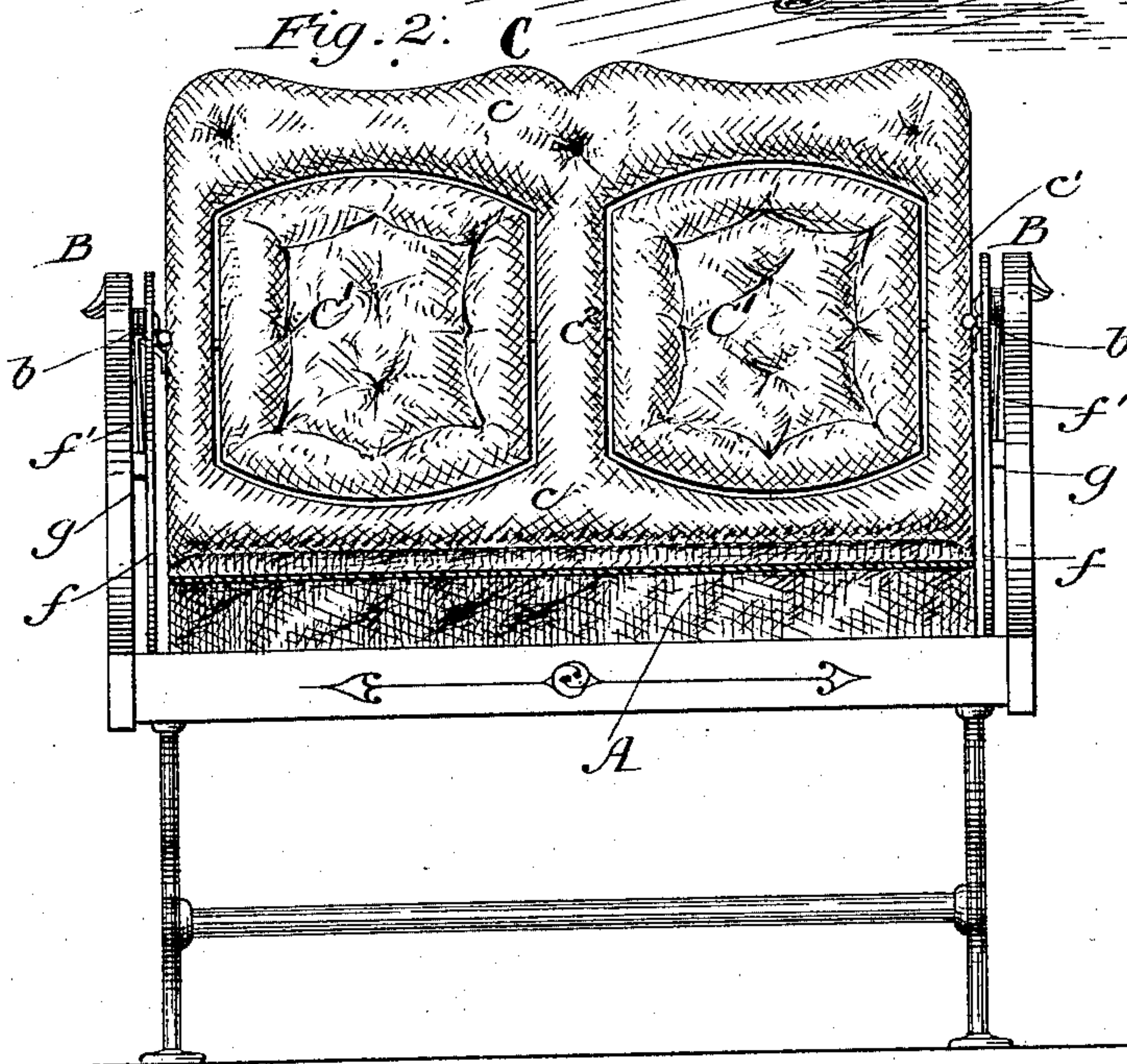


Fig. 2.



Witnesses:

O. W. Bond

William C. Whiting

Inventors:

Arthur M. Richards & Edward Dinsley

By

Jos. G. Elliott

Attorney.

(No Model.)

2 Sheets—Sheet 2.

A. M. RICHARDS & E. DINSLEY.

CAR SEAT.

No. 285,433.

Patented Sept. 25, 1883.

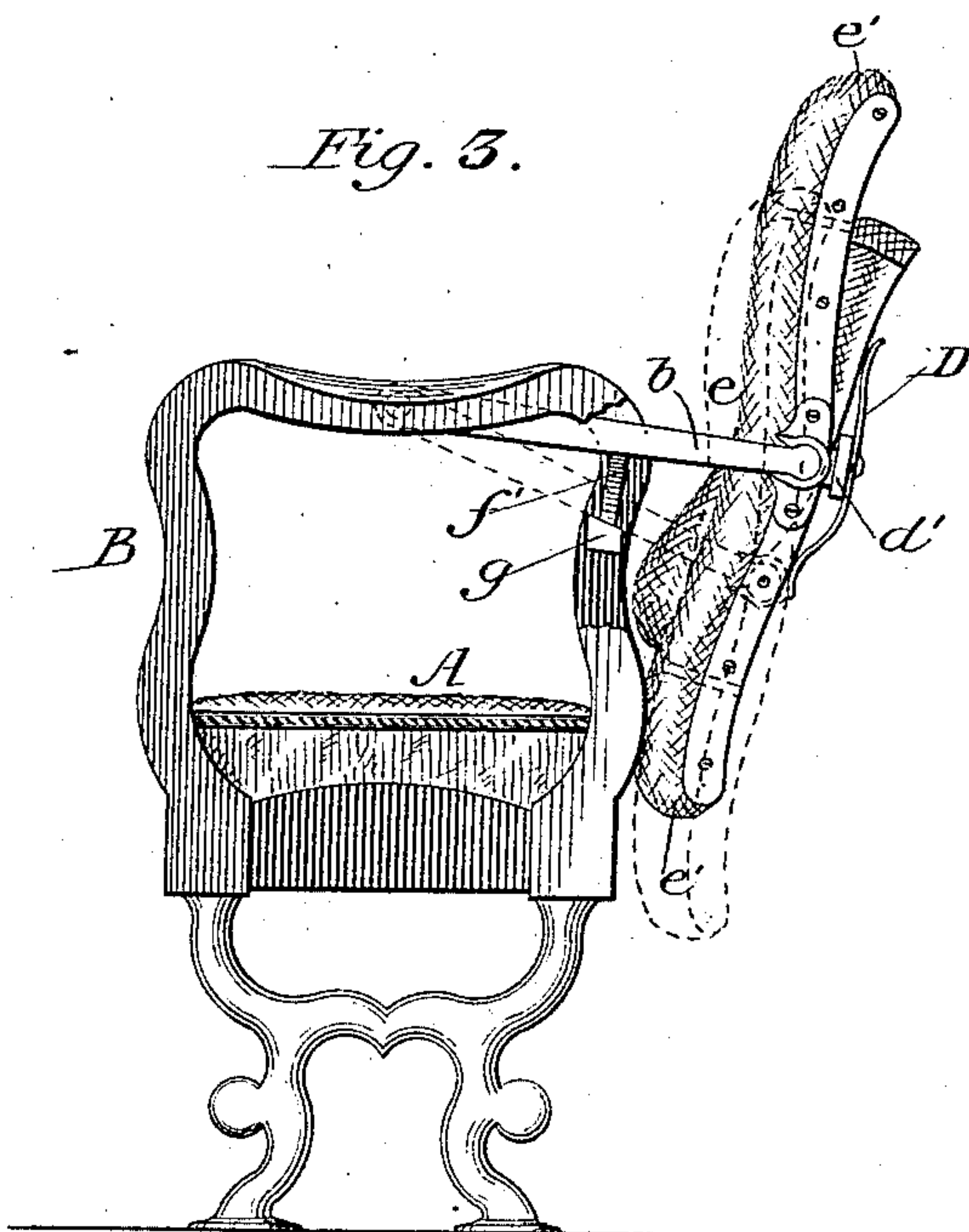


Fig. 4.

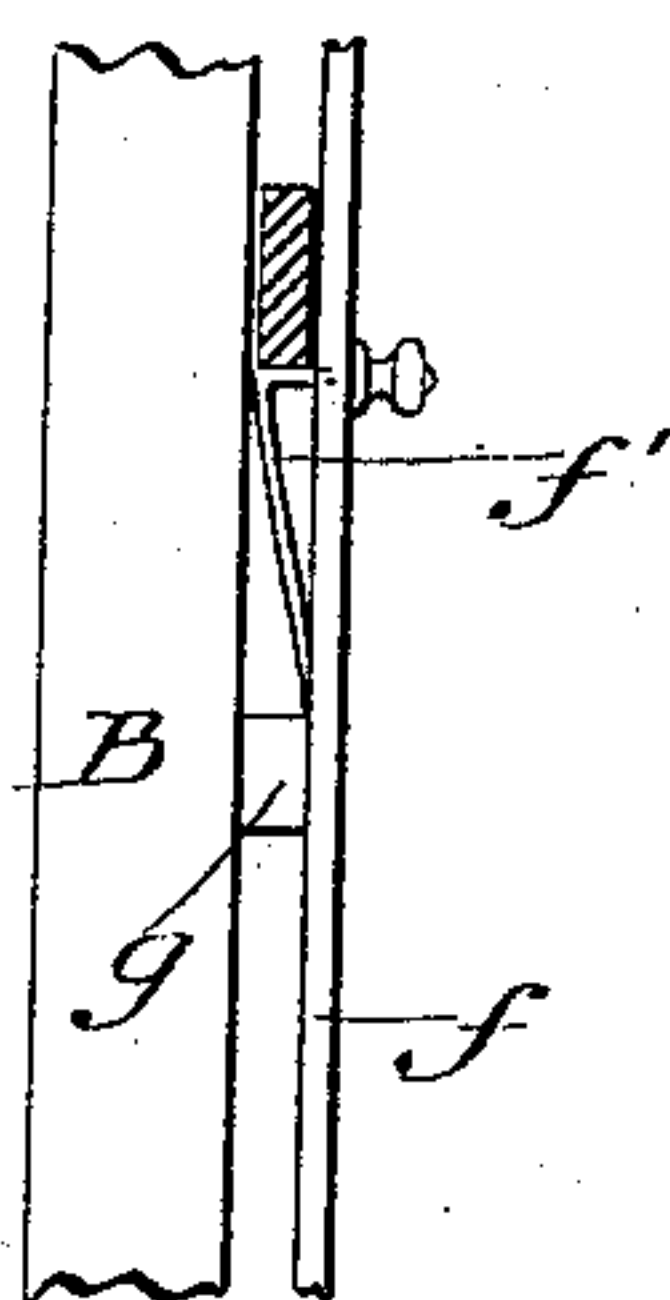


Fig. 5.

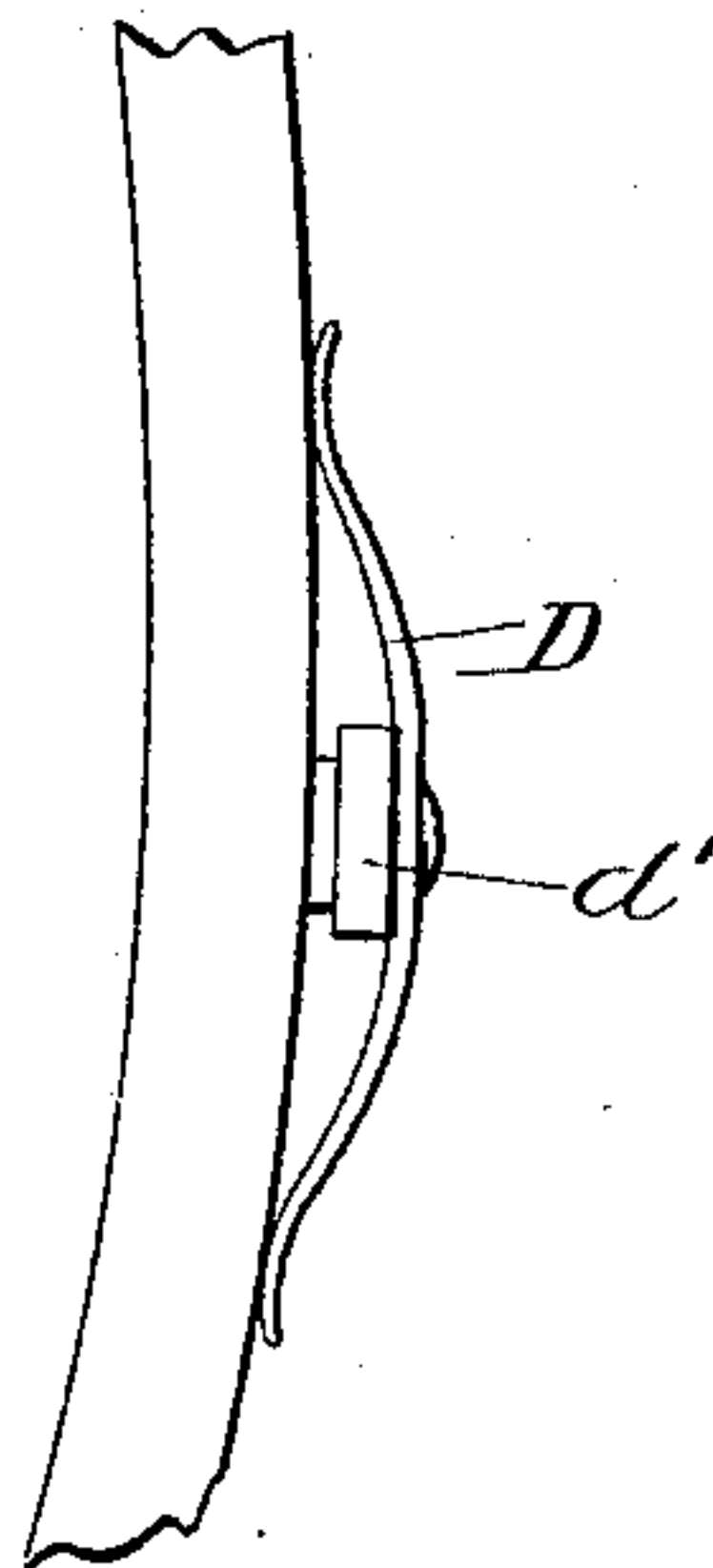
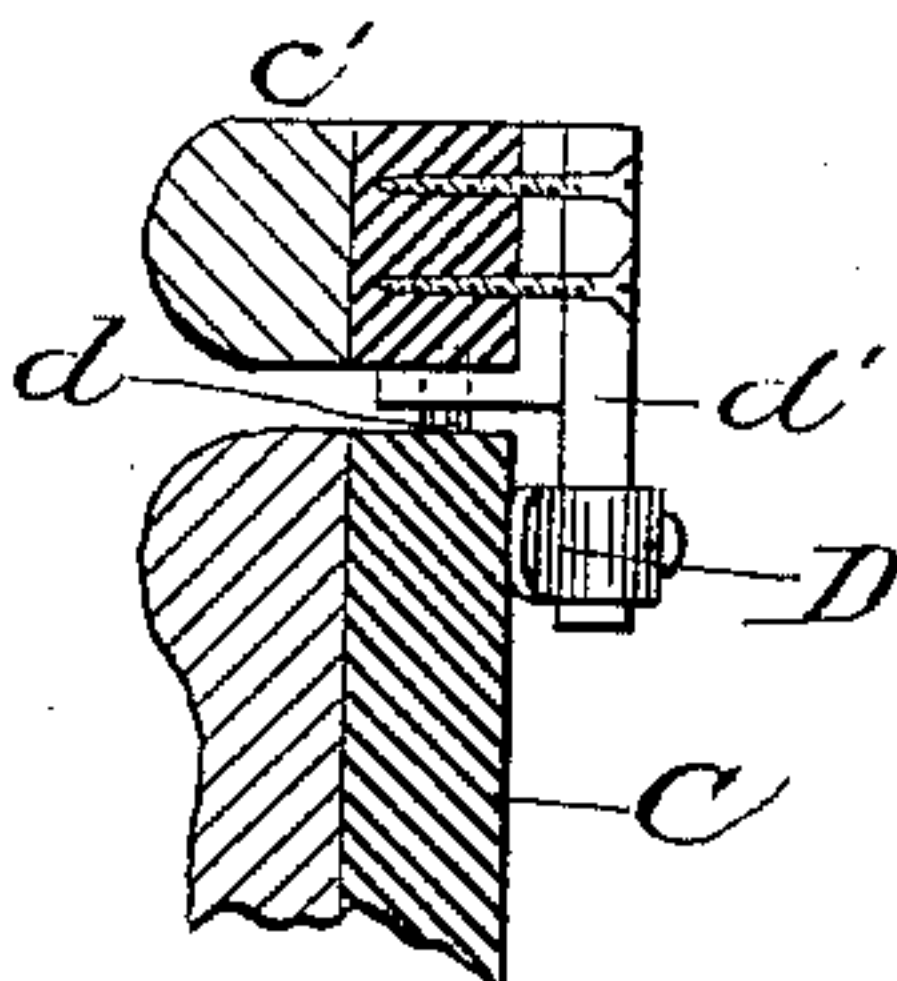


Fig. 6.



Witnesses:

William C. Whiting
O. W. Bond

Inventors:

Arthur M. Richards & Edward Dinsley
By Jno. G. Elliott
Attorney.

UNITED STATES PATENT OFFICE.

ARTHUR M. RICHARDS AND EDWARD DINSLEY, OF CHICAGO, ILLINOIS.

CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 285,433, dated September 25, 1883.

Application filed September 9, 1881. Renewed May 5, 1883. (No model.)

To all whom it may concern:

Be it known that we, ARTHUR M. RICHARDS, a subject of Great Britain, and EDWARD DINSLEY, a citizen of the United States, both residing in Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Car-Seats, of which the following is a specification.

Our invention relates more particularly to improvements in the backs of car-seats, which backs are adapted to be reversed; and the objects of our invention are to provide the car-seat back commonly used with a pivoted instead of a rigid panel for the purpose of adapting such back to the support of the head, shoulders, and small of the back of the occupant when his body is in a reclining position; to provide means for automatically maintaining the pivoted panel in a line with the frame of the car-seat back when the occupant is in an upright position; to provide means for limiting the pivotal movement of the panel to prevent its revolving out of an operative position, and, finally, to provide means for a positive adjustment of the entire back in differing planes relative to the seat. We attain these objects by devices illustrated in the accompanying drawings, in which—

Figure 1 is a perspective of a car-seat embodying our invention with one of the pivoted panels tilted; Fig. 2, a front elevation of the same with both panels upright; Fig. 3, an end elevation with a portion of the arm-rest broken away to show the spring-stop supporting the back, the lower adjustment of the back being shown in dotted lines, and the pivoted back-rest swung upon its pivot; Fig. 4, a detail showing the spring-stop with the pivoted bar in cross-section; Fig. 5, a detail of the rigid frame and the spring operating against the pivoted panel, and Fig. 6 a detail horizontal section through the back and pivoted panel with the spring in plan view.

Similar letters of reference indicate the same parts in the several figures of the drawings.

A represents an ordinary upholstered car-seat provided with the usual arm-rests B B and bars *b b* pivoted to these arms and to the back C to enable the back to be reversed—

that is to say, swung to either side of the seat; but the pivotal movement of the back upon the bar itself is limited by the flanges of the casting *a*, between which flanges the bar *b* operates.

The frame of the back C is made in the same manner as the commonly-used car-seat back; but the top and bottom pieces are upholstered as shown at *c c*, the end pieces as shown at *c' c'*, and the central upright as shown at *c''* independently of the panels *C' C'*, each of which panels is respectively pivoted to the central upright, *c''*, and the adjacent side pieces, *c' c'*, at their center of length by horizontal pivots *d d*, as shown in Figs. 2 and 3.

Pivoted panels *C' C'* are upholstered and curved to correspond, when in their normal position, with the upholstered frame, and are maintained in that position when not in use or when the occupant is sitting upright by bowed springs *D D* secured at their center of length and vertically to studs *d' d'* rigid upon the frame to press at two different points in a vertical line down the back of each of the panels, the studs operating as stops to limit the movement of the panels and prevent the frame from breaking the uprights. (See Fig. 3.) This spring will yield sufficiently to permit the panel to tilt on the pivots when the shoulders of the occupant are brought to bear upon the upper part of the panel, but otherwise will maintain the panel in its normal position—that is, in line with the frame.

On the left of Fig. 1 and in Fig. 3 the tilting or swinging of the pivoted panel, when the occupant is reclining, is clearly shown, though somewhat exaggerated in the latter for the sake of clearness in the drawings; but it will be understood that the upper portion of the panel will effectually support the shoulders, and the lower portion fit in and support the middle and small of the back of the occupant in an easy reclining position, with his head and neck resting in the same manner on the upper part of the frame, the panel readily adjusting itself to the angle assumed by the body, back, and shoulders of the occupant.

Any of the ordinary car-seat backs having a frame provided with panels may be altered at a trifling expense to receive our pivoted

panel, or may have their panels pivoted and upholstered; but the frame shown is somewhat better adapted by reason of its peculiar curvature—that is to say, it curves inwardly (see Fig. 3) at its center of width *e*, and backwardly at its tops *e' e'*, as the case may be, to conform to the natural curvature of the back of the occupant. The central longitudinal concavity adapts the panel to the outward curve of the center of the back of the occupant when reclining, and when the entire back is lowered, as shown in dotted lines in Fig. 3, the convex curves *e e* to the inward curvature of the back of the occupant when sitting upright.

The arms B B are provided upon their inner sides with strips *f f*, conforming in outline to the arms, and between which and the arms the bars *b b* operate when reversing the back, said strips forming guards preventing the clothing or person of the occupant from being pinched between the bars and their respective arms when shifting the bars on the stops, now to be described, which shifting may be done by the occupant without removing himself from the seat.

It will be observed that the back shown has a greater diameter—that is to say, is higher than the ordinary car-seat back—so that its upper edge may be used as a head-rest, and yet close against the seat, for it will be understood that if a back of ordinary width were raised for this purpose a space would remain between the seat and back; but the back shown may be lowered so that its upper edge will correspond in height with the ordinary back, and in so doing the panels will engage with the edge of the seat and be rendered rigid. To provide for this adjustment we arrange in a plane above the usual fixed stops *g g* movable stops *f' f'*, consisting of angular springs secured at their lower ends to the guard-strips, with their upper ends passing through the guards and terminating in buttons *f² f²*, for

convenience in grasping to release the bars when desirable to lower them to the fixed stops.

It will be observed that the movable stops may be operated to lower the back by the occupant while in the seat by simultaneously taking hold of both buttons and drawing the stops toward him. This adjustment of the back not only serves the purpose particularly described, but that of readily adjusting the ordinary car-seat back to persons varying in height, so that their shoulders may be supported.

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

1. The combination, with a seat-back provided with an opening or openings, substantially as described, of a panel or panels located in said openings and pivoted to the back by a horizontal axis, said axis being located centrally of each panel, substantially as set forth.

2. The combination, with a seat-back provided with an opening or openings, substantially as described, of a panel or panels located in said openings and pivoted to the seat-back, and a spring bearing against said panels, so as to maintain the panels in their normal upright position, substantially as described.

3. The combination, with a seat-back frame provided with an opening or openings, substantially as described, of a panel or panels located in said openings and pivoted to said frame, a spring bearing against said panel or panels, so as to maintain them normally in an upright position, but permit them to tilt on their axis, and a positive stop limiting said tilting movement, substantially as described.

ARTHUR M. RICHARDS.
EDWARD DINSLEY.

Witnesses:

JNO. G. ELLIOTT,
WILLIAM C. WHITING.