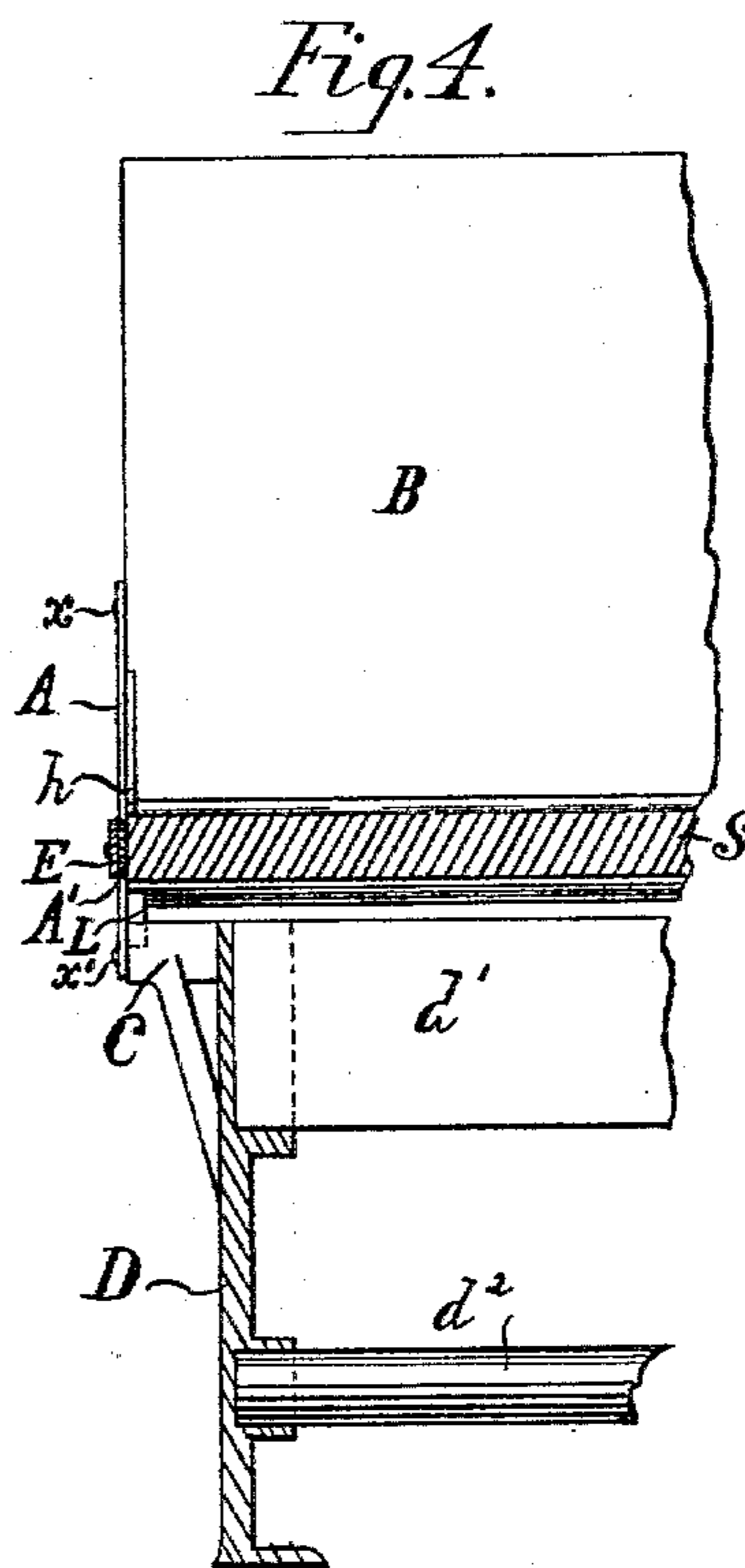
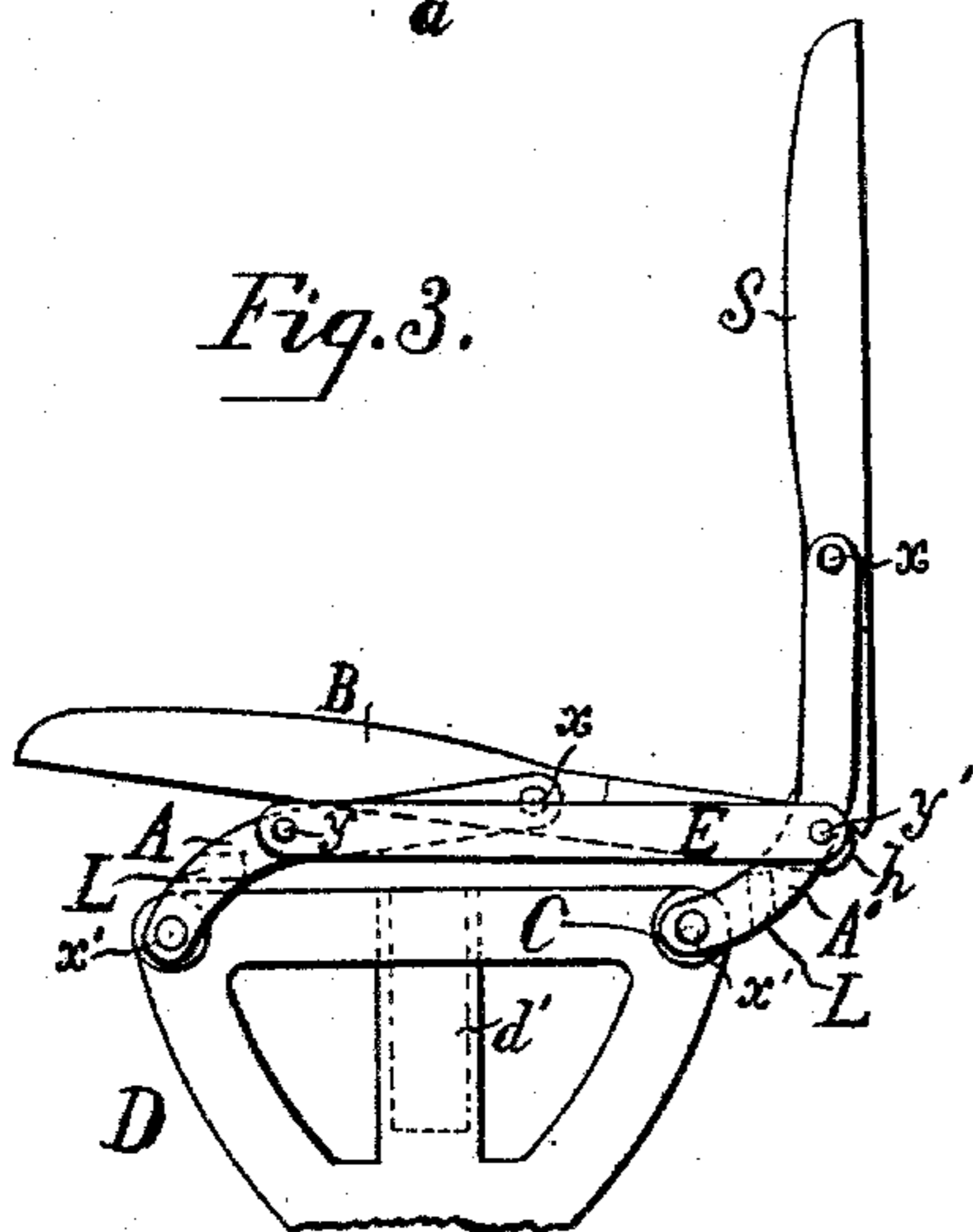
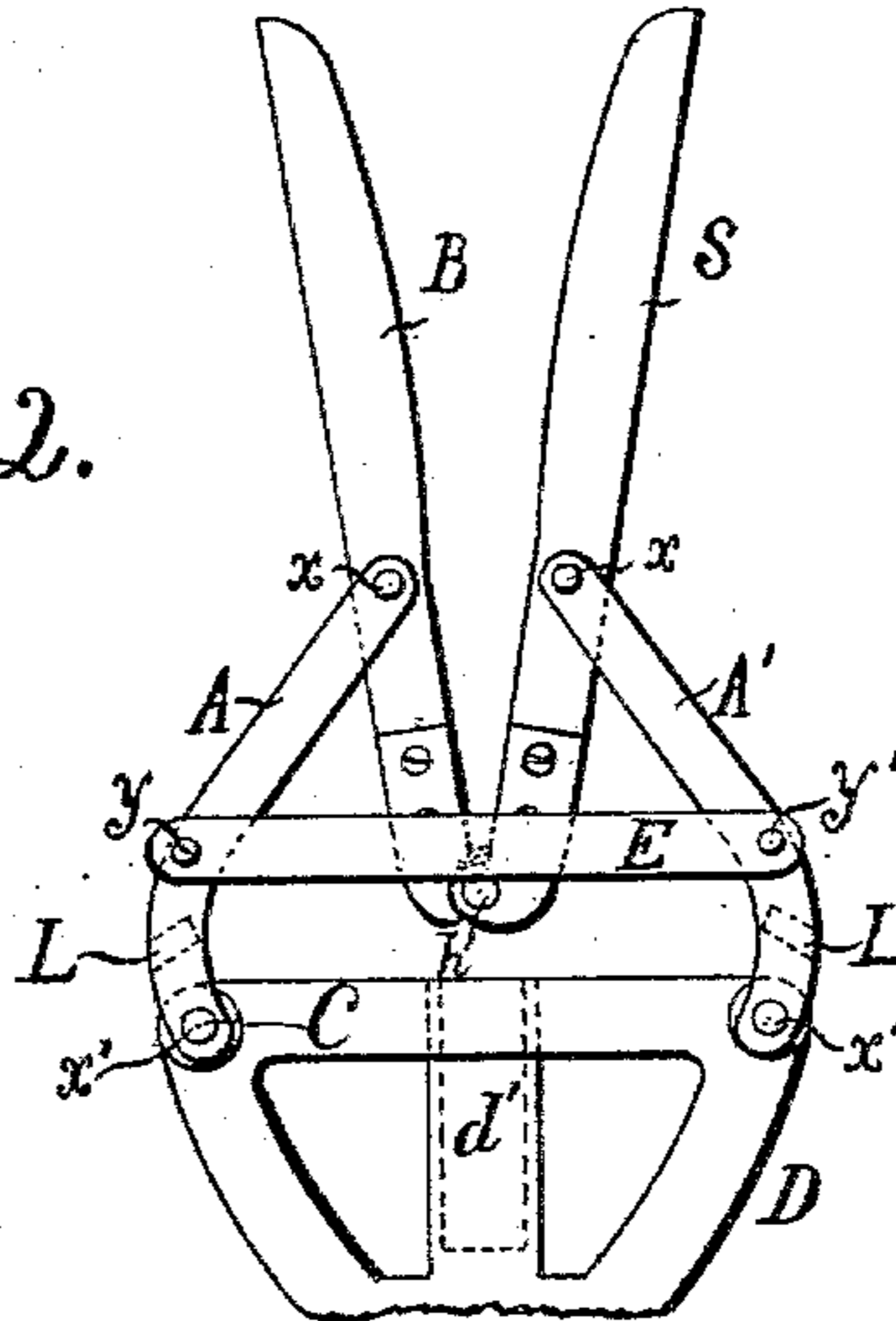
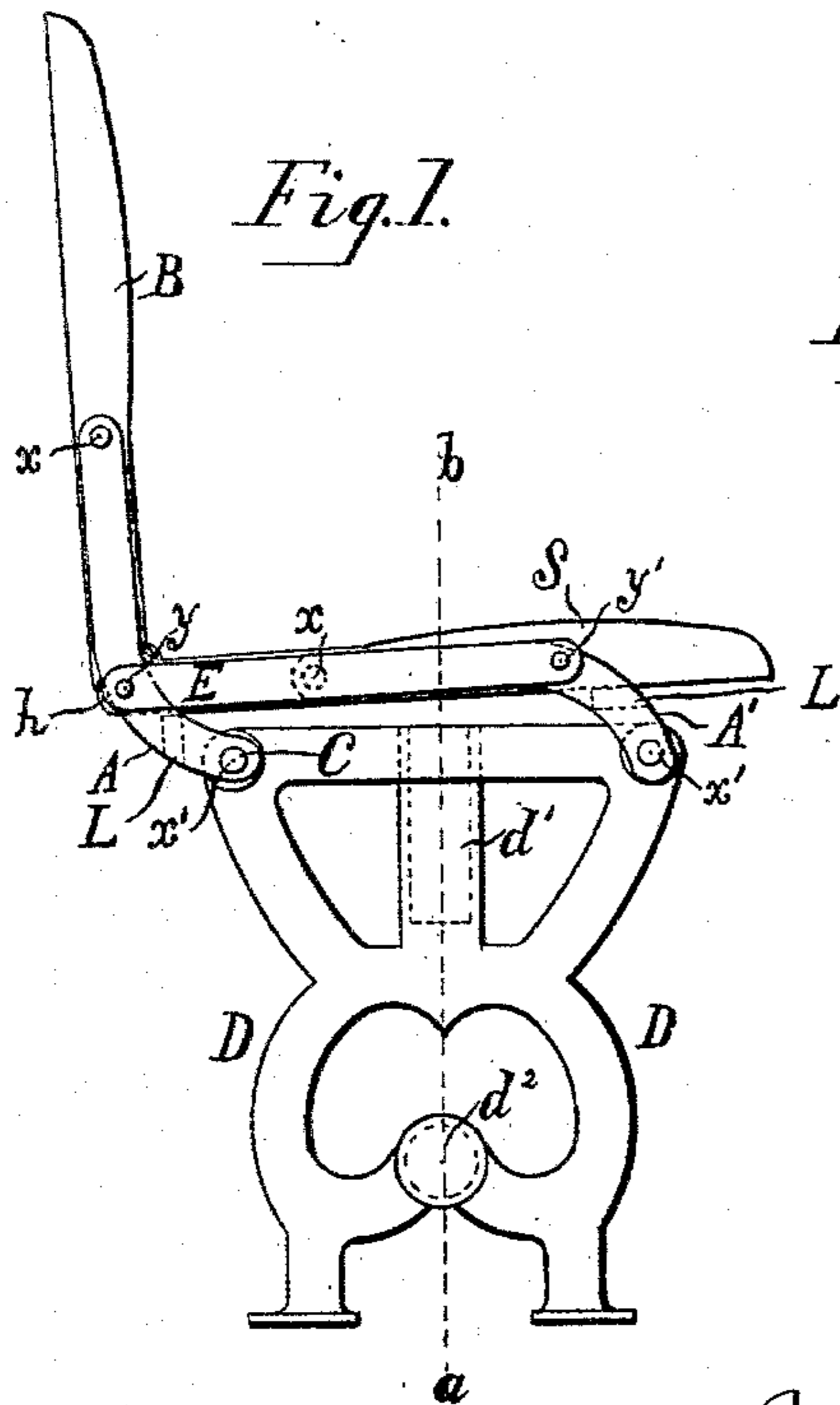


(No Model.)

W. M. NORCROSS.
REVERSIBLE CAR SEAT.

No. 551,326.

Patented Dec. 10, 1895.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM M. NORCROSS, OF PHILADELPHIA, PENNSYLVANIA.

REVERSIBLE CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 551,326, dated December 10, 1895.

Application filed October 4, 1894. Serial No. 524,880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. NORCROSS, a citizen of the United States, residing at the city and county of Philadelphia and State

5 of Pennsylvania, have invented certain new and useful Improvements in Reversible Car-Seats, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, of which—
10 Figure 1 is an end elevation; Fig. 2, an end elevation midway of reversal; Fig. 3, a similar elevation nearly reversed; Fig. 4, a section as on line *a-b*, Fig. 1.

The object of this invention is to supply a
15 reversible car-seat that shall be simple in construction and in operation, readily made, free from unnecessary projections or obstructions at the ends, and which may be quickly and easily reversed, and also partially collapsed
20 in order to leave a free passage-way between rows of the seats.

The invention consists of the combination with two parts constituting the back and seat portions hinged together at their lower or
25 meeting edges, an arm, one end of which is pivoted to one of said parts, as the seat portion, the other end thereof pivoted to the usual legs or support of the seat, a similarly-pivoted arm connecting the other part or back with
30 said support, a horizontally-disposed bar pivoted to and connecting the said arms, together with suitable stops upon which the seat portion is adapted to rest when the car-seat is in use, the construction and arrange-
35 ment being such that the seat may be readily reversed by turning upon the said hinge and pivots, the seat thereof becomes the back, and the back the seat, as desired, or the two parts brought to an approximate vertical position,
40 when required, for the purposes hereinbefore mentioned.

The invention consists also in certain special features of construction, which will be
45 duly pointed out, whereby the car-seat is devoid of any projecting arms or other obstruction at the ends thereof, a desideratum, especially in the transversely-disposed seats usual in city railway passenger-cars.

Referring to the accompanying drawings,
50 B and S designate the two parts or boards constituting the back and seat, respectively, of

substantially the same form and dimensions. They are placed together along their lower or inner edges and connected by a hinge *h* at each end.

55 A A' are two similarly-shaped arms, the end of one of which, A, is pivoted at *x* to the back B, and the other end is pivoted at *x'* to a cross-bar C of the legs or support D, whose feet rest on the floor of the car. The other arm
60 A' is likewise pivoted to the seat S and to the opposite end of the cross-bar C. These arms are connected by a horizontal transverse bar E, one extremity of which is pivoted at *y* to one
65 of said arms, and the other extremity at *y'* to the other arm. Each of these arms A A' is provided with an inwardly-projecting lug or stop L. (Shown in dotted lines in Figs. 1, 2, and
3, and in full lines in Fig. 4.) Said arms and connecting-bar, &c., are so arranged relatively
70 to each other and the parts B and S, that when the car-seat is in actual use, they will occupy the positions seen in Fig. 1—that is to say, the upper portion of one of the arms, as A, will coincide practically with the end of the
75 back, and the other arm A' will coincide with the end of the seat, while the connecting-bar E will coincide with the end of the seat portion and the latter will bear upon the lugs L. The back B will be retained firmly in the
80 proper position by the arms and connecting-bar. It will also be seen that the ends of the seat are entirely unobstructed and devoid of any projections upon which the clothing of
85 sitters may catch.

To reverse the seat—that is, to change the seat to the back and the back to the seat—it is merely necessary to seize hold of the back or seat portion and move the same on the pivots and hinges to cause them to take the po-
90 sition shown in Fig. 2 and then over to the position shown in Fig. 3, thence until the part B rests upon lugs L.

When it is desired to make ample passage-way between two adjacent rows of the seats,
95 either one or both of the rows may be shifted to the position of Fig. 2 or thereabout. Also, in case of rain in open cars, when the seats are unoccupied, they may be placed in like position, thus allowing the rain to run off. 100

The support D is connected to a similar one at the other end of the seat (not shown in the

drawings) by bars d' and d^2 , whose ends rest in suitable sockets in the inner side of said support.

I remark that as the only function of the lugs L is to form a stop or stops for the seat portion, as described, it is not essential, although preferable, that they shall be secured to or be a part of the arms, for it will be obvious that such stop or stops may be located elsewhere—for example, on the inner side of the top or cross-bar d' of the seat-support. I also remark that it is to be understood that the arms, connecting-bar, &c., are duplicated on the other end of the car-seat. (Not shown).

I do not broadly claim a car-seat comprising a support, a pair of combined back and seat parts, means whereby the parts are guided in their movement across the support, and means connecting the parts with the support so as to cause the parts, when in one position and shifted, in the act of reversing, to fold toward each other until they assume an approximately central position on the support and then unfold into reverse position; but

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a reversible car-seat the combination of the hinged seat and back portions, the arms pivoted respectively thereto and to the seat support, and the horizontal bar pivoted to and

connecting said arms, together with a suitable stop for the seat portion, all constructed, arranged and adapted to operate substantially as and for the purpose set forth.

2. In a reversible car-seat the combination of the seat support, the hinged seat and back portions, the arms pivoted to said support and to the seat and back portions respectively, and coinciding substantially with the ends thereof, the horizontal bar pivoted to and connecting said arms, and coinciding practically with the end of the seat portion, together with a suitable stop for the latter, all constructed arranged and adapted to operate substantially as and for the purpose set forth.

3. In a reversible car-seat the combination of the hinged seat and back portions, the arms pivoted respectively thereto and to the seat support, the horizontal bar pivoted to and connecting said arms, together with the stop lugs secured to the latter, substantially as and for the purpose set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

WILLIAM M. NORCROSS.

Witnesses:

GEO. W. REED.

WALTER C. PUSEY.