

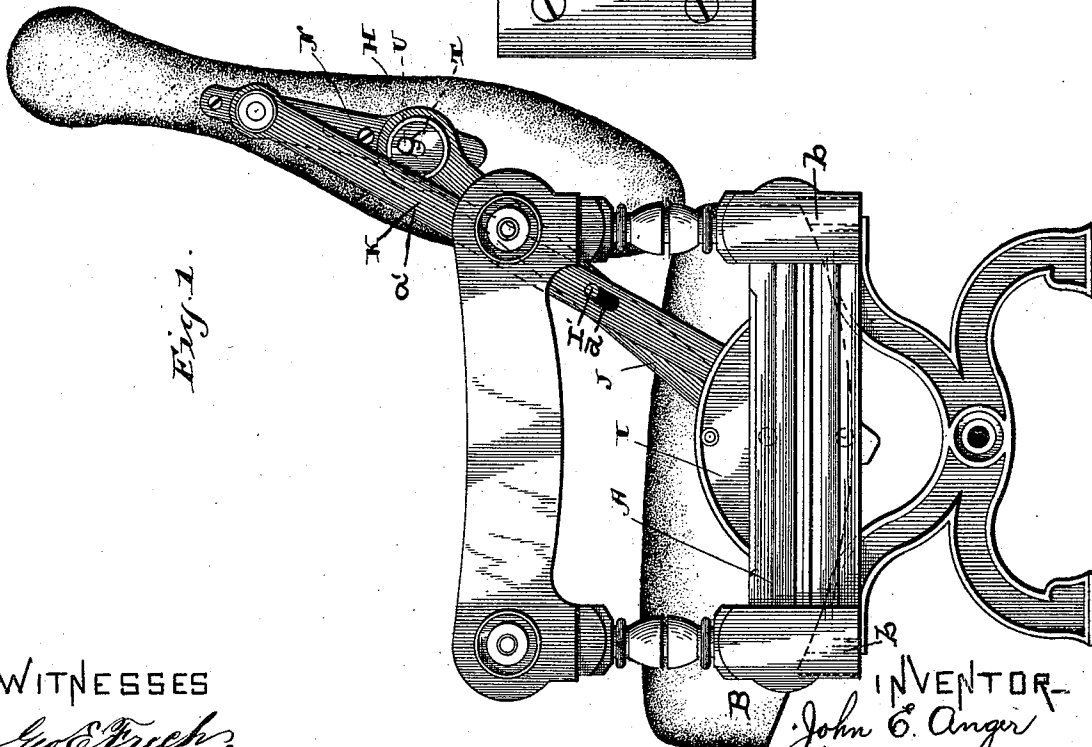
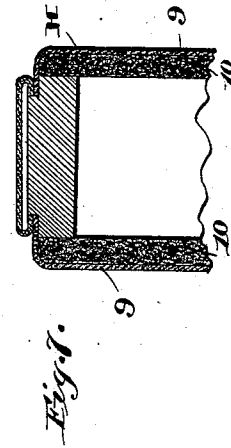
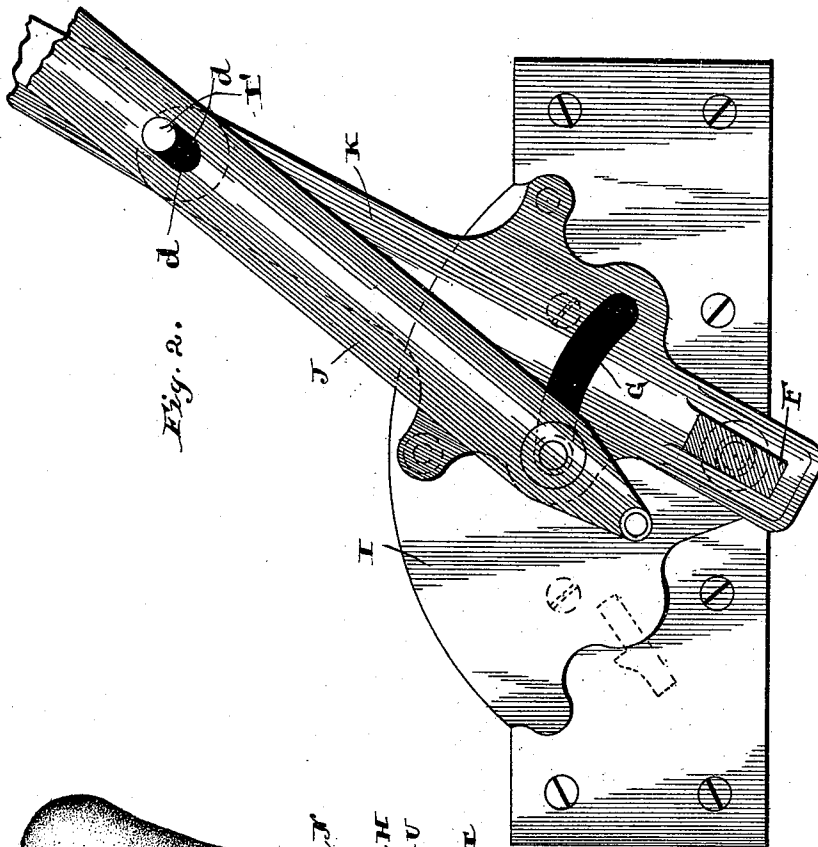
(No Model.)

2 Sheets—Sheet 1

J. E. ANGER.
REVERSIBLE CAR SEAT.

No. 510,374.

Patented Dec. 5, 1893.



WITNESSES

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(No Model.)

2 Sheets—Sheet 2.

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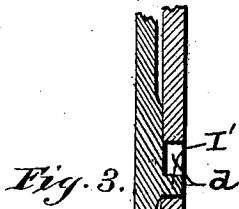


Fig. 4.

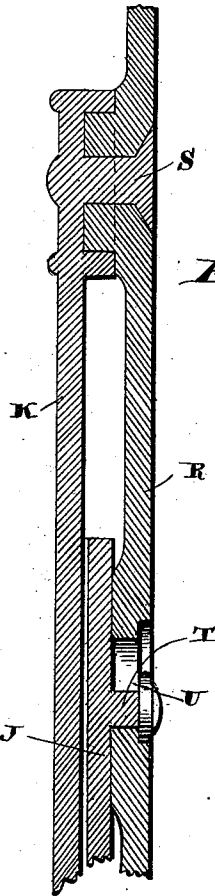


Fig. 5.

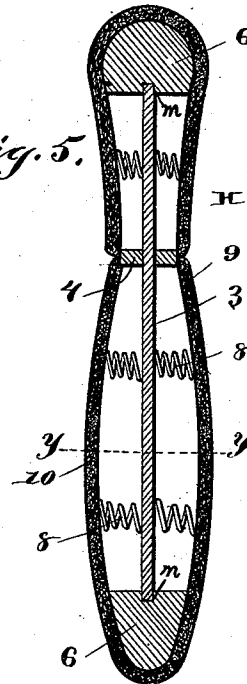
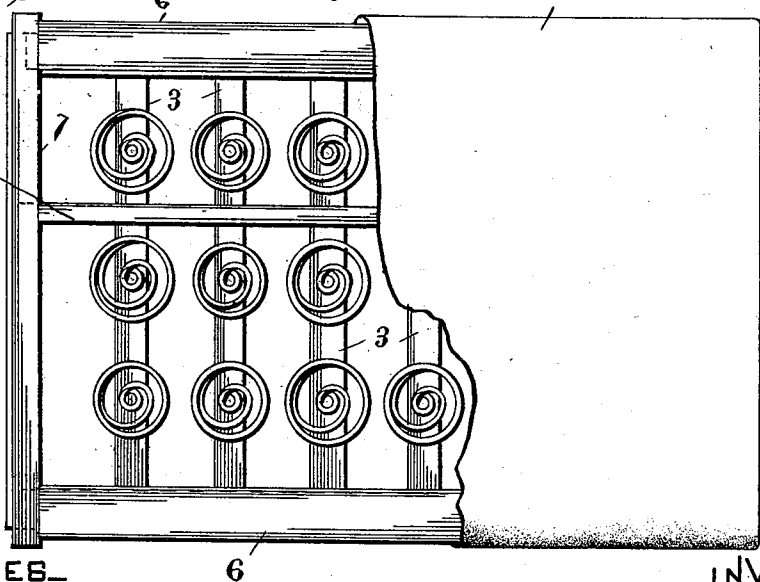


Fig. 6.



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UNITED STATES PATENT OFFICE.

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BERT A. STANLEY, OF LANSINGBURG, NEW YORK.

REVERSIBLE CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 510,374, dated December 5, 1893.

Application filed August 30, 1892. Serial No. 444,503. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. ANGER, of Green Island, in the county of Albany and State of New York, have invented certain new and useful Improvements in Reversible Car-
5 Seats; and I do hereby 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 pertains to make and use it, reference being had to the accompanying
10 drawings, which form part of this specification.

My invention relates to improvements in reversible car seats; and it consists in the particular construction and arrangement of
15 parts, which will be fully described hereinafter and particularly pointed out in the claims.

The object of my present invention is to produce a reversible car seat of the particular construction hereinafter fully described and shown, whereby the back of the seat is not revolved, but simply shifted from one side to the other of the seat proper, using both sides of the back, and to connect the swing-
25 ing arms of the back with the seat portion, whereby it is simultaneously moved with the back, in the proper relative position with the back.

In the accompanying drawings:—Figure 1
30 is a side elevation of a seat which embodies my invention complete. Fig. 2 is an enlarged side view of the lower portions of the swinging arms. Fig. 3 is a vertical section taken transversely through the swinging arms when they are in a vertical position. Fig. 4 is a
35 vertical section through the upper ends of the swinging arms when in a vertical position, and through the plate that is attached to the end of the back portion. Fig. 5 is a vertical section through the back portion proper. Fig.
40 6 is a side view of the back portion, the covering being broken away to show the interior thereof. Fig. 7 is a horizontal section through the back taken on the dotted line $y-y$ of
45 Fig. 5.

A indicates the middle bar of the end frame of the seat, which is provided with a curved support or supports b , shown in dotted lines, Fig. 1 for supporting the seat portion B. Secured to the inner side of this central bar A
50 at its center is a plate I, which is provided

with a lug E at the lower edge thereof, and with a lug D at the upper edge thereof, both of which extend inward. There is secured to the inner side of the car, a second plate I
55 which corresponds exactly in construction with this plate I that is attached to the end frame. An outer swinging arm K is pivoted at its lower end upon the lug E, and held in place thereon by means of a screw a . This
60 arm K is widened out just above its lower end, and this widened out portion is provided with a curved slot G, through which the lug D passes, whereby this outer arm K is allowed a swinging movement upon its pivotal lug E,
65 and is limited and supported at the extremes of its swing by the ends of the slot engaging the said lug D as will be understood. The upper end of this arm K is pivotally connected to the upper end of a plate N which is se-
70 cured to the end of the back portion H.

By reference to Fig. 3 it will be seen that the lug D extends inside of the outer arm K, and pivoted upon this lug D between its ends, is a second swinging arm J. Projecting in-
75 ward from the arm K a suitable distance from its lower end is a projection I' which passes into a vertical slot d made in the inner arm J. Owing to this construction, it will be seen that when the outer arm K is swung upon its
80 pivotal point, the inner arm is also turned. It will also be noticed that the pivotal point of the inner arm is above the pivotal point of the outer arm, so that the upper end of the inner arm, which is the shorter of the two, is
85 moved farther than the intermediate corresponding point a' of the outer arm. The upper end of the inner arm is provided with an inwardly extending projection T, which enters an elongated opening or slot U, in the
90 lower end of the plate N, that is secured to the end of the back portion. When the back portion is shifted from one side of the seat to the other, owing to the fact that the upper
95 end of the inner arm moves farther than the corresponding point of the outer arm, the back portion assumes the same inclined position at either side of the seat portion. A stud L extends inward from the lower end of the inner arm J, and enters the slot e made in the
100 end of the seat portion B.

It will be understood of course, that while

I have described but one end of the seat, the swinging arms and other construction will be the same at the other end of the seat, and that they will all move together.

5 For the purpose of strengthening the seat, and preventing one set of arms moving before the other, a bar F has its ends placed in pockets *i*, formed in the lower ends of the outer bars K. Attention is also called to the
10 fact, that this bar F is at the center of the pivotal point of the outer lever or arm K, so that it forms an axle connection for them, which causes them to move together uniformly, and prevents any torsional movement
15 of the parts when the chair is being shifted, as well as greatly strengthening the same.

From the above description it will be seen, that when the back portion is shifted it is raised as it moves over, and that the lower
20 ends of the inner arms at the same time move the seat portion B forward, thus bringing it in the proper relative position to the back portion no matter to which side it is shifted, and that the arrangement of the arms is such
25 that the back portion is held in an inclined position when shifted.

Owing to the fact that the back portion does not revolve, and that the top always remains the same, I am enabled to shape each
30 side of the back portion alike, and of an outline corresponding to the shape of the person, whereby it is made very comfortable. This it will be understood cannot be the case where the back revolves as in ordinary car
35 seats, for the reason that when the back is at one side of the seat, the top thereof is the bottom when at the opposite side of the seat.

The back portion is composed of top and bottom horizontal bars *6*, which are connected
40 at their ends by means of the vertical pieces 7. These horizontal top and bottom pieces *6* are provided at their inner faces with longitudinal grooves *m*, which receive the ends of

vertical pieces 3. The covering is composed of plush 9, and a suitable filling 10, and
45 springs 8 are placed between the bars 3 and the inner side of the covering. A horizontal bar 4 is placed near the upper bar 6, and the covering is attached to this, at which point it is drawn in to give it the desired shape.
50

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

1. A reversible seat comprising a frame, a back, an inner and outer swinging arm for
55 each end of the back, the outer arms pivoted at their lower ends to the said frame and provided with transverse slots above their pivotal points, the inner arms pivoted through said slots to the said frame, the upper ends
60 of the arms pivoted to the said back one above the other and having a sliding pivotal connection between their ends, and the pivotal point of one arm movable longitudinally on the back, substantially as specified.
65

2. A reversible seat comprising a frame, a reversible back, a reversible seat, an inner and outer arm for each end of the back, the inner arms pivoted between their ends to the said frame and carrying projections at their
70 lower ends engaging opposite ends of the seat, the lower ends of the outer arms firmly connected by a cross bar below the lower swinging ends of the inner arms and pivoted at this point to the frame, the said outer arms
75 having transverse slots above their pivotal points through which the pivotal points of the inner arms extend, and the arms having a sliding pivotal connection between their ends, substantially as specified.
80

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

JOHN E. ANGER.

Witnesses:

GEORGE A. VAN BERGEN,
GEORGE ANGER.