

F. BENNETT & S. A. WALKER.  
CAR SEAT.

APPLICATION FILED OCT. 29, 1903. RENEWED MAY 3, 1905.

2 SHEETS—SHEET 1.

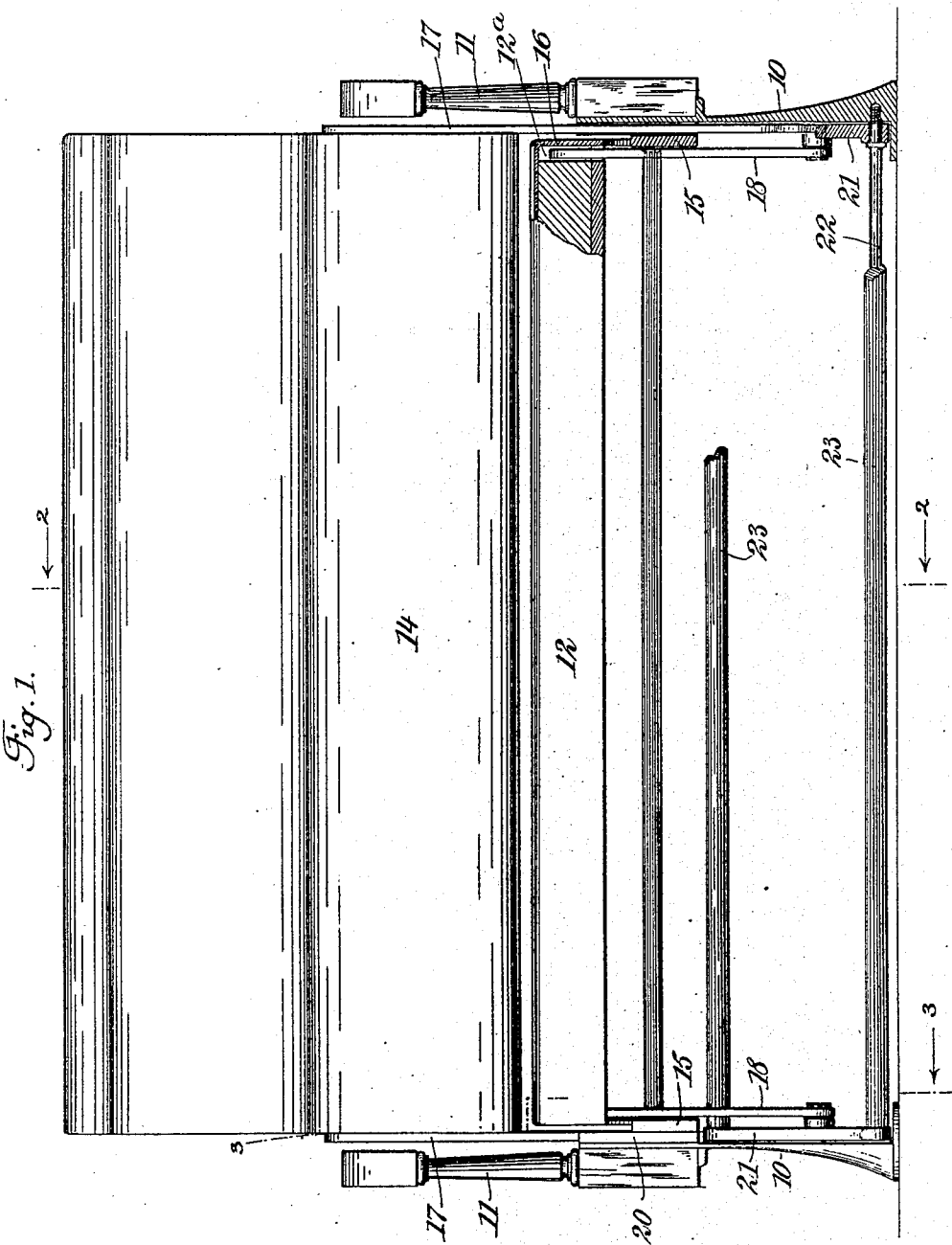


Fig. 1.

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No. 809,084.

PATENTED JAN. 2, 1906.

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CAR SEAT.

APPLICATION FILED OCT. 29, 1903. RENEWED MAY 3, 1905.

2 SHEETS—SHEET 2.

Fig. 3

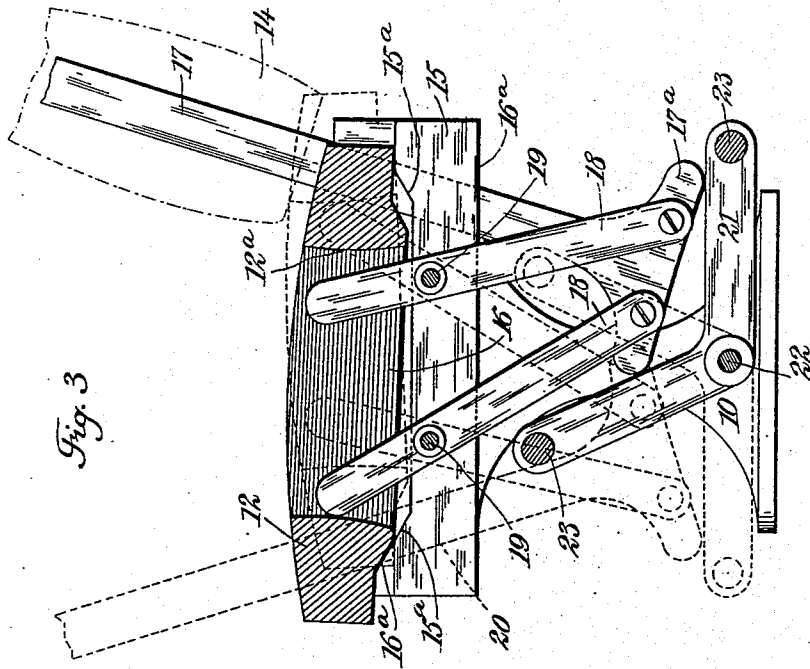
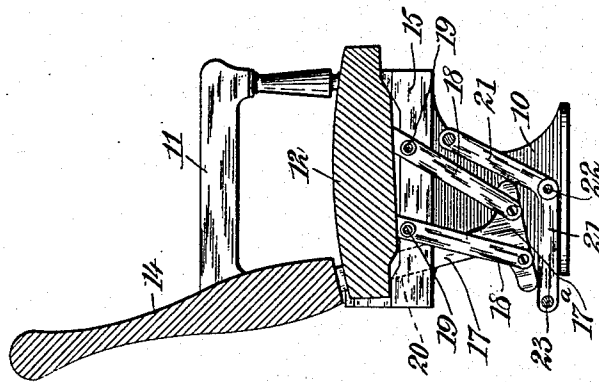


Fig. 2.



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## UNITED STATES PATENT OFFICE.

FREDERICK BENNETT AND SHERIDAN A. WALKER, OF NEW YORK, N. Y.

## CAR-SEAT.

No. 809,084.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed October 29, 1903. Renewed May 3, 1905. Serial No. 258,725.

*To all whom it may concern:*

Be it known that we, FREDERICK BENNETT, of Ravenswood, Long Island City, borough of Queens, in the county of Queens and State of New York, and SHERIDAN A. WALKER, of the borough of Manhattan, in the county of New York, city and State of New York, citizens of the United States, have invented a new and Improved Car-Seat, of which the following is a full, clear, and exact description.

This invention relates especially to a car-seat of that class in which the back is made to shift from one position to another, so as to reverse the seat, and in which the seat proper is made to change its inclination in correspondence to the change in the position of the back.

The invention resides in a certain novel manner of mounting the back or the back and seat to attain these results and in a peculiar arrangement of the foot-rest with respect to the said mounting devices.

This specification is an exact description of one example of our invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the invention with parts broken away. Fig. 2 is a reduced cross-section on the line 2 2 of Fig. 1, and Fig. 3 is a detail section on the line 3 3 of Fig. 1.

10 indicates the frame-pieces, which are located at each end of the seat and carry the arms 11.

12 indicates the seat proper, and 14 indicates the back.

Fastened to or formed integral with each frame member, at the upper inner side thereof, is a guide 15, each guide having in its upper edge two inclines 15<sup>a</sup>, respectively, adjacent to the ends of the guides. The seat 12 has at each end a runner 16, these runners bearing, respectively, on the guides 15 and being formed at each end portion with inclines 16<sup>a</sup>, corresponding reversely to the inclines 15<sup>a</sup>. When, therefore, the seat is moved leftward to the position shown by full lines in Fig. 3, the left-hand incline 16<sup>a</sup> rides up the corresponding incline 15<sup>a</sup>, and the seat is tilted or canted

downward toward the right. When the seat is moved to its opposite position, as indicated by the broken lines in Fig. 2, this cant is reversed. Therefore by these means the seat is mounted to shift from one side to the other as the back is reversed and simultaneously to tilt or cant downward toward the side at which the back is located.

The back is supported by two arms 17, which extend vertically between the guides 15 and the respective frame members 10 and are formed with enlarged lower portions 17<sup>a</sup>, each pivotally connected with two links 18, whereby the arms 17 and the back are supported. Said links 18 are two for each of the arms 17, and are pivoted, as at 19 in the drawings, preferably by means of rods which extend transversely under the seat from side to side and are mounted in the aforesaid guides 15. The links 18 project upwardly from the pivots 19, and their upper extremities are fitted in cavities 12<sup>a</sup>, formed in the ends of the seat proper 12, just inward of the runners 16. The swinging movement of the arms 17 is limited by blocks 20, which are located at each end of the guides 15, between said guides and the corresponding frames. These blocks may or may not be formed integral with the frames or with the guides, as desired. As here shown, they are separate from the frames and guides and serve the double purpose of limiting the movement of the arms 17 and of spacing the guides from the frames. As the arms 17 are swung from one side to another they carry with them the back 14, and in this manner the back is reversed. It will be observed that the arms 17 in shifting have a combined swinging and bodily movement.

The foot-rest comprises two elbows 21, located one at each side frame 10 and fulcrumed on a rod or bar 22, which extends across from frame to frame at any desired elevation from the floor-line. The said elbows 21 are in direct line with the enlargements 17<sup>a</sup> at the lower ends of the arms 17, and the enlargements contact with the elbows so as to shift the elbows on their pivot 22 in unison with the shifting of the arms 17. The ends of the elbows are connected by bars 23, which form the foot-rests proper and extend across from frame to frame, as shown. By this arrangement the foot-rests are adjusted or shifted with the

parts of the seat, and it will not be possible for a person in the seat behind to reverse the seat ahead by pressing on the foot-rest.

In connection with the operation of this seat it will be observed that the back is moved in true parallelism to the floor-line, owing to the arrangement of the links 18 and arms 17, and it will also be observed that when in its intermediate position, with the back standing in the middle thereof, the seat is in its lowermost position and as the back continues on to its extreme position at one side the seat moves slightly away from side to side and is depressed at the side adjacent to the back and raised at the side removed therefrom. The two parts act, therefore, in true coincidence, and the movement of one in no way interferes with the other.

Referring to Fig. 3, it may be seen that upon swinging the back leftward the right-hand link 18 after assuming a perpendicular position will begin to lift at its lower end. The left-hand link, however, will not at this time reach a perpendicular position, and its lower end will for a time continue to drop. This difference in movement between the lower ends of the links imparts a turning movement to the lower end 17<sup>a</sup> of the arm 17, permitting the arm to change the direction of its inclination, as indicated by the full and broken lines in Fig. 3, and allowing the arm, and consequently the back, to move from one side to the other along an essentially horizontal line. In this connection it is important to observe that the upper or supporting pivots of the links are wider apart than the lower pivots connecting the links with the enlargement 17<sup>a</sup> of the arm 17.

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

1. The combination of a support, a seat movably mounted thereon, two intermediately-pivoted links mounted on the support and having their upper ends in connection with the seat, a back, and means connecting the back with the lower ends of the links, to sustain the back.

2. The combination of a support, a seat movably mounted thereon, two intermediately-pivoted links mounted on the support and having their upper ends in connection with the seat, a back, and arms attached to the sides of the back and extending downward to and connected with the lower ends of the links to sustain the back on the links.

3. The combination of a support, a seat movably mounted thereon, two intermediately-pivoted links mounted on the support and having their upper ends in connection with the seat, a back, arms attached to the sides of the back and extending downward to and connected with the lower ends of the links, to sustain

the back on the links the lower ends of the arms having enlargements, and a rocking foot-rest having parts between which said enlargements engage, whereby to operate the foot-rest in unison with the seat and back.

4. The combination of a support, a link hung thereon, a seat having connection with the link, to be operated thereby, a back, an arm attached to the back and extending downward to and having connection with the link, and a foot-rest including an elbow-like part, between the limbs of which the lower end of the arm projects whereby to operate the foot-rest in unison with the back and seat.

5. The combination of a support, an intermediately-pivoted link mounted thereon and extending in a vertical direction, a movable seat mounted on the support and engaged by the upper part of the link, and a movable back having a part extending downward in connection with the lower end of the link, the back being wholly sustained through the medium of the link, said arrangement causing the seat and back to change position simultaneously.

6. The combination of a support, a seat movably mounted thereon, an intermediately-pivoted link mounted on the support and extending in a vertical direction, the link having its upper portion engaged with the seat, a back, an arm attached to the back and extending downward therefrom and having connection with the lower portion of the link, the back being wholly sustained through the medium of the link, and a foot-rest mounted below said arm and engaged thereby, whereby to operate the seat, back and foot-rest simultaneously.

7. The combination with a support, of two links pivotally mounted thereon and hanging freely downward from the same, a back, and a member projecting downward from the back and having pivotal connection with the lower ends of the links to sustain the back through the medium of said links.

8. The combination with a support, of two links pivotally mounted thereon and hanging freely downward from the same, a back, a member projecting downward from the back and having pivotal connection with the lower ends of the links to sustain the back through the medium of said links, and a seat movably sustained on the support and adapted to be operated by said links whereby to shift the seat simultaneously with the back.

9. The combination with a support, of two links independently pivoted thereon and hanging downward therefrom, a back and a member projecting downward from the back and having the lower portions of the links independently pivoted thereto, the upper or supporting pivots being farther apart than the lower or second-named pivots.

10. The combination with a support, of two

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links independently pivoted thereon and hanging downward therefrom, a back and a member projecting downward from the back and having the lower portions of the links independently pivoted thereto, the upper or supporting pivots being farther apart than the lower or second-named pivots, and a seat movably mounted on the support and arranged to be operated by said links.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

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SHERIDAN A. WALKER.

Witnesses:  
ISAAC B. OWENS,  
JNO. M. RITTER.