

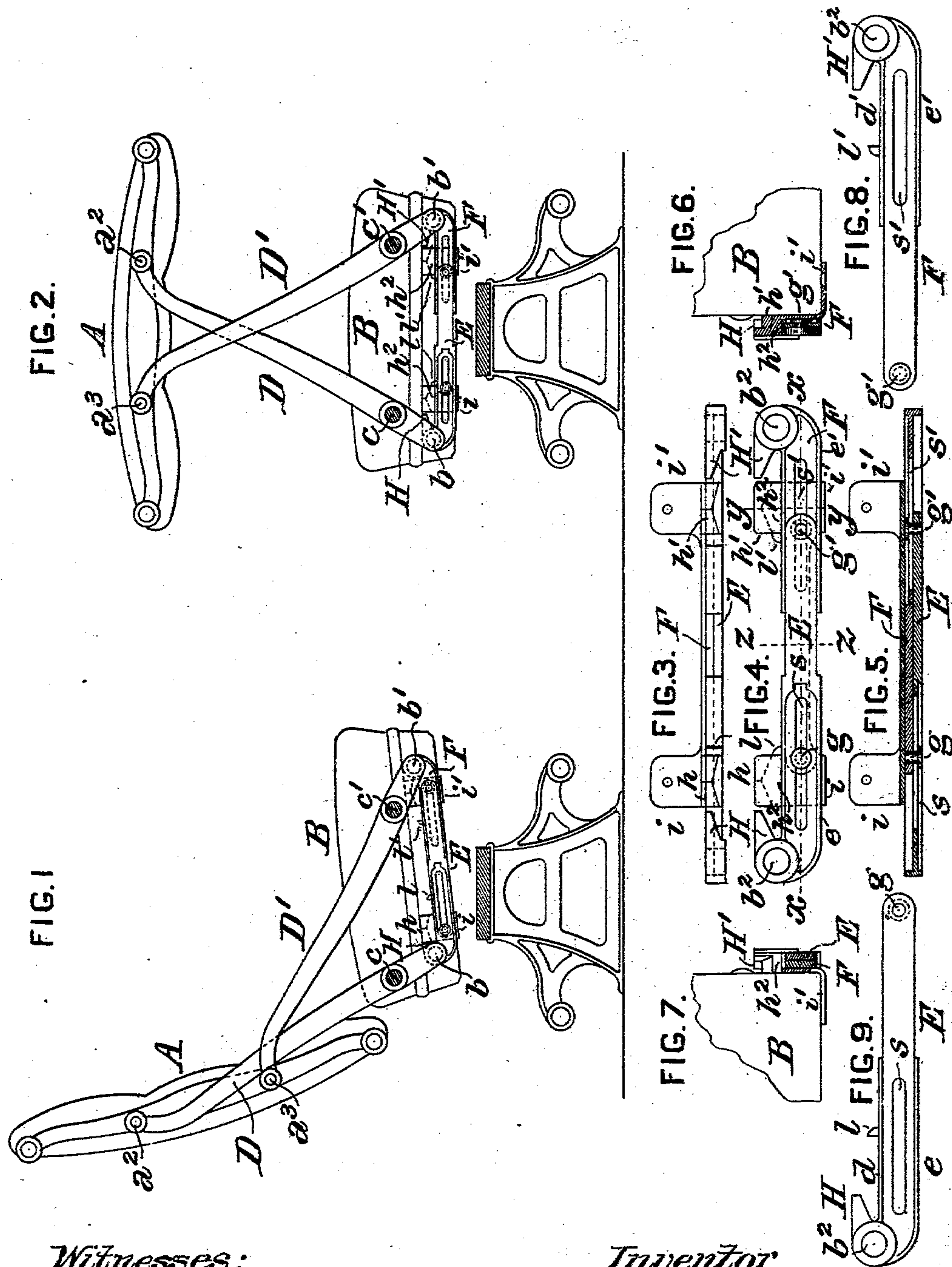
No. 716,882.

Patented Dec. 30, 1902.

M. N. FORNEY.  
CAR SEAT.

(Application filed July 12, 1902.)

(No Model.)



Witnesses:

James C. Heron.  
S. R. Bell.

Inventor:

M. N. Forney.  
by S. R. Bell, atty



# UNITED STATES PATENT OFFICE.

MATTHIAS N. FORNEY, OF NEW YORK, N. Y., ASSIGNOR TO SANFORD G. SCARRITT, OF ST. LOUIS, MISSOURI.

## CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 716,882, dated December 30, 1902.

Application filed July 12, 1902. Serial No. 115,351. (No model.)

*To all whom it may concern:*

Be it known that I, MATTHIAS N. FORNEY, of the borough of Manhattan, in the city and State of New York, have invented a certain new and useful Improvement in Car-Seats, of which improvement the following is a specification.

My present invention is an improvement in car-seats of the type set forth in Letters Patent of the United States Nos. 324,825 and 360,148, granted and issued to me under dates of August 25, 1885, and March 29, 1887, respectively; and its object is to provide simple and effective means for connecting the crossed or intersecting links or seat-back arms therein described to a seat, and thereby supporting the latter on extensions of said arms and moving it longitudinally by the movement of the back.

The improvement claimed is hereinafter fully set forth.

In the constructions set forth in the Letters Patent aforesaid the crossed links or arms for reversing the back are provided with extensions below the fixed pivots, to which the arms are attached, and these extensions have other pivots which support and move the seat. As was explained in the specifications of said patents, the movement of these arms or links when the seat-back is turned over is such that the distance between the seat-pivots is greater when the back is turned part way over than it is when the back and seat are in either of their two service positions.

My present invention is designed to provide a means of connecting the extensions of the reversing-arms together and supporting the seat, which will admit of this variation in distance between the seat-pivots while the back is being reversed and which will also lock the seat in its service position and release it when the back is turned over.

In the accompanying drawings, Figure 1 is an end view of a seat and back with the latter in its service position on the left-hand side of the seat; and Fig. 2, a similar view with the back turned half-way over, the arm-rest and seat end being omitted in both figures to show the construction more clearly. Figs. 3 and 4 are plan and side views, respectively, on an enlarged scale, of the sliding bearing-bars of

the reversing-arms which serve to support and move the seat. Fig. 5 is a sectional plan on the line  $x x$  of Fig. 4. Figs. 6 and 7 are transverse sections on the lines  $y y$  and  $z z$ , respectively, of Fig. 4; and Figs. 8 and 9 are side views of the two sections of the seat-support separated.

The seat-back A and seat B are, as in the patents before specified, connected at their ends by pairs of intersecting or crossed links D D', by means of which the back is reversed and the seat moved. The arms are connected by fixed pivots  $c c'$  to the seat ends, and the back A is connected to the arms by pivots  $a^2$  and  $a^3$ . The arms are extended below the pivots  $c c'$ , and their extensions are provided with pivots  $b b'$  on their lower ends for supporting the seat. It will be seen that in moving the seat-back from the position in which it is shown in Fig. 1 to that shown in Fig. 2 the distance between the centers of the pivots  $b$  and  $b'$  is materially increased. To provide for this variation, an extensible connection formed of two bars E F, which are adapted to slide longitudinally relatively one to the other, is interposed between the pivots  $b$  and  $b'$ , each of the bars having an eye  $b^2$  at one of its ends fitting one of the lower pivots  $b$  or  $b'$  of the reversing-arms.

When the back is in either of its service positions as in Fig. 1, the two pivots  $b$  and  $b'$  are in the position nearest one to the other and the two sections E and F of the extensible bearing-bars are then closest together longitudinally, as shown in said figure. When the back is turned half-way over, as represented in Fig. 2, the pivots  $b$  and  $b'$  are moved considerably farther apart and the two sections E and F of the extensible bearing-bars are drawn correspondingly farther apart longitudinally, as indicated in Figs. 2 and 4. The sections or bars E and F are provided with upper and lower flanges  $d e$  and  $d' e'$ , respectively, extending from their ends on which the eyes  $b^2$  are formed for a portion of their length, the remaining portion of the length of each bar being made sufficiently narrow to slide between the flanges of the other bar. Longitudinal slots  $s s'$  are formed in the bars E and F, and the bars carry headed pins  $g g'$ , the pin of one bar traversing in the slot of



the other bar, as indicated in Figs. 4 and 5. The pins  $g g'$  serve to hold the two bars together and in their proper relative position, while at the same time permitting them to slide horizontally relatively one to the other.

The seat B, a portion of which is shown in Figs. 6 and 7, is provided at its ends with brackets  $h i$  and  $h' i'$ . These brackets have bearings  $h^2$ , which rest on top of the bars E and F, and the lower brackets  $i i'$  are secured to the bottom of the seat, which is thus supported on the extensible bearing-bars, which are left free to move horizontally when the back is reversed.

As it is important that the seat should be capable of removal for cleaning and other purposes, the brackets are so constructed that when the back is turned over into the position shown in Fig. 2 the seat can be lifted off the bearing-bars and removed. It is also important that when the seat is in its service position it should be locked in its place. To this end the two sections E and F of the extensible bearing-bars are provided each with a hook H and H', respectively. The tops and sides of the upper brackets  $h h'$  are inclined in form, as indicated by the dotted lines in Figs. 1, 2 and 4 and by full lines in Fig. 3, and the bottoms and sides of the hooks H H' are made to correspond in shape. When the two sections E and F of the extensible bearing-bars are slid together, as shown in Fig. 1, the hooks engage with the brackets  $h h'$ , and by reason of the wedge shape of each the brackets and seat are securely clamped in their service position when the seat-back is turned completely over. When the back is turned into the position shown in Fig. 2, the brackets and seat are released by the hooks, and the seat can then be removed. In order to keep the seat in the middle of the bearing-bars when the back is in the position shown in Fig. 2, the bars E and F of the adjustable connection are provided on the upper sides with lugs or projections  $l l'$ , respectively. When the bars are pulled apart, as shown in Figs. 2 and 4, these lugs engage with the brackets  $h h'$ , and thus move them clear of the hooks H H', thereby releasing the seat.

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

1. The combination of a car-seat, a seat-back, pairs of crossed reversing-arms at the ends of the seat, pivoted supports for the reversing-arms, extensible bearing-bars, pivots coupling the reversing-arms to the extensible bearing-bars, and bearings attached to the seat and resting on the extensible bearing-bars.

2. The combination of a car-seat, a seat-back, pairs of crossed reversing-arms at the ends of the seat, pivoted supports for the reversing-arms, extensible bearing-bars located below the reversing-arms, pivots coupling the reversing-arms to the extensible bearing-bars, bearings attached to the seat and resting on the extensible bearing-bars, and hooks fixed to the extensible bearing-bars and adapted to engage with and disengage from the seat in and by the movement of the seat-back.

3. The combination of a car-seat, a seat-back, pairs of crossed reversing-arms at the ends of the seat, pivoted supports for the reversing-arms, extensible bearing-bars consisting of pairs of bars, each having lateral flanges for a portion of its length, a portion of one bar being adapted to slide between the flanges of the other, headed pins, each fixed to one of the bars and sliding in a longitudinal slot in the other, pivots, each coupling a reversing-arm to a bar of the sliding bearing-bars, and bearings attached to the seat and resting on the extensible bearing-bars.

4. The combination of a car-seat, a seat-back, pairs of crossed reversing-arms at the ends of the seat, pivoted supports for the reversing-arms, extensible bearing-bars located below the reversing-arms, pivots coupling the reversing-arms to the extensible bearing-bars, bearings attached to the seat and resting on the extensible bearing-bars, hooks fixed to the extensible bearing-bars and adapted to engage with and disengage from the seat in and by the movement of the seat-back, and projections on the extensible bearing-bars adapted to abut against the seat-bearings and move the seat into a central position, and disengage it from the hooks, during the movement of reversal of the seat-back.

MATTHIAS N. FORNEY.

Witnesses:

H. L. BRIDGES,  
A. WIECHERS.