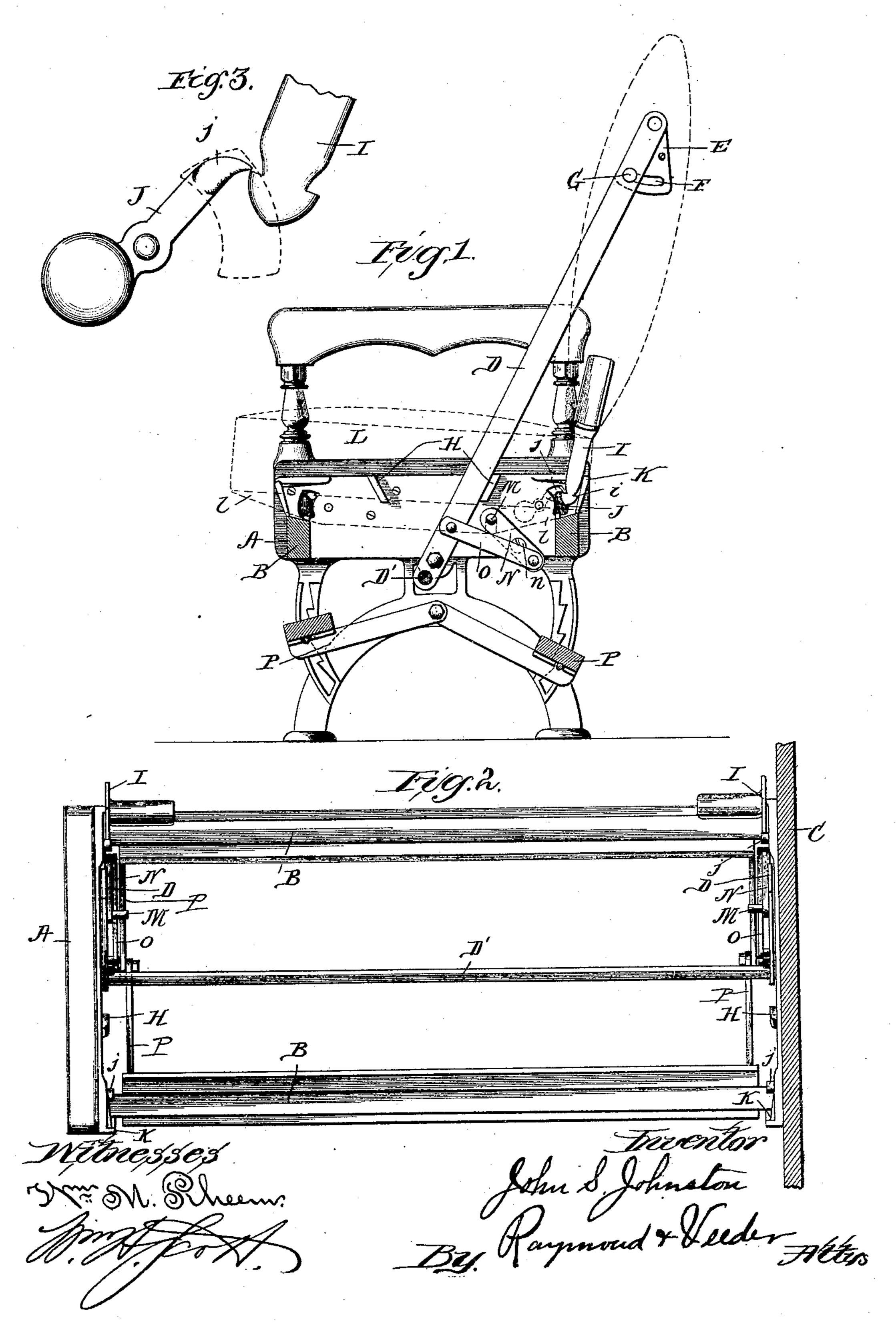
## J. S. JOHNSTON. CAR SEAT.

No. 489,562.

Patented Jan. 10, 1893.



## United States Patent Office.

JOHN S. JOHNSTON, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE ADAMS & WESTLAKE COMPANY, OF SAME PLACE.

## CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 489,562, dated January 10, 1893.

Application filed March 28, 1892. Serial No. 426,691. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. JOHNSTON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illi-5 nois, have invented certain new and useful Improvements in Car-Seats, of which the following is a specification, reference being had

to the accompanying drawings.

My invention belongs to that class of car ro seats in which the back is not inverted when it is reversed or changed from one side to another of the seat. One objection to reversible seat backs of the class referred to, is, that if any pressure is brought against the seat back, 15 as for example, by the knees of the sitter in the seat behind, it is liable to be displaced unless means are provided for locking the seat so that it cannot be shifted at all until it is unlocked.

One object of my invention is to remove this objection by providing a simple device for the suspension of said back and holding it in position against accidental displacement, while it is free to be easily and quickly shifted

25 when desired.

In carrying out the main object, I have provided for connecting the seat to the back-suspending devices so that it will be shifted when the back is reversed, the inclination of its up-30 per surface being thus adjusted to suit the

position of the back.

In the accompanying drawings: Figure 1 is a vertical cross section of the seat, the back and bottom being shown in dotted outline. 35 Fig. 2 is a plan view, the back and bottom being removed. Fig. 3 shows a detail of the

construction.

A is the end frame of the seat.

B B are the rails joining the end frame to

40 the car side C.

As the devices at each end of the seat for supporting the back and shifting the seat, are alike in their construction and mode of operation, the sectional view shown in Fig. 1, in 45 which one end is illustrated, sufficiently shows the construction at both ends.

D is a flat bar which is pivoted at one end to the seat-frame and at the other to the upper part of the back E. A short distance be-50 low the point where it is pivoted to the back E it is provided with a stud G which projects

into a slot F in the seat-back, the movement of the seat back on the pivot being thereby limited. The movement of the bar D on the seat-frame is limited by the stops H.

D' is a rod connecting the lower ends of the

bar D.

At each lower edge of the seat-back E, is a projection I having notch i on each edge. Pivoted to the seat-frame is a pawl J the project- 60 ing end j of which is in such position that there is just room enough between it and the ledge K on the seat-frame to admit the passage of the projection I. The notch i of the latter is opposite the end j of the pawl when 65 the seat-back is fully reversed. The pawl J is counterweighted at its inner end as shown, so that the projecting end j has a tendency to rise, the amount of its rise being limited by the edges of the slot in the seat-frame through 70 which it projects.

The lower edges l of the seat bottom L are beveled as shown and rest upon the rails BB. There is a slot in each end of the seat bottom with which engages a pin M carried by the 75 arm N. The latter is pivoted at n to the seatframe and is connected by the link O to the bar D. By these means as the bar D is swung from one side to the other in reversing the seat-back, the seat bottom is shifted from side 80 to side and the bearings of its beveled edges upon the seat bars are changed, thus giving the proper inclination to its surface. The stops H and F prevent the lower edge of the seat back from swinging past the recesses be- 85 tween the catches J and the ledge K which receive the projections I. The pivoted catch J will yield permitting the projections I to enter their recesses in case the seat is not swung to its extreme limit when reversing.

The catch J serves to prevent the seat-back from being moved by any accidental pressure applied to it from below the point where it is pivoted to the side bars D, as such pressure will cause the lower part of the back to swing 95 inward and the notches of the projection I to engage with the catch J; at the same time they afford no hinderance to the reversal of the seat-back by the pressure applied to the upper edge.

There is shown in this application a shifting foot rest, P which, however, I have not

specifically described as I do not claim same to be my invention.

I claim:

1. In a car seat, the seat frame, the seat back and bars pivoted at their upper ends to the upper portion of the seat back and at their lower ends to the seat frame, combined with stops on the seat frame to limit the movement of said bars, stops to limit the movement of the seat back on said bars, and projections secured to the lower corners of the seat back adapted to enter recesses formed in the seat frame to prevent accidental movement of the seat back, substantially as specified.

2. In a car seat, the seat frame, the seat back, and bars pivoted at their lower ends to the seat frame and at their upper ends to the upper portion of the seat back, combined with a beveled seat-bottom supported on the seat 20 frame, arms N pivoted on the seat frame and connected at one end to the seat bottom, links O connecting the other ends of the arms N to the bars, and stops on the seat frame to limit the movement of the said bars, substantially 25 as specified.

JOHN S. JOHNSTON.

Witnesses:
IRWIN VEEDER,
V. HUGO.