

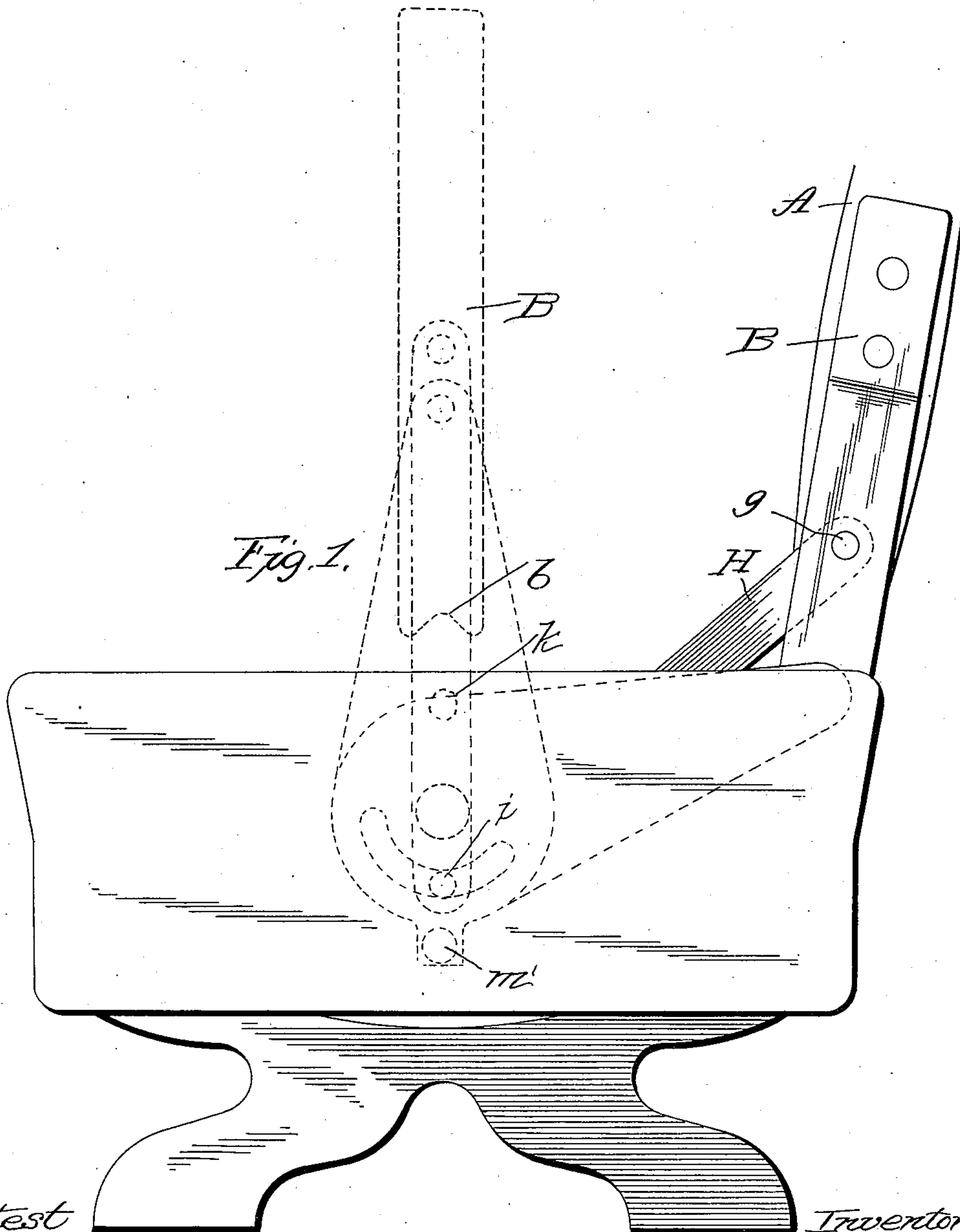
(No Model.)

2 Sheets—Sheet 1.

G. W. DRYER.  
REVERSIBLE SEAT.

No. 564,244.

Patented July 21, 1896.



Attest  
F. L. Mudgett

Inventor  
George W. Dryer  
by Ellis Spear  
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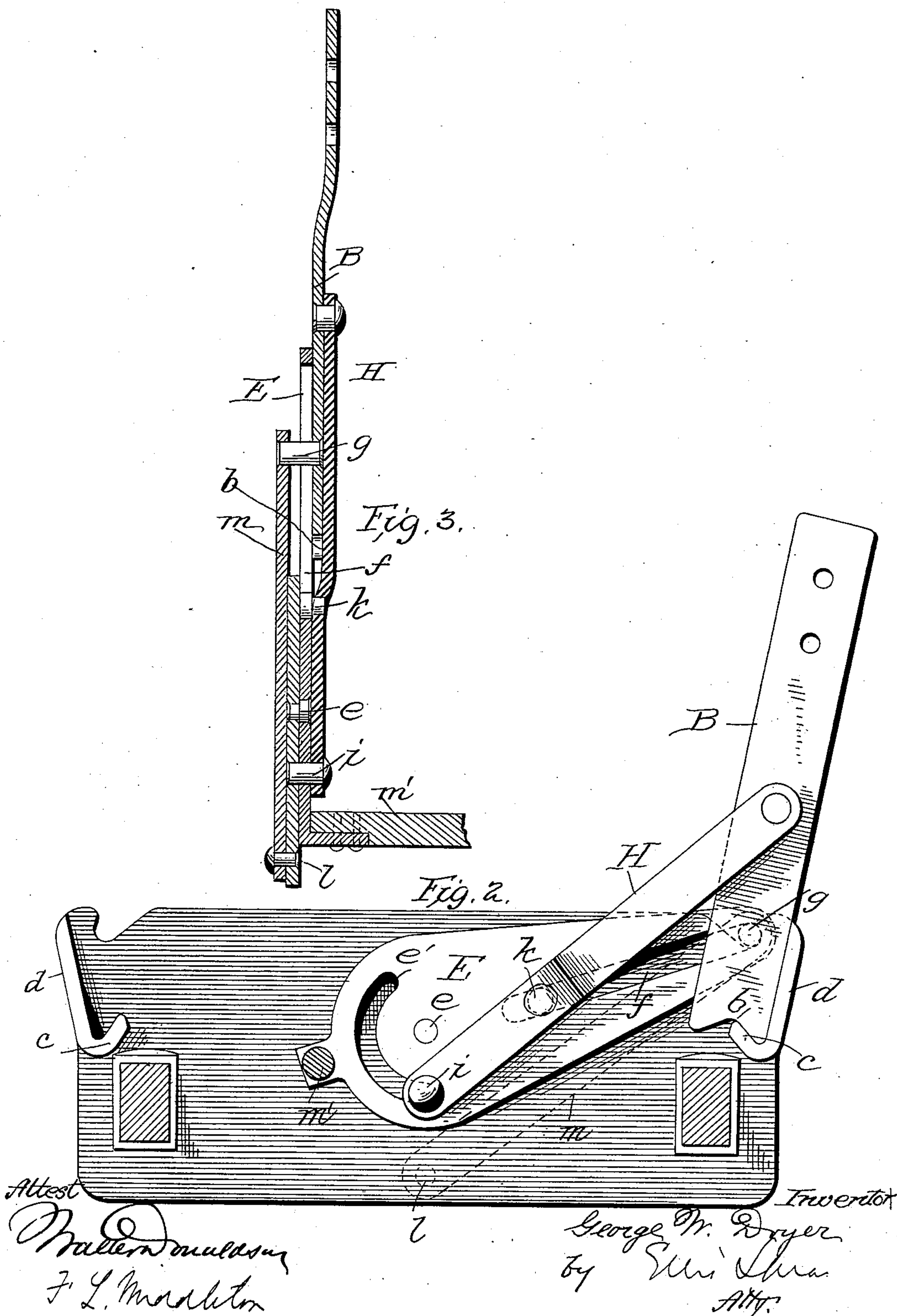
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# UNITED STATES PATENT OFFICE.

GEORGE WORDEN DRYER, OF EASTON, PENNSYLVANIA, ASSIGNOR TO THE  
BUSHNELL MANUFACTURING COMPANY, OF SAME PLACE.

## REVERSIBLE SEAT.

SPECIFICATION forming part of Letters Patent No. 564,244, dated July 21, 1896.

Application filed March 17, 1896. Serial No. 583,542. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE WORDEN DRYER, a citizen of the United States, residing at Easton, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Reversible Seats, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to reversible car-seats of that class in which the back is made to be shifted from one side of the seat to the other in order to face toward either end of the car.

The invention concerns more particularly the supporting and shifting mechanism, and is designed for greater simplicity in the construction, for ease of action, and to hold the seat, when shifted, securely in place.

In the drawings, Figure 1 represents an outside end view of the seat with the back in normal position, shown in full lines. Fig. 2 is a sectional view of the seat-frame from front to rear, showing the operating-levers in side elevation. Fig. 3 is a detail view showing the operating-levers and the supporting-levers of the back in section.

In the drawings, A represents the back of the seat. It is made alike on both sides and upholstered or otherwise furnished in the usual manner. At each end supporting-arms B are directly fixed to the edges, the lower ends of these arms being notched, as shown at *b*, and these notches, when the seat is in normal position, rest upon studs or projections *c*, fixed to the frame. Back of the studs *c* on each side is a flange or equivalent stop *d*, against which the edge of each arm rests, and thereby the arms and back are supported against backward pressure. The arms carrying the back are supported in shifting, and in part when at rest, by pairs of levers. The first of these levers is shown at E at each end of the seat. This lever is pivoted to the end of the seat-frame on a fixed pivot *e*. At its lower enlarged end is a curved slot *e'*, struck from the center of the pivot *e*.

The upper end of the lever E is connected to the lower end of the arm B by a pivot *g*, and the lower end is held by a stud *i*, fixed in the frame and located in the slot *e'*. A second lever H is pivoted on a fixed stud at

its upper end to the arm B a little above the pivot *g*, and at its lower end it is pivoted to the stud *i*, which passes through the slot *e'* and is fixed in the end of the seat-frame, so that the lower ends of the levers are also pivoted at different points. These two levers therefore form connections at different points between the seat-back arms and the seat-frame. The movement of the levers E is limited by the ends of the curved slots coming into contact with the studs, and when the back is in its fixed position it is supported vertically by the studs *c*, and against backward pressure by the flanges or stop *d*. It is also braced by the arms, which then cross each other and bear on their pivots. The levers have also an intermediate connection by means of a stud *k* in one passing through the slot *f* in the other, and they are made movable in relation to each other by the slipping of the stud *k* in the slot *f* when the seat is shifted. The construction is further braced and strengthened by the stud *k*, set in the lever extending into the slot, as shown in Figs. 2 and 3.

At the inner end I have shown an additional support consisting of a pivoted bar *m*, which is connected at its upper end with the pivot *g*, and at its lower end is pivotally connected with the end of the seat-frame by bolt *l*, the connection being such that the bar turns freely when the seat is shifted from front to rear. I have shown this only on the wall end of the seat; but it may be used on both ends, if desired.

The levers E are connected to each other by a rod *m'*, on which the bottom of the seat is supported in the usual manner.

I claim—

1. In combination, the seat-frame, the back, the levers E pivoted to the seat-frame and having slots below their pivots, and the slotted connections between their upper ends and the lower parts of the back and the levers H pivoted to the seat-frame below the pivots of the levers E and in the slots thereof and to the back above the pivots of the levers E and the slotted connections between the levers, said levers E having a cross-bar to operate the seat, substantially as described.

2. In combination, the seat-frame, the back,



the levers E pivoted at one end to the seat-frame and having a slotted pivotal connection at the other ends with the back, the levers H pivoted to the seat-frame and to the  
5 back, slotted pivotal connections between the levers E and H and a bar *m* pivoted to the seat-frame and to the back, substantially as described.

3. In combination the seat-frame, the back,  
10 the levers H pivoted to the seat-frame and to the back, the levers E pivoted to the seat-frame and having a slotted pivotal connec-

tion with the back and with the levers H, said levers E having also means for engaging the shifting seat, and the bar *m* arranged substantially parallel with one of the levers H and pivoted to the seat-frame and back, substantially as described. 15

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

GEORGE WORDEN DRYER.

Witnesses:

H. D. MAXWELL,  
M. A. DEVINE.