G. W. BOREL.

Opera-Chair.

No. 160,641. Patented March 9, 1875.

Fig. 1

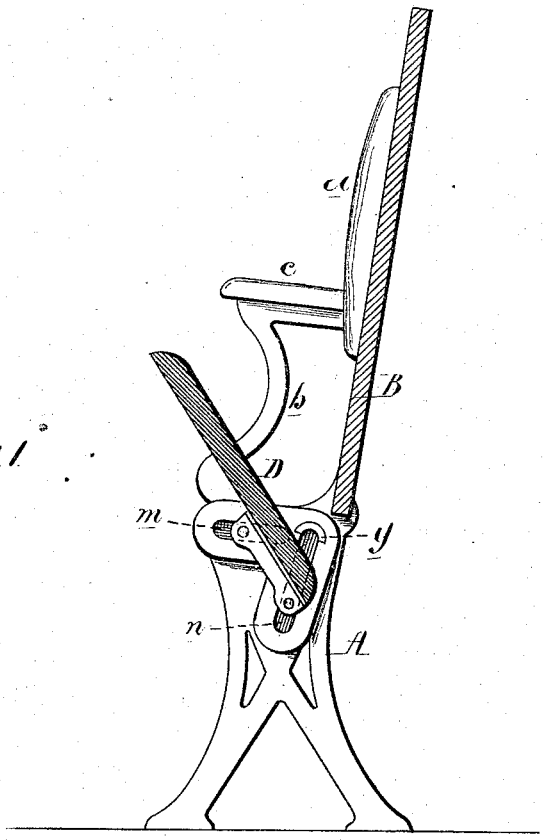


Fig. 4

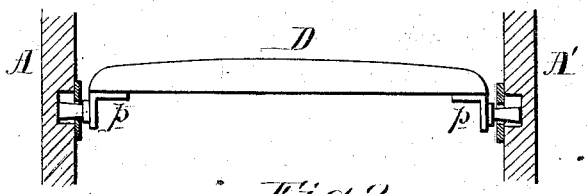


Fig. 3.

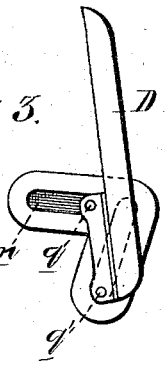
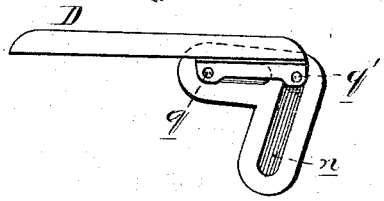


Fig. 2.



Witnesses, Harry Smith
Thomas McEvoy

George W. Borel
by his attys.
Howson and Son.

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UNITED STATES PATENT OFFICE.

GEORGE W. BOREL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO ROBERT WOOD, OF SAME PLACE.

IMPROVEMENT IN OPERA-CHAIRS.

Specification forming part of Letters Patent No. **160,641**, dated March 9, 1875; application filed March 13, 1874.

To all whom it may concern:

Be it known that I, GEORGE W. BOREL, of Philadelphia, Pennsylvania, have invented an Improvement in Chairs with Tilting Seats, of which the following is a specification:

My invention relates to an improvement in the chair with tilting seat, for which Letters Patent No. 146,432 were granted to Robert Wood, assignee of S. G. Close, January 13, 1874; and the object of my invention is to more easily raise the seat to a position against the back, and to thus raise it within a narrower space than in the chair described in the said patent.

In the accompanying drawing, Figure 1 is a vertical section of my improved chair; Figs. 2 and 3, diagrams, illustrating my invention; and Fig. 4, a transverse section.

Two frames, A A, are connected together by a permanent back, B, which is suitably upholstered at *a*, the upper portions of the said frames forming the arms *b*, provided at the top with pads *c*. In each of the opposite frames, or in a plate secured to the same, are two slots, *m* and *n*, the former being horizontal, or slightly inclined downward from the front to the rear of the chair, and the slot *n* being arranged at the angle shown in the drawing in respect to the slot *m*. D is the seat, consisting of an upholstered frame of wood, to the under side of which is secured, near each edge, a plate, *p*, and from the latter project two pins, *q* and *q'*, one into the slot *m*, and the other into the slot *n*.

The main feature of my invention is the inclined slot *n*, which permits the seat D to be raised from the position shown in Fig. 2 to that seen in Fig. 3 within a narrow compass. This will be best understood by supposing the slot *n* in Fig. 3 to be vertical, in which case the seat D would be inclined toward the front of the chair to such an extent that it would not retain its elevated position, so that the only remedy would be to extend the horizontal slot farther back to permit the seat to be moved to a position where it would be self-sustaining, and this would involve the necessity of making the chair wider—an obvious objection in chairs of this class.

By making the slot *n* inclined, as shown, the lower edge of the seat D, on elevating the same, must be moved forward, while the upper edge is moved rearward; hence the seat is elevated to a self-sustaining position within a much more contracted space than when the slot *n* is vertical.

I am aware that the pins of a tilting seat have been adapted to a slot consisting of two parts, arranged at right angles to each other, and also to a curved slot in a frame. I therefore claim neither of these plans; but

I claim as my invention—

A chair in which a tilting seat, D, having two pins at each edge, is combined with two frames, each having a horizontal or slightly-inclined slot, *m*, and a slot, *n*, inclined downward and forward, and forming an acute angle with the slot *m*, said angle having its opening toward the front of the chair, all substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE W. BOREL.

Witnesses:

WM. A. STEEL,

HARRY SMITH.