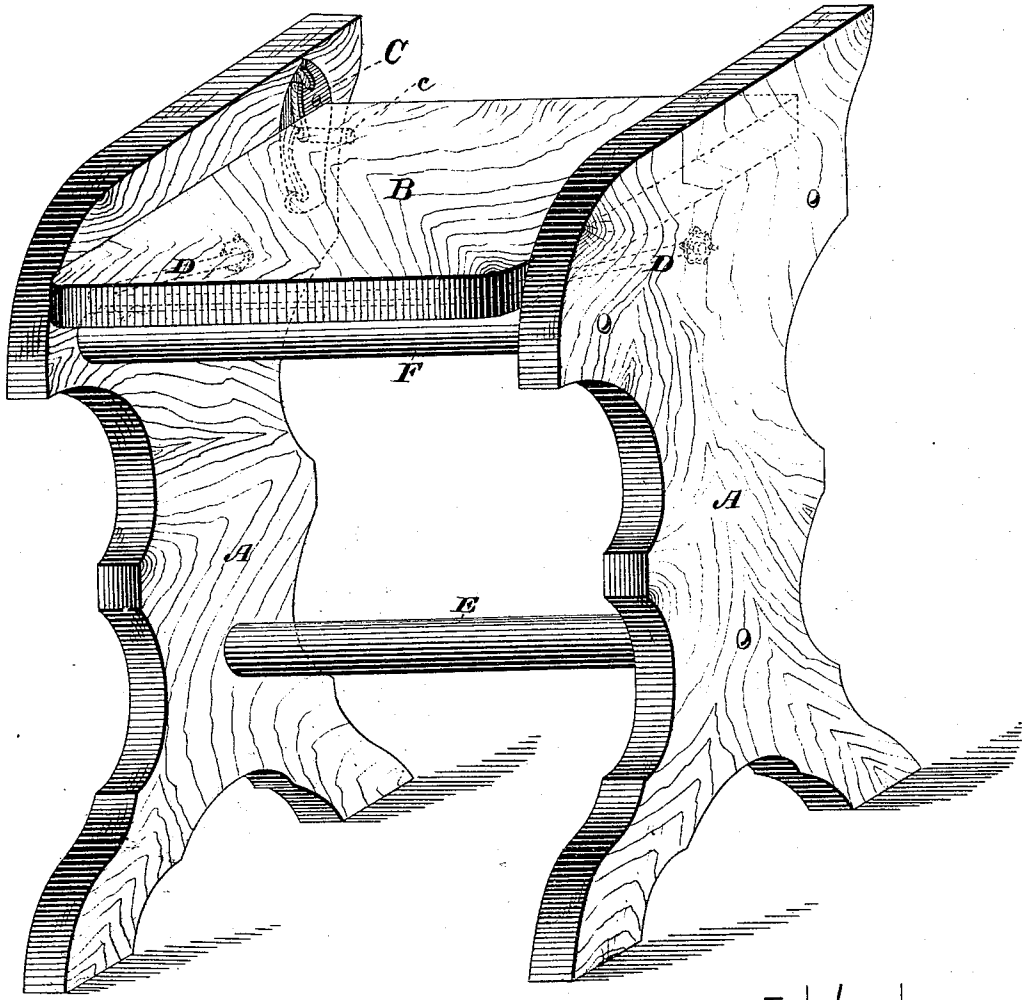
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J. S. ROBINSON.

Adjustable Seat, Desk, &c.

No. 228,840. **Patented June 15, 1880.**

Fig. 1.



WITNESSES:

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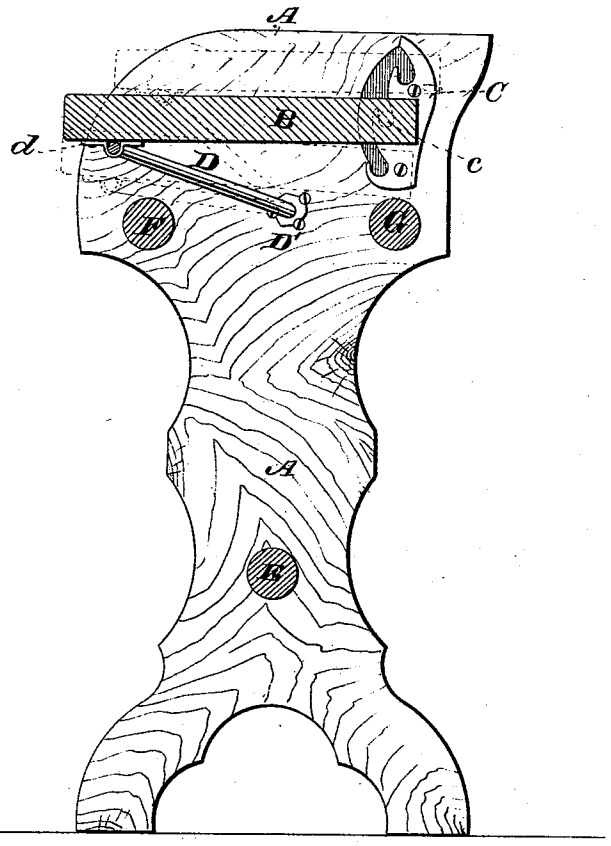
2 Sheets—Sheet 2.

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Fig. 2.



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UNITED STATES PATENT OFFICE.

JAMES S. ROBINSON, OF JAMESTOWN, NEW YORK.

ADJUSTABLE SEAT, DESK, &c.

SPECIFICATION forming part of Letters Patent No. 228,840, dated June 15, 1880.

Application filed July 8, 1879.

To all whom it may concern:

Be it known that I, JAMES S. ROBINSON, of Jamestown, in the county of Chautauqua and State of New York, have invented new and useful Improvements in Adjustable Seats, Desks, &c.; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention consists in providing benches, chairs, and desks with devices whereby the seats or tops of the same can be adjusted to various heights.

My invention relates to the means employed for thus adjusting and sustaining said adjustable seats or tops, and in no way relates to the form or construction of the other parts of the seat or desk.

My device may be applied to music-stools, foot-stools, and rests, school seats and benches, desks, tables, and similar objects.

In the accompanying drawings I show my device applied to an organ or music stool.

In these drawings, Figure 1 is a perspective view, and Fig. 2 is a transverse vertical sectional view.

A A are the sides or legs of the stool or bench. B is the seat or top, which is made adjustable by my device.

E, F, and G represent the cross-stays or rungs. The seat or top B is free to move vertically between the side pieces, A A. The seat or top B is attached to the sides A A, as follows: On the inside of the side pieces, A A, is attached, near the back side of the same, a ratchet or catch-iron, C, which is provided with as many notches as desired, which notches are preferably hook-shaped.

On the inside of the side pieces, A A, at a point near the middle of the same and somewhat below the lowest point to which the seat B is to be adjusted, is pivoted, on each of said side pieces, a square bent bail-like iron rod, D, which has its ends fastened by a bush-iron, D′, on the side pieces, and is attached to the seat near its front by loop-irons *d*. The rod D is free to move pivotally in the irons D′ and in the loop-irons *d*. On the ends of the seat B, near the rear side, are set pins *c*, which engage with the notched iron C on the side pieces. The seat B being attached to the rod D, as described, can be raised or lowered, and while so moving, if kept level, the pin *c*, in its rear side, will describe an arc; hence it is desirable that the notches on the iron C be arranged in an arc or that the iron be set slanting back at a proper angle. It will now be seen, by observing the drawings, that if the back of the seat be raised and the pin *c* be set in a higher notch the rod D will sustain the front part of the seat at that elevation; or, in other words, it will be seen that the rod D will sustain the front part of the seat at the same height that the pin *c* sustains the back part of the seat, no matter what notch in the iron C it may rest in.

When the form of the desk or other object to which this invention may be applied is such that it is not desirable that the side pieces extend above the top, the construction can be varied as follows: The pin *c* may be on the side piece and the notched iron C attached to the top and extend down below it.

It is not essential that the brace D be made of one bent rod. It may be made of two braces, one at each end of the top, and pivoted at each end, so as to operate the same as the one shown; or one brace placed in the middle of the top could be made to serve.

It is essential that the brace and ratchet device be so adjusted that the top when raised and lowered shall not materially change its relative horizontal position nor its position relative to a given vertical line—that is to say, the top must move up and down without materially changing its relative horizontal position and without materially swinging toward or from a given vertical line.

I am aware that a shifting carriage or wagon seat has been made which is supported on one side by a pivoted brace and on the other side by a branching arm or lug, which rests upon the side of the carriage-box; but no pin-and-ratchet device is used, and what is a more essential difference is that the seat as it changes positions swings laterally to a great degree from and toward a given vertical line. In fact such a movement is an essential of that invention, while the exact opposite is an essential of my invention. I refer to the patent to J. P. Cost, March 9, 1875, No. 160,651. Of course a slight

lateral movement may exist in my device, but it should not be of sufficient degree to carry the top beyond the frame-work.

What I claim is—

In a seat, desk, or other like object which has a vertically-adjustable top or seat, the body or sides provided with one part of a ratchet device, in combination with the top, connected at one side to the body by a pivotal link or brace, and provided on its other side with the other part of said ratchet device to engage with the part on the body or sides, whereby the said top may be adjusted in substantially a vertical line without materially changing its horizontality, as and for the purposes set forth.

In testimony whereof I, the said JAMES S. ROBINSON, have hereunto set my hand.

JAMES S. ROBINSON.

Witnesses:

R. H. BAKER,

JAMES I. FOWLER.