

G. ELSEY.  
School-Desk.

No. 203,252.

Patented May 7, 1878.

Fig. 1.

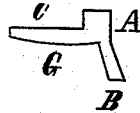


Fig. 2.

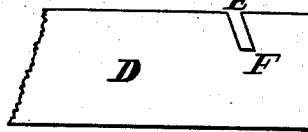


Fig. 3.

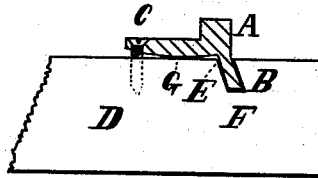
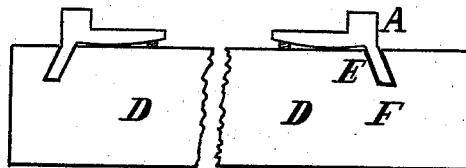


Fig. 4.



Witnesses:

Allen Webster  
John P. Wall

Inventor:

George Elsey

# UNITED STATES PATENT OFFICE.

GEORGE ELSEY, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO ELISHA RISLEY, OF SAME PLACE.

## IMPROVEMENT IN SCHOOL-DESKS.

Specification forming part of Letters Patent No. 203,252, dated May 7, 1878; application filed April 4, 1878.

*To all whom it may concern:*

Be it known that I, GEORGE ELSEY, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in the Manufacture of School-Desks—*i. e.*, in the manner of fastening the slats to the standards; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a sectional end view of the desk-standard A, with oblique tenon B running parallel with the standard, which has a rocking surface at G.

Fig. 2 is a side view of slat D, showing the transverse angular slot E F.

Fig. 3 is a view of the combination of standard A and slats D, by means of the tenon B entering the slot E F, and which may be held more securely together by a screw, pin, or nail at the point on the drawing designated as C.

Fig. 4 shows an end view of the standards A A, and a side view of the slats D D when fastened together, the tenon and slot of right standard running in opposite angle from that of the left standard.

This invention has relation to school-desks; and consists in joining the wood to the iron standards by means of the oblique tenons and transverse angular slots, the two fitting each other, and the tenon and slot of the right side of desk running exactly opposite that of the left side, thus holding the slats and standards in such a position that they will not separate, and will at the same time brace each other so as to prevent any lateral motion of the desk. As a further precaution, a screw, pin, or nail is put through the standard at the point designated in the drawing, C, thus insuring the utmost rigidity and strength.

It will be seen at once that my device is practical, economical, and useful, as well as new.

The combining the slats with the standards by means of the tenon and slots is very

simple and easily done, and cheaper than by any other method, taking into consideration the setting up of the desk. The tenon acts or serves as a guide, where to put the slats, and, when put together acts as a brace, and prevents any lateral motion, and the slats cannot be pulled off without either breaking them or the standard.

To insure a still greater amount of strength, and make the desk more rigid and firm, I propose to use, in connection with the tenon and slot, a screw, pin, tack, or nail, put through the standard at point C in the drawing, and drive or force the same into the slat, thus obtaining an additional amount of security and strength.

I am well aware that others have combined the standards and slats of a school-desk by means of grooves, &c., in the shape of dovetail, and otherwise driving on the slats, and simply depending on the close fit to hold them. Practically they have failed, owing to the shrinking of the wood, the expansion and contraction of the iron, and the tendency of the iron to come from the molds too large at one point and too small at another, owing to the rapping from side to side, &c., in order to draw from the sand, thus necessitating a wedging up and cutting out, in order to secure a firm and substantial result.

Others, I notice, have cut a straight groove in the slats and a corresponding straight tenon on the standards. This plan serves well as a guide to set up a desk, but adds nothing to the strength. Others have fastened the iron into the dovetail by means of strips, which is open to the disadvantage of the wood shrinking, and causing the desk to become rickety and loose.

My invention differs from any of these, and obviates all of the above difficulties in at least three ways: first, running the tenon obliquely into the slat; second, in the use of a screw or nail at point C; and, third, and most important point in my invention in connection with the tenon, slot, and screw or nail, is the slight elevation G of the surface of the standard A midway between the tenon B and point C, thus forming a rocking surface between the iron standard and the slat, so that when the

screw or nail is brought down to the slat the tenon is forced to its utmost bearing in the slot by the leverage thus attained by the elevation G, so that, no matter if the wood shrinks or swells, simply by tightening or loosing the screw the slats are still firm and rigid.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination of the desk-standard A, having an oblique tenon, B, running parallel with the standard, and being a part of the same, also constructed with the rocking surface at G, and the slats D D, having a trans-

verse angular slot, E F, corresponding with and fitting the tenon B on standard A, the same being held firmly together and in position by a screw, pin, tack, or nail, at the point designated as C in the annexed drawing, for the purpose substantially as specified.

In testimony that I claim the above I hereunto affix my name and seal in the presence of two witnesses.

GEORGE ELSEY. [L. S.]

Witnesses:

W. F. POTTER,  
W. H. BRADWAY.