

UNITED STATES PATENT OFFICE.

JOHN L. RITER, OF BROWNSVILLE, INDIANA.

IMPROVEMENT IN SCHOOL-DESK BRACKETS.

Specification forming part of Letters Patent No. 125,411, dated April 9, 1872.

To all whom it may concern:

Be it known that I, John L. Riter, of Brownsville, in the county of Union and State of Indiana, have invented a new and valuable Improvement in School-Desk Frames; 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 drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side view of the frame, showing my invention. Figs. 2, 3, 4, and 5 are details of the same.

My invention relates to the manufacture of school-desks; and consists in the novel construction of plates or castings to connect the legs and serve as brackets to support the seat and foot-board, as hereinafter specified and claimed.

Referring to the accompanying drawing, A A' represent the end supports or legs of my combined school-desk and seat. From their upper ends to about half their lengths these supports, by reason of their peculiar curvature, stand parallel or diverge slightly, and thence spread or diverge more acutely toward their lower ends. Above their middle parts the legs A A' are thrown back or inclined, as shown. The front edge of the leg A is cut to correspond to the curve of the back. This leg, from about its middle part, is curved outward, thence downward, forming a convex knee, a, below which the leg stands in a vertical position. The object of this shaping of the leg A is to bring its lower part underneath instead of behind the back part of the seat, which is hinged, as shown, within the concave lap a'above the knee, and by this means to receive the strain caused by the weight on the seat in the direction of its length, thereby forming a stronger and more rigid support to said weight. The upper ends of the legs A A', which are secured to the sides B, support the desk-top near its forward edge. As will be observed, the strain is made to bear on the legs in the direction of the length of their upper or parallel parts. From about its middle part the leg A' is bent back either on a straight incline or gentle curve, so as to bring its lower end underneath the rear part of the desk-top, and

thus preserve the equilibrium of desk, so as to prevent it from becoming loose or shaky. D represents the socket-plates, in which the lower ends of the desk-legs rest, and which are secured to the floor. Near their middle parts the legs A A' are connected and strengthened by means of a casting, of which E is a transverse plate, having at its ends the wings e^{1} , curved to correspond to the form of the legs, to which they are secured by screws or rivets e. From the inner surfaces of said wings lugs e1 project and are embedded in the wood. This connecting device is cast with an upwardly and outwardly curving bracket or arm, e2, having a flat top edge. The arms e^2 are the devices designed to hold the seat, to the upper edge of which is attached the flanged plates F. The sides of the arms e² are vertical and parallel. G is a conical projection, having a square aperture, g, for the passage of the square hinge-bolt g', which is inserted from the outer side of the plate F, through which is formed a large circular aperture, h. The bolt and aperture being square the former is prevented from turning. Washers h1 are used in adapting the bolt-head to the size of said aperture. When the parts are hinged together the conical projection G enters the aperture h and serves to produce a steady joint. h^2 represents a nut to hold the hinge-bolt. The sides of the plates E nearest the arms e² are beveled, as shown in Fig. 4, so that, according as the seat is lowered, the friction of the arms and plate will increase, and thereby prevent the seat from being slammed down forcibly. I designates the flanges on the upper part of the plates F. On the under sides of each of these plates projections i are cast, leaving a space between them to receive a block of India rubber, F', so arranged as to project slightly. These blocks are secured by means of screws or headed pins K, the heads of which lie within recesses K'. The object of these India-rubber blocks is to prevent the noise of the falling or slamming down of the seats in case the hinge-bolts should at any time become loose. The weight on the seat compresses the India rubber and allows the projections i to come in contact with the arms e^2 , and thereby preserves the rubber from being worn out. The plate E, it will be seen, is cast with a horizontal rib, n, projecting from its in-

ner surface, and lying between the two legs A A'. These ribs are designed to support the ends of the foot-board, which reaches from one side of the desk to the other, and which is secured to said ribs by means of screws passing through holes m.

I have described the plate F as being beveled and the sides of the arm e^2 vertical. I wish it to be understood, however, that, if desired, the arm e^2 may be beveled and the side of the plate F made vertical, or both the plate

and the arm may be slightly beveled.

M M' represent solid panels in the ornamented side plates B and the plates E. These panels may be made to correspond in appearance by bronzing or gilding them.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The casting E E' e^2 , connecting the legs A A' of a school-desk, and furnishing brackets to support the hinged seat, substantially as and for the purpose specified.

2. The casting E E' e^2 , having the ridge n to support the ends of a foot-board, as and for

the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN L. RITER.

Witnesses:

GEORGE C. UPHAM, D. D. KANE.