

JOHN H. FRENCH.

Improvement in School-Desks.

No. 115,839.

Patented June 13, 1871.

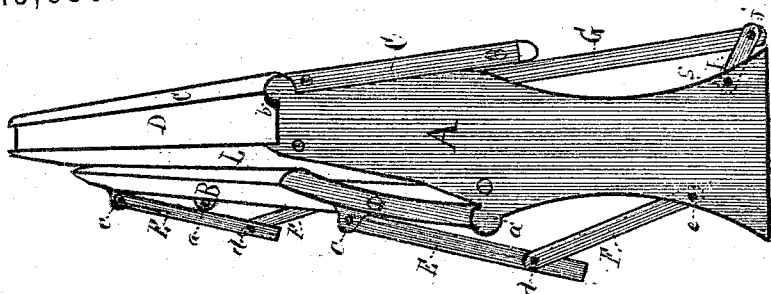


Fig. 1.

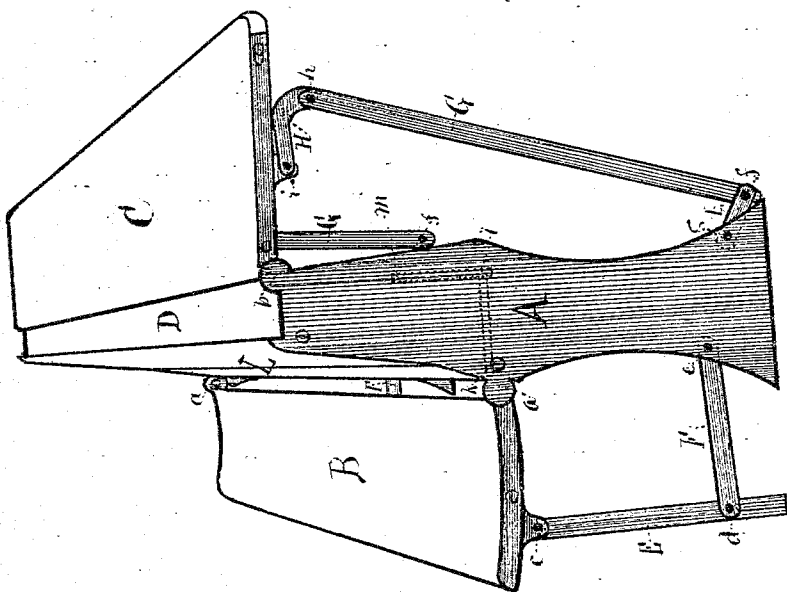


Fig. 2.

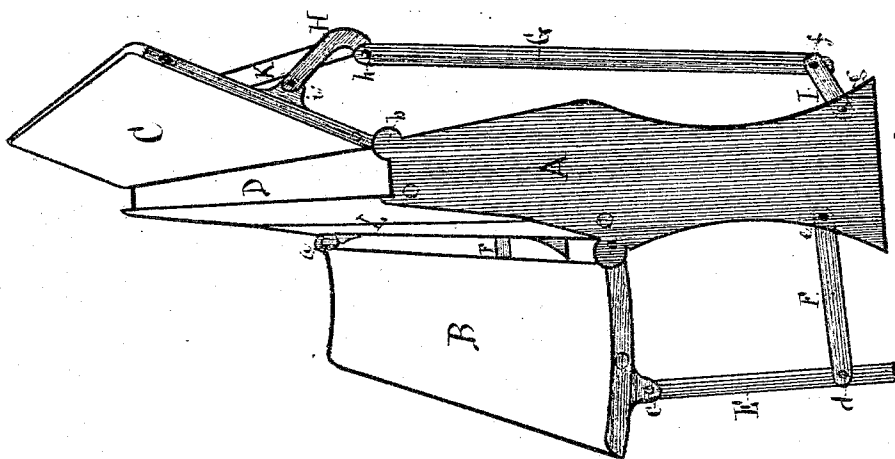


Fig. 3.

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UNITED STATES PATENT OFFICE.

JOHN H. FRENCH, OF BURLINGTON, VERMONT.

IMPROVEMENT IN SCHOOL-DESKS.

Specification forming part of Letters Patent No. 115,839, dated June 13, 1871.

To all whom it may concern:

Be it known that I, JOHN H. FRENCH, of Burlington, county of Chittenden and State of Vermont, have invented a new and Improved School-Desk and Seat; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a perspective view, showing both desk and seat closed. Fig. 2 is a perspective view, showing both desk and seat open; and Fig. 3 is a perspective view, showing the seat closed, and the desk-lid raised as in the act of opening and closing the desk.

Similar letters of reference indicate like parts.

This invention relates to a school-desk and seat, which are so constructed that both desk-lid or leaf and seat can be folded back against the uprights quickly and conveniently whenever desired, the seat having legs for its support on the floor when open or turned down for use, the desk-lid or leaf also having legs or braces for its support when open or turned up for use, these legs or braces adding to the strength and stability of seat and desk respectively. The folding of both desk-lid and seat give ample space between desks for pupils to stand or to pass, and the folding down of the desk-lid or leaf, inclosing the book-box, keeps the books secluded from dust. I make all the parts of my seats and desks of wood, or the braces and legs of metal, or the uprights, braces, and legs of metal, as may be desired, and I put them together with pins, nails, screws, or rods of wood or iron, at my option.

A represents the standards or uprights. B represents the seat, turning on the hinges *a*. C represents the desk-lid or leaf, turning on the hinges *b*; and D represents the stationary top rail. The seat B may be made of slats or of one piece of board, with either a flat or curved upper surface, and the back L may be straight or curved, and made of a single piece of board, or of two or more pieces matched and grooved, or dowel-pinned at the joining edges. The seat, when open for use, is supported by the legs E; and, when closed or folded back, these legs fold against the under side of the seat by

means of the joints *c*. These legs are at all times kept in their proper places by the rods F, which are attached to the legs by the joints *d*, and to the standards by the joints *e*. The desk-lid or leaf C, when opened for use, is supported by the straight braces or rods G, the lower end of each of which rests upon the floor or upon the foot of the uprights, which foot may be made to project far enough to form a step, upon which the brace may rest. Each of these braces is connected, at its lower extremity, with the straight brace I by the joint *f*, and at its upper extremity with the curved brace H by the joint *h*, the opposite end of the brace I being attached to the standard A by the joint *g*, and the opposite end of each curved brace H being connected with the desk-lid or leaf C by the joint *i*. The desk-lid C rests upon the curved brace H; the joint *i*, being attached to the lid C at a distance from the joint *b* greater than the shortest distance between the points *i* and *h* of the curved brace H, permits the braces G and H to be folded back under the stationary top rail D when the desk is closed, as shown in Fig. 1. The braces H are connected by a rod, K, the extremities of which rod are permanently fastened to these braces at or near the joints *h*. The desk is opened from the closed position shown in Fig. 1 to the position shown in Fig. 2 by raising the front edge of the desk-lid C high enough above a horizontal to permit the turning of the braces G and H from a closed to an open position, as shown in Fig. 3, (which is readily done by means of the rod K,) and then lowering the lid until it rests upon the curved braces H, as shown in Fig. 2. The desk is closed by raising the front edge of the lid C, throwing back the braces G and H, and then dropping the lid to the position shown in Fig. 1. Between the standards A is placed a book-box, a vertical section of which is shown in Fig. 2. This book-box consists of the bottom board *k l* and the upright board *l m*, as shown in Fig. 2. When the desk is closed the interior of this box is protected from dust. In putting books into or removing them from the book-box the lid C may be raised to a perpendicular position, or to any desired angle, as shown in Fig. 3, the short braces I permitting the foot of the braces G to be raised for this purpose.

The advantages which this desk possesses are: First, the principal part of the weight or pressure upon the seat is supported by the legs E, which rest directly upon the floor. All lateral strain of the seat upon the standards is thus removed, and pupils are not liable to jostle the desk behind them. Second, the weight or pressure upon the desk is supported mainly by the straight braces G, which also rest directly upon the floor. All lateral strain upon the standards caused by leaning or resting upon the desk-lid is thus removed. Third, greater stability is given to the standards by the removal of all lateral strains upon them; consequently they are less liable to become loosened from the floor. Fourth, books are more secure in the book-box than on a shelf underneath the desk-top, and they are secluded from dust when the desk is closed. Fifth, when seats and lids are closed ample space is obtained between desks in the same row for standing, for moving classes, for gymnastics, and for sweeping, amounting in some cases to twenty and even twenty-four inches. Sixth, when the desk-lid is raised or thrown up to its furthest limit, it can be used for an easel or drawing-board by students in painting and drawing, or for a book-

easel, on which books and slates may be placed by pupils while studying their lessons.

I do not claim the folding seat as my invention, or as being new, for I am aware from personal knowledge that a meeting-house in Hancock, New Hampshire, built, probably, more than fifty years ago, had, twenty-three years ago, seats throughout the body of the house that folded or turned up against the backs of the slips or pews, and which then had the appearance of having been used in the house many years.

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

1. The combination of the devices consisting of the braces G, H, and I and the rod K, for the purposes of opening, closing, supporting, and operating the desk, substantially as herein described.

2. The devices for operating the desk, in combination with the devices consisting of the legs E and the braces F, combined with the seat B and the standard A, for folding and supporting the seat, as herein described.

Witnesses: JOHN H. FRENCH.

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