No. 659,411. Patented Oct. 9, 1900.

P. S. McAULAY & M. ANDERSON.

SCHOOL DESK AND SEAT.

(No Model.) (Application filed Apr. 27, 1897.)

Fig. 1,

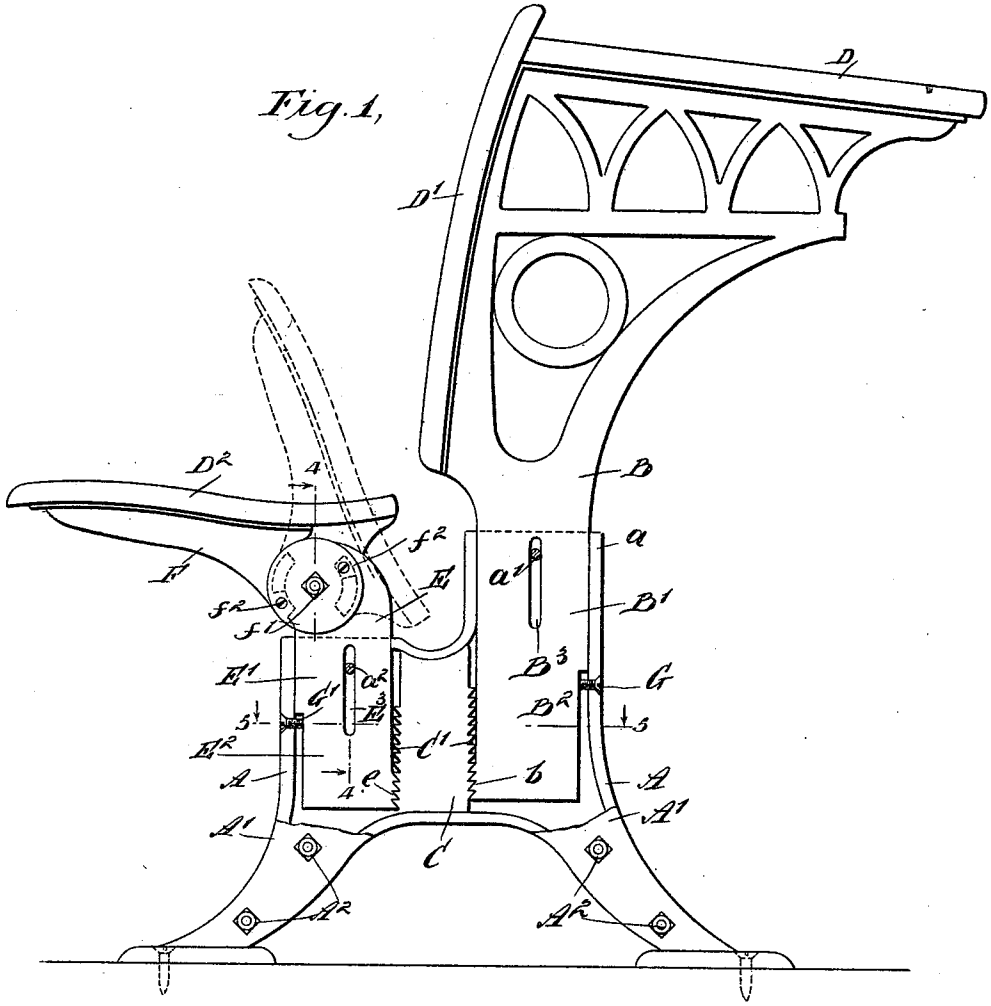


Fig. 2,

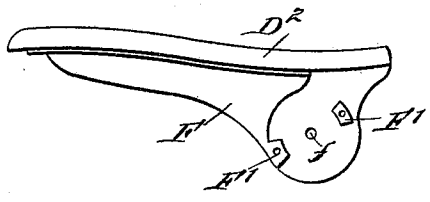


Fig. 4,

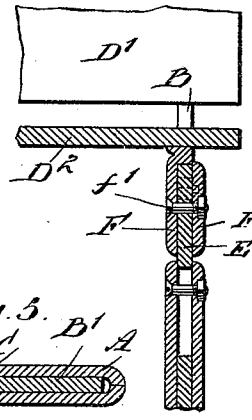
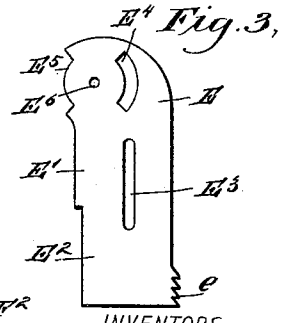


Fig. 3,



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Fig. 5.



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PAUL S. McAULAY AND MARTIN ANDERSON, OF SOUTH OMAHA, NEBRASKA.

SCHOOL DESK AND SEAT.

SPECIFICATION forming part of Letters Patent No. 659,411, dated October 9, 1900.

Application filed April 27, 1897. Serial No. 634,071. (No model.)

To all whom it may concern:

Be it known that we, PAUL S. McAULAY and MARTIN ANDERSON, of South Omaha, in the county of Douglas and State of Nebraska, have invented a new and Improved School Desk and Seat, of which the following is a full, clear, and exact description.

Our invention relates to an improved form of desk and seat for school purposes; and it consists in forming the end frames with sockets adapted to receive bars which respectively carry the seat and the desk. These bars are made independently adjustable, so that each may be adjusted to the height desired without its affecting the other.

It also consists in certain means for pivoting and supporting the seat and in other details, which will be pointed out hereinafter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is an end elevation of a desk constructed according to our device, having a portion of the outside plate removed in order to show the inner construction. Fig. 2 is an elevation of the pivoted seat-supporting bar. Fig. 3 is an elevation of the vertical bar upon which the seat is pivoted. Fig. 4 is a section taken upon the line 4 4 of Fig. 1, and Fig. 5 is a section taken upon the line 5 5 of Fig. 1.

The object of our invention is to produce a seat and desk for school use which shall be of strong and simple construction, pleasing in outline, and which shall permit of independent adjustment of the seat and desk for pupils requiring the same at different heights.

The end frames which carry the seat and the desk are each composed of two plates A and A'. These plates are provided with feet adapted to be secured to the floor and are concaved or hollowed, so as to form a hollow frame, the concaved sides being put together. This frame does not extend above the height of the seat when in its lowest position. These two plates are so shaped as to form two sockets, having their opening at the upper edge of the plates and adapted to receive the bars E and B, carrying, respectively, the seat and the desk. The inner edges of each of these sockets—that is, the edges next to the central line of the frame—are provided with notches C'. Within the forward one of these sockets is inserted the bar E, which carries the seat.

It is understood that the desk as herein described is one having two side frames, with the seat formed as a bench and also with the desk portion extending from one side to the other. The parts herein mentioned and described are therefore understood as being produced in duplicate, the sides being alike.

The bar E, which is shown in detail in Fig. 3, consists of a flat plate, which is in general of a rectangular outline. At the lower end upon one side edge it is provided with teeth *e*, adapted to engage the teeth C' upon the frame. This edge of the bar is the one which lies toward the rear or toward the center of the frame. The opposite lower edge of the bar is recessed, so that it is narrower than the portion immediately above it. This divides the bar into two sections, the narrower one E^2 at the bottom and the wider one E' at the top. The section E' is of such a width as to snugly fit in the opening of its containing-socket. That portion of the bar which projects beyond the sockets in the position shown in Fig. 1 is rounded. It is provided with a hole E^6, through which a bolt f' passes, which pivots the bar F thereto. It is also provided with a segmental slot E^4 and a notch E^5, corresponding to the slot E^4, but upon the opposite side of the center.

The bar F, to which the seat is fastened, is provided with a cental pivot-hole *f* at its rear end, adapted to receive the bolt f'. The bar F is also provided with lugs F', adapted to engage the slot E^4 and the notch E^5 in the bar E. These lugs are shorter than the slot and the notch and permit the seat to be rocked upon its pivot, as indicated by the dotted lines in Fig. 1. A cap F^2, consisting of a circular washer, is bolted to the lugs F' by the bolts or screws f^2, so that it holds the plate F securely against the upper end of the bar E. The cap F^2 turns with the bar F. The lugs F', engaging the ends of the slot E^4 and the notch E^5 upon opposite sides of the center of the bar E, form a double support for the plate F and relieve the pivot-bolt f' of substantially all the strain. This makes the points of support twice as far apart as they

would be were a single lug used, and therefore makes the parts stronger than they would otherwise be.

The plates A and A′, forming the base of the side frame, are secured together by bolts A^2. The bar E is also provided with a vertical slot E^3, through which passes the bolt a^2, limiting the upward movement of the bar and at the same time binding the two plates of the frame closely together. A set-screw G′ enters the forward edge of the base of the frame and engages the forward edge of the lower section E^2 of the bar E. This set-screw holds the bar to the rear, so that the teeth *e* cannot be disengaged from the teeth C′ until the set-screw has been withdrawn.

The frame B, forming the end frame of the desk proper, is provided at its lower end with two similar sections B′ and B^2, the lower one being the narrower. Upon the lower end of its forward edge the section B^2 is provided with teeth *b*, which are adapted to engage the teeth C′ upon the frame. Said section is also provided with a vertical slot B^3, through which passes a bolt *a*′, serving to limit the upward movement of the plate B and to bind the two plates A and A′ of the frame together. A set-screw G also engages the rear edge of the lower section B^2 to hold the teeth *b* in engagement with the teeth C′. To release either of the bars E or B for adjustment of their height, the set-screws G and G′ are withdrawn far enough so that the lower end of the bar may be forced away from the teeth C′. The bar is then raised or lowered until the proper position is obtained. The bars will hold themselves in place, because the center of gravity of each bar is upon the side opposite that occupied by the engaging teeth. As a result, the bars E and B will be held firmly in engagement with the teeth C′. The set-screws G and G′ will lock the bars firmly in place, so that they cannot be moved by hand. The upper ends of the slots E^3 and B^3, it will be noticed, are slightly smaller than the portion immediately below. This provides for firmly holding the upper ends of the bars and yet permitting a slight rocking thereof sufficient to release the locking-teeth when adjustment of the height of the bars is necessary.

A desk-frame made in the manner described presents smooth surfaces, which will not catch and hold dust and has no rough parts which will catch or wear the clothing or shoes of the scholars. It is also a strong form and one which may be readily manufactured at a slight expense.

The construction shown and described also provides for considerable variation in height of both seat and desk, and thus adapts the same desk for the use of scholars varying a great deal in height. The adjustment of the seat and the desk cannot be accomplished by the scholar except by the use of tools, and yet the locking device may be released quickly by the use only of a screw-driver. This prevents tampering with the desk by the pupils.

It is preferred that the heads of all bolts used in securing the parts together should be countersunk, so as to present a smooth surface. The desk-top D and the seat-back D′ may be made of any convenient material and of any design preferred and attached to the frame B, as desired.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

The combination with a stand provided with vertical sockets having teeth on one lower side edge, of bars fitting in the sockets and provided at their lower ends on their inner edges with teeth engaging the teeth of the sockets and on the outer edges with recesses, the upper ends of the bars being each provided with a curved slot and a notch in its edge corresponding to the slot, but on the opposite side of the center, set-screws passing through the sockets and engaging the recesses of the said bars, and seat-bars pivoted to the upper ends of the sliding bars and provided with oppositely-arranged lugs engaging the slot and notch respectively of the sliding bars, substantially as herein shown and described.

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