

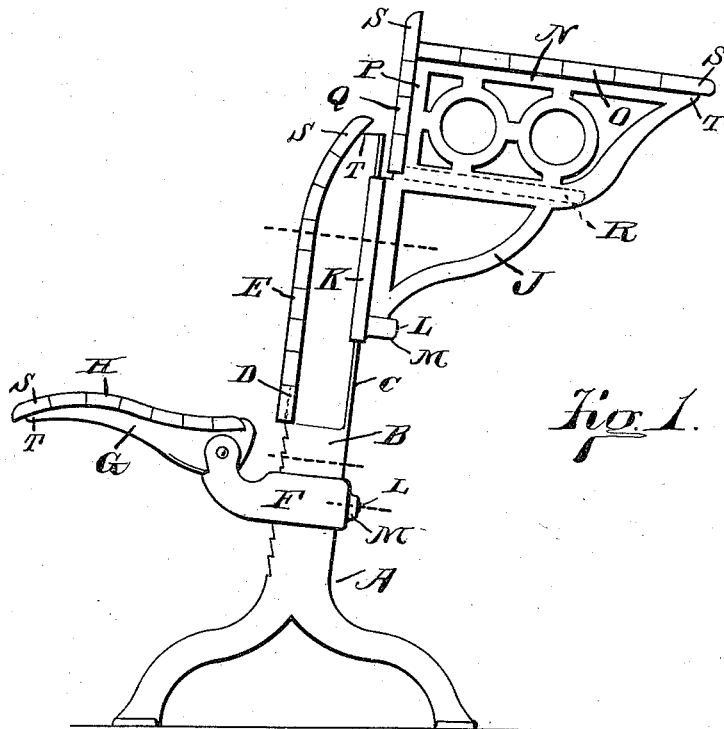
(No Model.)

E. MURRAY.

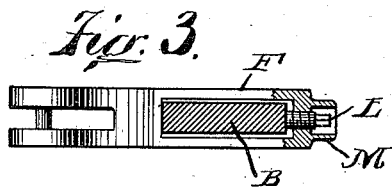
SCHOOL DESK.

No. 385,316.

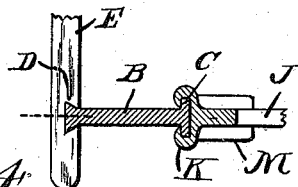
Patented June 26, 1888.



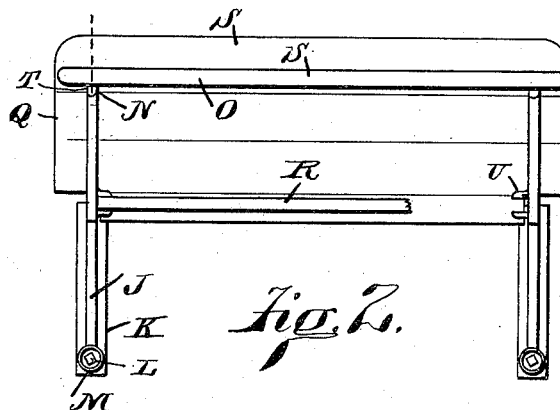
*Fig. 1.*



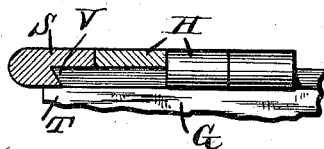
*Fig. 3.*



*Fig. 4.*



*Fig. 2.*



*Fig. 5.*

WITNESSES:

Wadsworth  
R. S. Carr.

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INVENTOR,

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ATTORNEY.

# UNITED STATES PATENT OFFICE.

ELI MURRAY, OF RUSHVILLE, INDIANA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE RUSHVILLE SCHOOL FURNITURE COMPANY, OF SAME PLACE.

## SCHOOL-DESK.

SPECIFICATION forming part of Letters Patent No. 385,316, dated June 26, 1888.

Application filed October 29, 1887. Serial No. 253,784. (No model.)

*To all whom it may concern:*

Be it known that I, ELI MURRAY, of Rushville, Rush county, Indiana, have invented certain new and useful Improvements in School-Desks, of which the following is a specification.

This invention pertains to combined school-desks and seats arranged for adjustment as to height, so as to be adapted for the use of scholars of different sizes. My improvements will be readily understood from the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of a combined school-desk and seat illustrating my improvements; Fig. 2, a rear elevation of the desk portion thereof with its supporting brackets; Fig. 3, a plan of one of the seat-arms, shown partly in horizontal section, and showing also one of the standards in horizontal transverse section; Fig. 4, a horizontal transverse section through the upper portion of one of the standards, in connection with one of the seat-back slats shown in plan, and a portion of the desk-supporting bracket appearing in horizontal section; and Fig. 5, an elevation of a portion of one of the seat-ribs G with a few of its attached seat-slats, some of the latter appearing in vertical section.

In the drawings, A indicates the standards which support the seat, seat-back, and desk, these standards consisting of uprights of substantially parallel form, terminating below in bifurcations forming the feet, by which the standards are secured, as usual, to the floor.

B represents the upright portions of the standards, the lower portion being intended to receive the seat-arms, while the upper portion receives the seat-back and the desk-brackets.

C are straight parallel ribs projecting sideways from the rear upper portion of the standards, and intended to form, substantially, a dovetail and T to be engaged by the desk-brackets.

D are ribs projecting sidewise from the front upper portion of the standards, these ribs being intended to form, substantially, dovetails or T's to be engaged by grooves in the seat-back slats; E, the seat-back slats transversely

dovetailed or T'd to engage these ribs in the usual manner, except as hereinafter specified.

F are the seat-arms, consisting of castings carrying each a pivot for the appropriate seat-rib, and provided with a mortise fitting loosely upon the lower portion of the standard-support, so as to be capable of vertical adjustment upon that upright, these arms being placed in position by being passed downward over the tops of the standards before the seat-back slats or the desk-brackets are applied to the standards.

G are the usual seat-ribs pivoted to the arms F, and provided upon their upper surface with the usual dovetails or T's to be engaged by the seat-slats.

H are the seat-slats attached to the seat-ribs by means of transverse dovetail or T grooves in the slats engaging the seat-ribs in the usual manner, except as hereinafter specified.

J are the desk-brackets, consisting of bracket-shaped castings whose tops are properly inclined for the desk-top, and whose upper frontal edges are adapted to receive slats forming a superback, and whose lower frontal edges are fitted for engagement with the ribs C of the standards.

K is an open-fronted groove forming substantially a dovetail or T in the front lower edge of each of these brackets, such groove being adapted to engage the ribs C of the standard and serve to prevent the rearward displacement of the bracket from the standard and at the same time permit vertical adjustment of the bracket upon the standard.

L are set-screws employed for securing the adjustable parts in position upon the standard, there being a set-screw for each seat-arm F and for each desk-bracket J, these set-screws being threaded through those parts and impinging with their points against the appropriate part of the standard, these set-screws being very short.

M are counterbored bosses formed upon the seat-arms and desk-brackets, concentric with the screws L and completely encircling the heads of these screws.

N are the top ribs of the desk-brackets,

formed with top dovetails or T's, precisely like the seat-ribs G, to receive the desk-top slats.

O are the desk-top slats secured to the desk-brackets by means of transverse dovetail or T grooves, the construction being the same as in the case of the seat-slats H.

P are ribs at the front upper edges of the desk-brackets, also provided with dovetails or T's for the reception of slats.

Q are superback slats applied to these ribs in an obvious manner, these slats forming a superback for the seat and also a front closure for the interior of the desk.

R is a desk floor-board reaching from this superback rearwardly and extending from desk-bracket to desk-bracket, this board forming the floor of the receptacle below the desk-bracket.

S are the terminal slats of the several series of slats forming the seat, the seat-back, the superback, and the desk-top.

T are the extremities of the T or dovetailed ribs which support the several series of slats, these extremities of the ribs forming the portions which are engaged by the terminal slats S.

U are lugs projecting inwardly from the desk-brackets and engaging the upper and lower surface of the ends of the floor-board R.

V are forward projections of the tops of the rib extremities T, forming undercut ends to the dovetail portions of these ribs, the terminal slats F of the several series of slats being provided with transverse grooves extending partly across them, the terminal ends of these grooves being undercut to intermember with these undercut rib portions.

These several series of slats form the seat, seat-back, superback, and desk-top, and are applied to the T's or dovetails of their respective ribs in the usual manner except as to the terminal slats S. These slats, instead of having their dovetail grooves entirely across them, have the grooves extend part way across only, and the ends of the grooves are undercut at the bottom, as indicated in Fig. 5, which figure is drawn to represent the seat construction, but will serve to illustrate also the other portions referred to. The extremities T of the various dovetail ribs are undercut to intermember endwise with the ends of the dovetail grooves in the terminal slats S. By this means the outer edges of the terminal slats are prevented from curling upward, and these edges caused to present a neat appearance, free from dovetail openings.

The seat is adjusted in height by securing the arms F in desired position upon the standards, the arms being fixed in position, after adjustment, by means of their set-screws L, and these set-screws are prevented from accidental disturbance and the catching and tearing of clothing by the encircling bosses M.

When the desk-brackets and the seat-back are removed from the standards, the entire seat structure, including its attached arms, may be lifted upward and off of the standards.

The superback formed by the slats Q forms the front closure for the desk-receptacle, and also forms an upward extension of the seat-back. This superback projects somewhat above the desk-top and forms a front guard for the desk-top and prevents the interference of the sitter's head with the desk to the rear of the sitter.

The desk portion is adjusted vertically by sliding the brackets upon the ribs C, and when adjusted is fixed in position by the appropriate set-screws L, guarded by their encircling bosses M in the same manner as the set-screws of the seat-arms. The set-screws of the desk-bracket are in the example located at the lower extremities of the desk-brackets and pinch the standards at those low points, thus permitting the weight of the desk portion and any weight imposed upon it to be met by direct impingement of the upper portions of the front elements of the grooves K against the fronts of the ribs C, whereby fulcrum-like actions upon the set-screws and consequent loosening and rattling are prevented.

The floor-board R is retained in position by simple insertion between the lugs U, by which simple construction a book-receptacle is formed within the desk portion.

The groove portions K of the desk-brackets are located below the level of the floor-board, so that the entire vertical depth of the desk-receptacle projects above the grooves K, and the superback Q extends from the top of the groove portions to above the top of the desk. By this construction the standards are shortened an amount equal to the vertical depth of the desk portion, and at the same time a proper height is secured for the entire seat-back. The desk-brackets may be said to consist of those portions at and below the level of the floor-board R, those portions of the brackets extending above this level forming ends for the desk-receptacle and extension-brackets for the support of the superback and desk-top.

The slats Q, forming the superback, extend endwise beyond the sides of the brackets, as indicated in Fig. 2, in order that the superback may form an upward extension of the seat-back of full width of the seat-back.

I claim as my invention—

1. In a school-desk, the combination, substantially as set forth, of standards adapted for attachment to the floor, a seat-back attached directly to the front edges of the standards, a seat attached to the standards in front of and below the seat-back, desk-brackets having at their lower front edges open grooves adjustably engaging the rear edges of the standards independent of the seat-back and seat, and projecting upwardly beyond such engagement, dovetail ribs P upon the said upwardly-projecting front edges of the brackets, a desk-top secured to the tops of these brackets, and a superback secured to the upper front edges of these brackets.

2. In a school-desk, the combination, substantially as set forth, of standards adapted for attachment to the floor, a seat-back attached to the front edge thereof, a seat and  
5 desk vertically adjustable on the standards, set-screws L, with their points impinging against the rear of the standards, for securing

the desk and seat in adjusted position upon the standards, and counterbored bosses M encircling the set-screws.

ELI MURRAY.

Witnesses:

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W. A. SEWARD.