

Harrington & Mills,

School Seat.

No. 105676.

Patented July 26, 1870.

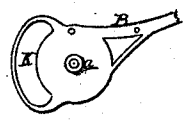
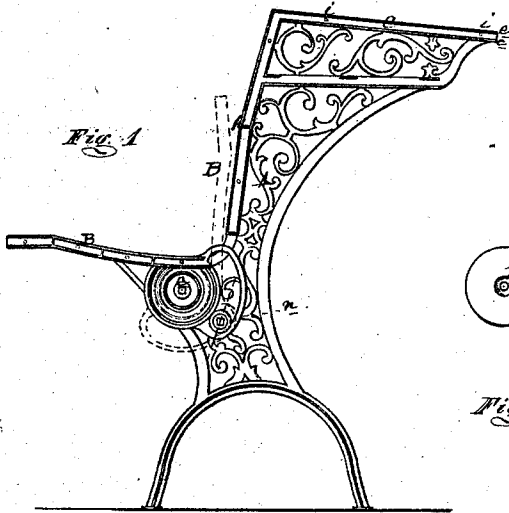


Fig. 2

Fig. 3

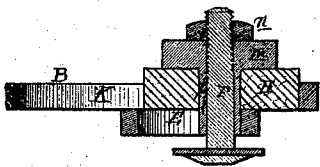


Fig. 4

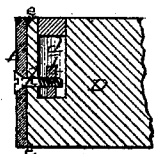


Fig. 5

ATTEST

Samuel J. Spray  
Frank C. Culp

INVENTOR

Ch. Harrington  
& Mills  
per atty  
Thos. S. Sprague

# United States Patent Office.

CHARLES G. HARINGTON AND DAVID MILLS, OF NORTHVILLE, MICHIGAN.

Letters Patent No. 105,676, dated July 26, 1870.

## IMPROVED SCHOOL-SEAT.

The Schedule referred to in these Letters Patent and making part of the same.

### To whom it may concern:

Be it known that we, CHARLES G. HARINGTON and DAVID MILLS, of Northville, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in School-Seats; and we do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is an elevation of the inner side of one of the end frames of a seat and desk, with seat-arm in place.

Figure 2 is a section of the frame with the seat-arm removed, showing the box in which the axle of the seat-arm actuates, and the slot, by means of which said seat-arm is adjusted.

Figure 3 is a plan of a section of the seat-arm, showing the axle thereof, and a curved slot, which forms a stop.

Figure 4 is a section on the line  $xx$  in figs. 1 and 2, showing the slot, thimble, bolt, rubber stop, nut, and stop.

Figure 5 is a section showing the manner in which the top of the desk is secured to the frame.

Like letters indicate like parts in each figure.

The nature of this invention relates to the construction of school-seats and desks, so that the seat may be adjusted vertically, and that it will be noiseless in operation; and

It consists in a new and ingenious arrangement of the various parts, the whole forming a neat, strong, durable, adjustable, and noiseless in operation, seat and desk for the purposes designed.

In the accompanying drawing—

A represents one of the end frames employed in the construction of our seat, which frame may be ornamented as desired.

B represents a seat-arm, to which is secured, in any suitable manner, any desired seat.

This arm is provided with an axis,  $a$ , which actuates in the seat  $b$ , cast for that purpose in the side of the seat-frame, and is secured by the bolt  $c$ .

C is a groove, made by an upper and lower flange,

$e$ , cast on the upper end of the seat-frame, and which is designed to receive the end of the board D, which forms the platform or top of the desk.

A hole,  $d$ , is bored into the board from the edge, into which is inserted a proper nut,  $h$ , which engages with a screw-bolt,  $k$ , which passes through suitable holes  $i$  in the frame, and by means of which the top is firmly secured to the frame.

E is a slot, cast in and through the seat-frame, through which passes the thimble  $l$ , which is provided with a shoulder,  $m$ .

Through this thimble, from the outside of the frame, passes the bolt F, the inner end of which engages with a nut,  $n$ .

Between the shoulder  $m$  of the thimble and the side of the frame, and sleeved upon said thimble, is placed a thick elastic washer or buffer, H.

K is a circular slot, cast in the rear end of the seat-arm, and engages with the elastic washer or buffer H in such a manner that, when the seat is thrown down, as in fig. 1, it will act as a stop and be noiseless in operation by impinging against said elastic washer.

Should it be desired to alter the inclination of the seat, to suit the various heights of scholars, it may be done by loosening the nut  $n$ , raising or lowering the bolt F and thimble  $l$  in the slot E, and then tightening the nut again.

It will be noticed that the front of the frame which forms the back of the seat is nearly vertical to the point  $p$ , from which point it inclines backward, for the purpose of accommodating the shape of the seat-back to the form of the sitter.

What we claim as our invention, and desire to secure by Letters Patent, is—

The school-seat above described and shown, consisting of the frames A, the arm B, the board D, the bolt F, and the washer H, when the several parts are constructed, arranged, and secured together as described and shown, as and for the purposes set forth.

CHARLES G. HARINGTON.  
DAVID MILLS.

Witnesses:

SAML. HUNGERFORD,  
W. H. SERVISS.