N. E. Toyle, School Tesk. No. 109304. Patented Nov. 15. 1890.

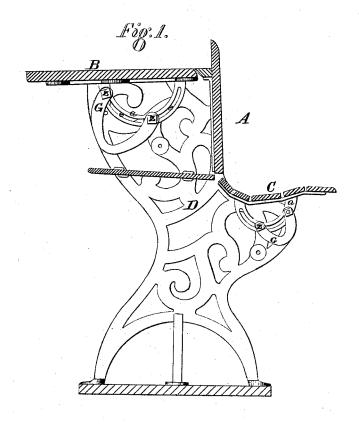
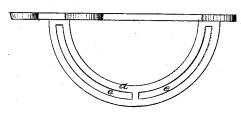


Fig. 2.



Witnesses Hurry N. Miller, Villete Inderson Inventor Tr. E. Doyle, Chipmantomer Co Attorneys

United States Patent Office.

WILLIAM E. DOYLE, OF EATON, OHIO.

Letters Patent No. 109,304, dated November 15, 1870.

IMPROVEMENT IN SCHOOL-DESKS.

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

To all whom it may concern:

Be it known that I, WILLIAM E. DOYLE, of Eaton, in the county of Preble and State of Ohio, have invented a new and valuable Improvement in School-Desks; 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 central vertical section

of my invention.

Figure 2 is a detached view of the slotted semicir-

cular arc.

My invention relates to school-furniture, and consists in the construction and novel arrangement of semicircular slotted arms attached to each end of the table and seat of a school-desk, and designed to facilitate the ready adjustment thereof, vertically or horizontally, according to requirement.

The letter A of the drawing designates my com-

bined school-desk and seat;

B represents the desk-board; and

C, the seat thereof.

D D represent the standards.

Secured firmly to the under side of the desk-board, at each end thereof, is a semicircular arc or arm a, of metal, provided with the quadrant slots e e.

G designates a horseshoe-shaped casting fastened to the inner side of the standard by its center, and having its ends bent outward to admit the semicircular plate a.

Bolts z z pass from the standard through the quad-

rant slots of the arc, and are secured to the ends of the casting G.

This arrangement keeps the bolts or pins always horizontal, and prevents them from binding on the arc a or becoming bent downward by pressure.

It is apparent that when the desk-board assumes the horizontal position it is perfectly firm and steady.

Each bolt z is, at the end of its quadrant slot, nearest the scholar, and any pressure on this side of the desk-board only serves to secure it more firmly in its

When the desk-board is thrown upright the weight thereof is transferred inward toward the seat-back, and serves to prevent any jarring or slight shock from throwing it down into the horizontal position again.

A precisely similar arrangement of devices is provided for the seat, and similar letters have been used to designate like parts with reference to the mechanical construction.

What I claim as my invention, and desire to secure

by Letters Patent, is-

The combined school-desk and seat herein described, provided with the bracing arms G G, bolts z z, and semicircular plates a a, attached to the under side of the seat and desk-board, and provided with the quadrant slots e e, as and for the purposes shown and described.

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

Witnesses:

WM. E. DOYLE,

B. R. LARSH, J. R. BEATY.