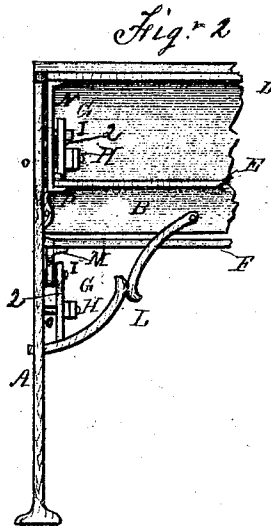
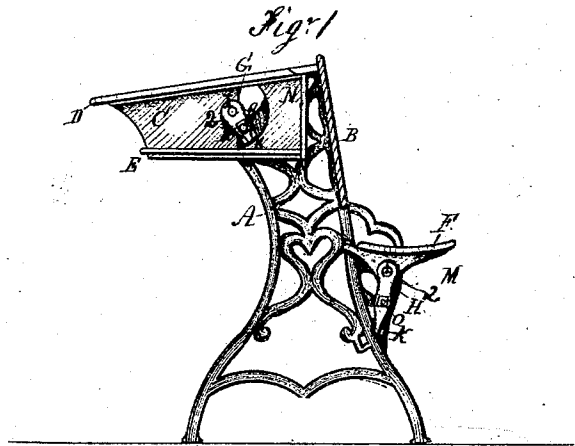


*J. F. Piehl,*

*School Desk.*

*No. 106403.*

*Patented Aug. 16. 1870.*



*Witnesses*  
*William E. Bell*  
*John Calvert*

*John F. Piehl*  
*By Thos A. Dugdale*  
*Attorney*

# United States Patent Office.

JOHN F. PIEHL, OF RICHMOND, INDIANA.

Letters Patent No. 106,403, dated August 16, 1870.

## IMPROVEMENT IN SCHOOL-DESK.

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

I, JOHN F. PIEHL, of the city of Richmond, county of Wayne and State of Indiana, have invented certain Improvements in School-Desks, of which the following is a specification.

### *Nature and Object of the Invention.*

My invention consists in providing a school-desk and seat with a clamp-hinge, or a hinge provided with a clamp, so that the clamp may be screwed tight against the hinge, for the purpose of holding the desk more firmly, and to produce a more permanent hinge.

### *Description of the Accompanying Drawing.*

Figure 1 is a transverse vertical section of my desk, shown as it appears when cut off close to the end-piece of the desk.

Figure 2 is also a transverse vertical section of my desk cut in two in the middle, and viewed from the front, showing a brace.

### *General Description.*

The same letters refer to corresponding parts in the several figures.

A is the end upright, of which there are two.

B is the back board, secured to the upright A by means of ears P.

C is one of the end pieces of the desk, of which there are two.

D is the top of the desk.

E is the bottom of the desk.

F is the seat.

G is a clamp, of which there are four, two only being represented.

H, jam nuts.

I, pins on which the desk and seat vibrate.

K, lugs each side of the end of the clamp G.

L is a brace, there being one at each end of the desk, at the bottom of the back board, and secured to the uprights A.

M is a piece to which the seat is secured at each end, and through which there is a hole to receive the pin I, and on which it vibrates.

Q, joints.

N is the back board of the desk.

O is a pin on which the clamp G is slipped, one desk requiring four of those pins O.

P shows one of the ears to which the back board is secured, there being six; only one is shown.

The uprights A, and also the end pieces C of the desk, are made of cast iron, or any other suitable metal, as also the clamps, joint-pins, nuts, and braces; the wood-work is best made of one-inch ash lumber.

The end of the back board B should butt up against the upright A, and be secured by means of the ears P, which are on the back of the upright A.

I am aware of the patents of A. E. Roberts, dated January 11, 1870, and D. H. Nation, May 18, 1869, and the devices therein found I do not wish to claim; but

What I do claim as my improvement in school-desks, and desire to secure by Letters Patent, is—

1. In combination with the standards A A, and pieces M, or pieces C, the pins I and O, clamps G, jam-nuts H, and lugs K, forming the joints Q, all constructed and arranged as herein described.

2. In combination with a school-desk, constructed as herein described, the ears P, and braces L, for the purpose specified.

JOHN F. <sup>his</sup> X <sup>mark</sup> PIEHL.

Witnesses:

WM. E. BELL,  
JOHN CALVERT.