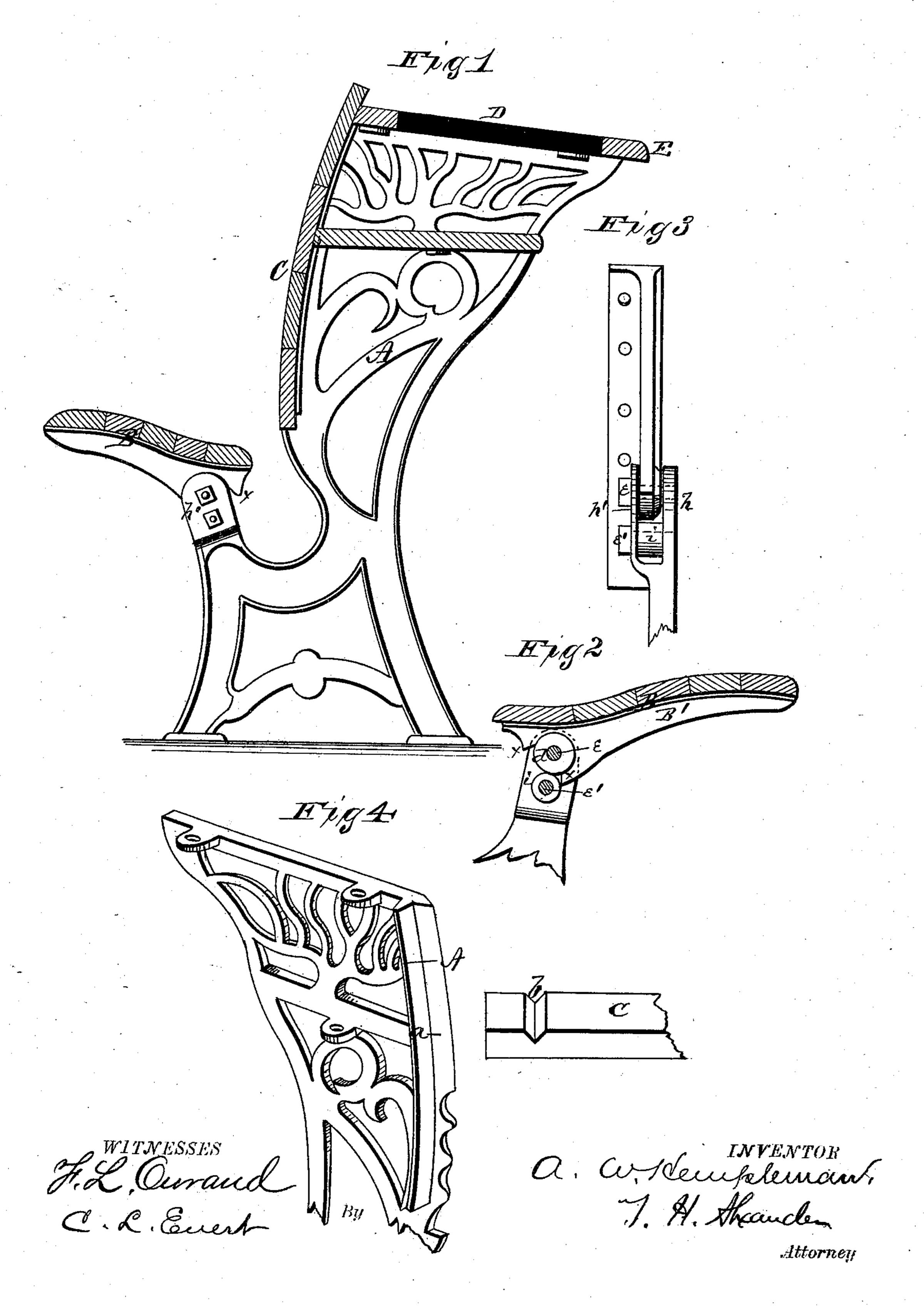
## A. W. HEMPLEMAN. SCHOOL-DESK.

No. 177,835.

Patented May 23, 1876.



## UNITED STATES PATENT OFFICE.

AARON W. HEMPLEMAN, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN SCHOOL-DESKS.

Specification forming part of Letters Patent No. 177,835, dated May 23, 1876; application filed February 25, 1876.

To all whom it may convern:

Be it known that I, AARON W. HEMPLE-MAN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in School-Desks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to that class of school-furniture which consists of a combined desk and folding-seat settee; and it consists in the manner of forming and attaching the settee-back; also, in the construction of the desk-top, and in the form of the seat hinge or joint, all as hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a transverse vertical section of a school-desk embodying my invention. Figs. 2, 3, and 4 show detached parts of the same.

The frame of my combined desk and settee consists of two iron standards, A A, with jointed seat-arms B B, provided, as usual, with flanges or lugs drilled for screws by which to attach the wood-work. To the front of these standards I form, by casting a V shaped tongue, dowel, or projection, a, which may be of any desired length, and either in one continuous piece, when hard wood is used, or serrated to penetrate soft wood, when such is used.

Upon the inner or rear surface of the woodback C, near each end, is formed a V-shaped groove, b, to receive the tongue or dowel part a of the standard, when secured in place by screws. This serves as a rigid brace, securing the desk from any diagonal or lateral motion, thus adding to the durability of the desk, and making it more stable and satisfactory in service. The peculiar form of the tongue or dowel is such that the contact with the woodback is not broken by shrinkage of the wood, and, in the event of any wear, it may be secured anew by tightening the screws.

As ordinarily made, the desk-top soon cracks, warps, and twists from the changeable temperature of the school-room, rendering the desk-tops unsightly, and oftentimes unfitted

for use. As a remedy, I form the desk-top of common slate, D, so framed in a frame, E, of wood, iron, or other material as to present a flush and smooth upper surface. This furnishes and continues to remain a smooth level table, not affected by temperature or climate, nor stained by inks or acids. It also furnishes, in the most convenient manner for the use of the pupil, a slate surface, and, at the same time, secures a degree of quiet in the schoolexercises which cannot be attained when the pupils are required to use movable slates. Attached to each seat-arm B, at right angles to it, and part thereof, is a flange, B', with a circular collar or hub, d, pierced in its center to receive a pivot-bolt. The flange below this collar is recessed to form stops x x. At a suitable point on each standard are cast two jaws, h h', one of which, h', is elastic or flexible, pierced for two bolts, e and e'; the bolt e being the pivot of the seat-arm, and the bolt e', sustaining a cushion, i, of leather, rawhide, rubber, or other elastic substance, serves as a stop to hold the seat at its proper point, either when folded or in position for use. Between the jaws h h' is sufficient room to receive the recessed flange of the seat-arm, and also the cushion i, for deadening any sound from percussion in any movement. The elastic jaw h' operates by the tightening of the pivot-bolt e, as a clamp, to prevent a too free movement of the seat, and to hold it at any angle of elevation without a tendency to fall of its own weight and create noise. Its elasticity also acts effectually to prevent any moving of either pivot-bolt or nut. The tendency to loosen the nut on the pivot-bolt is effectually overcome by the head and nut of said bolt, both having a bearing upon the jaws, and being entirely removed from the seat-arm. Both ends of the pivot and stop bolts are supported, thus adding strength to noiselessness, ease of operation, durability, and elegance.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the standard A, provided with a V-shaped projection, a, along its forward edge, and the back C, provided with a

corresponding groove, b, on its rear side, substantially as and for the purposes herein set forth.

2. The combination, in a school-desk hinge, of the recessed flange B' on the seat-arm, the fixed jaw. h, and elastic jaw h', on the standard, the bolts e e', and cushion i, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own invention, I hereunto affix my signature in presence of two witnesses.

AARON W. HEMPLEMAN.

Witnesses:
JNO. W. FRANCIS,
JAMES E. CLARK.