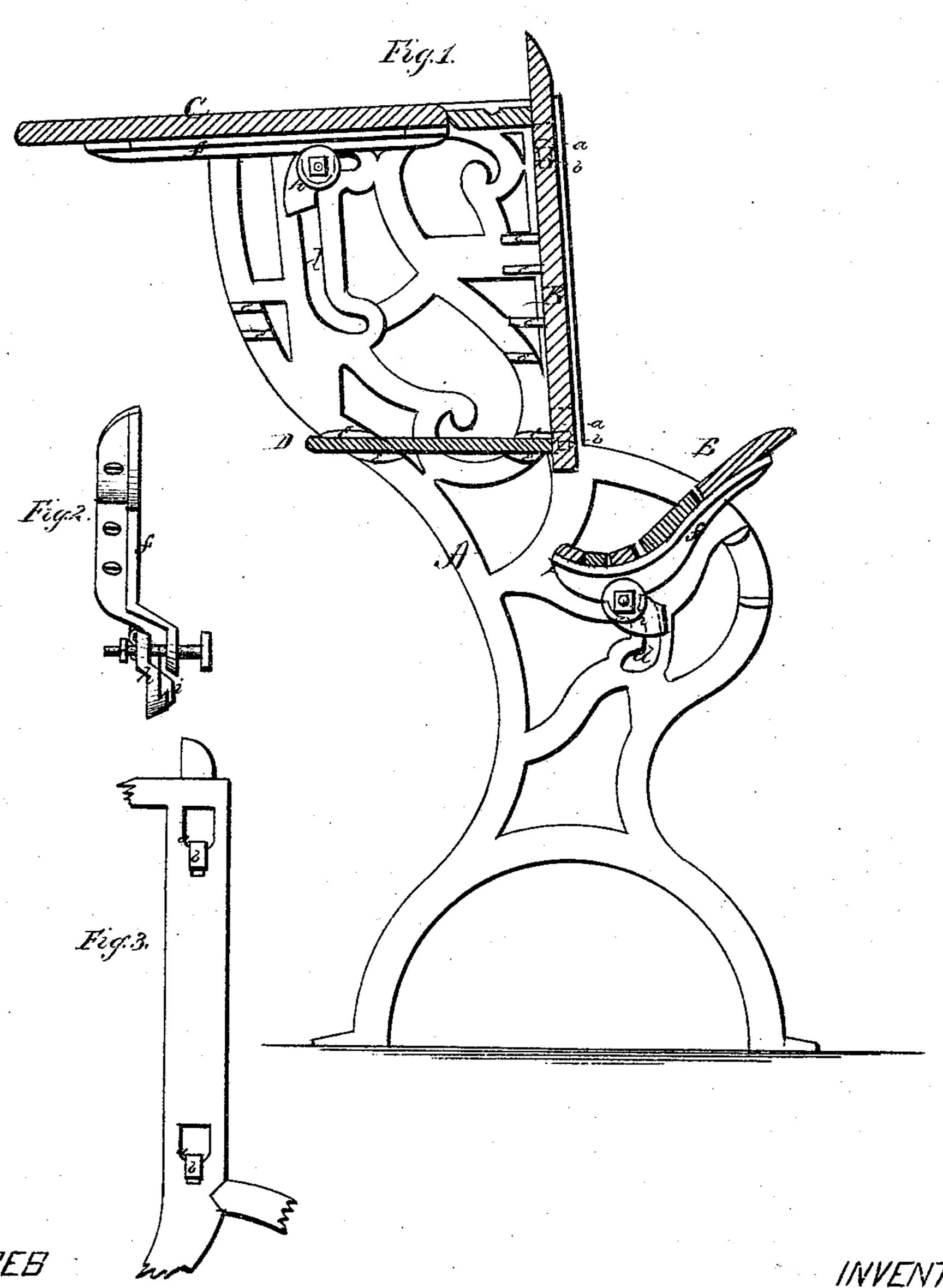
HO!4 & ADDO!4,

Patented Feb. 15.1870.



John A. Elles. Henry C. Miller

INVENTOR

M.L. Hotel C. Abboth. Ber D. H. Alexander

Anited States Patent Office.

M. L. HOLT AND L. C. ABBOTT, OF EATON, OHIO.

Letters Patent No. 99,895, dated February 15, 1870.

IMPROVED SCHOOL DESK AND SEAT.

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

To all whom it may concern:

Be it known that we, M. L. HOLT and L. C. ABBOTT, of Eaton, in the county of Preble, and State of Ohio, have invented certain new and useful Improvements in School Seats and Desks; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

The nature of our invention consists in the construction and arrangement of a "combined school desk and seat," as will be hereinafter fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawings, in which-

Figure 1 is a transverse vertical section of our combined desk and seat;

Figure 2 is a view of the hinge by which both the desk and seat are attached to the frame; and

Figure 3 is a side view of a portion of the side or frame, showing the manner in which the back is attached to the same.

A represents the side or frame of our desk;

B is the back;

C, the desk; D, the book-shelf; and

E, the seat.

The sides or frame A are cast-iron, and at the point where the back B is to be attached are two vertical slots, a a, the upper ends of said slots being enlarged, as shown in fig. 3.

In the edges of the back B are fastened two bolts, b b, which are headed, and of such size that they can be inserted through the enlarged portions of the slots a a, and by then moving the back B downward the bolt will pass downward through the slot, the head of the bolt preventing the back and side from coming apart, thus firmly securing the back to the sides or frame. This device greatly facilitates the taking apart and setting up school furniture, renders it easy of shipment, and has when put together great stability.

The book shelf D is held between lugs e e on the inner sides of the frame A. There are two or more of these lugs e e above each other, so that the bookcase or shelf can be adjusted to suit the height of the desk C, which is made adjustable and llinged in the following manner:

In the sides A, at a suitable point in rear of the back B, is a vertical slot, d, the ends of which are turned horizontally forward, as shown in fig. 1. These

ends of the slot d form the bearings for the desk C; that is, either the upper or lower end of the desk being capable of being moved to either, thus adjusting it to suit the size of the scholars.

On the under side of the desk C, at each end, is a bar, f, having at a suitable point a circular enlargement projecting downward, through which a screwbolt passes, said bolt having passed from the outside through the slot d, its head preventing it from passing entirely through.

The inner end of this screw-bolt passes through a metal piece or washer, h, and is then fastened by a nut.

The washer h is of considerable thickness and has a circular recess on its outer side, in which the circular projection on the bar f fits snugly.

The washer then extends downward for a short distance, and is held by a projection, i, on its outer side, which projection is inserted in the vertical portion of the slot d.

By this means the friction can always be so regulated as to prevent any noise by falling from its own weight, and also lock the desk before it strikes the back, and prevent any noise from concussion in folding up the desk.

The seat E is hinged exactly in the same manner as above described for the desk, except that the vertical ends of the slots in the frame for said seat are turned toward the rear instead of toward the front, as in the former case.

Both the seat and the desk can be adjusted in either end of the slots in the frame, to suit the size of the scholars.

Having thus fully described our invention,

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

1. In combination with the desk C and seat E, the slats a in the standards A, for adjusting the desk and seat as herein described.

2. The combination of the bar f with its circular projection, washer h with its projection i fitting in the slot d, and its bolt and nut, all constructed and arranged as described for the purpose set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

> M. L. HOLT. L. C. ABBOTT.

Witnesses:

JNO. R. STEPHEN, G. D. STEPHEN.