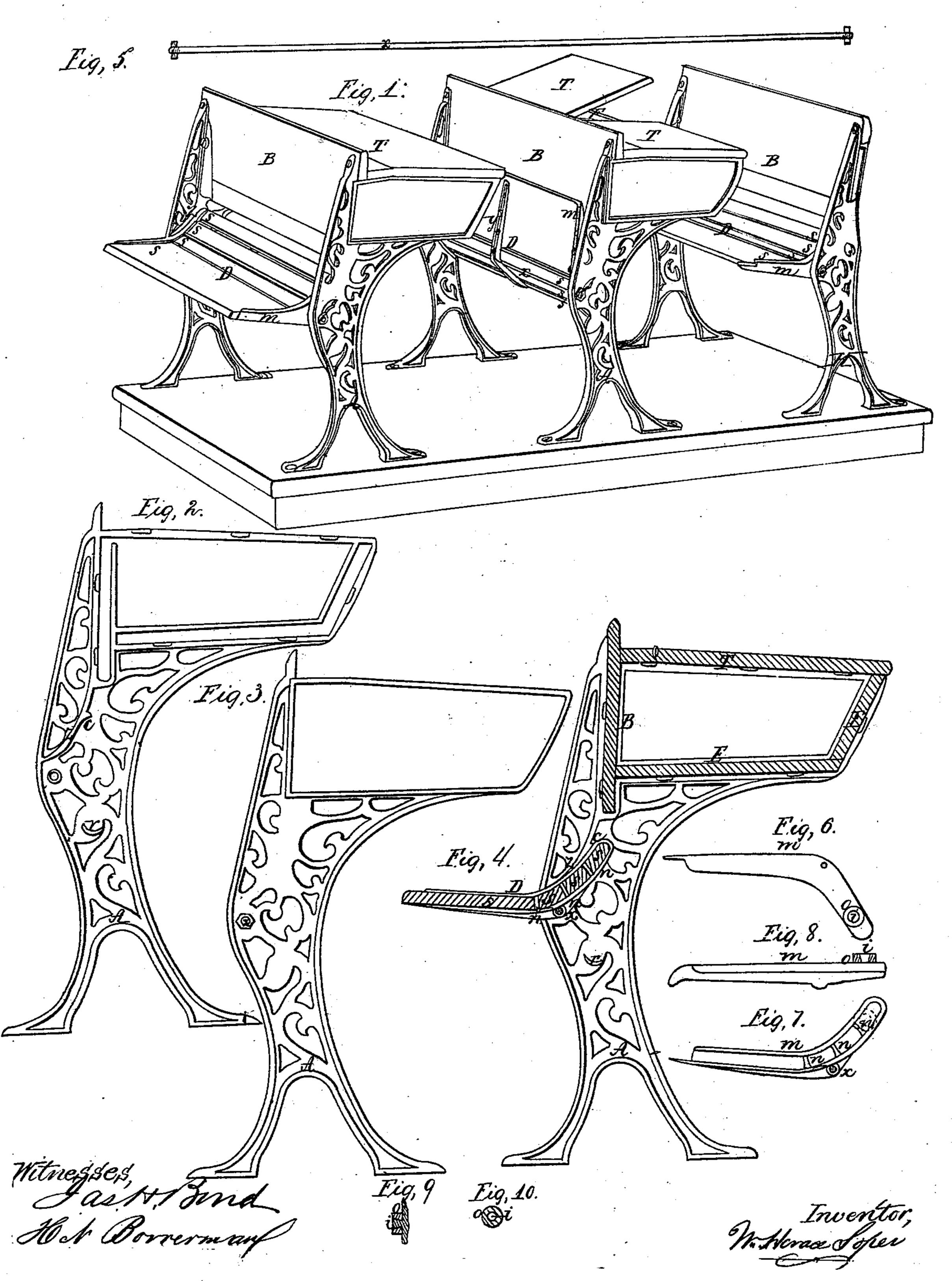
## M. M. Soller. Sollow Dest.

193,919.

Patental Aug. 17,1869.



## Anited States Patent Office.

## W. HORACE SOPER, OF BALTIMORE, MARYLAND.

Letters Patent No. 93,919, dated August 17, 1869.

## 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 I, W. Horace Soper, of the city of Baltimore, and State of Maryland, have invented a new and improved School-Desk; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable persons skilled in the art to make, construct, and use the same, reference being had to the accompanying drawings, which form a part of this specification, in which—

Figure 1 is a perspective view of a set of desks and a rear seat, showing the combination of the desk and

the folding curved seat.

Figure 2 is an inside view of the standards A A.

Figure 3 is an outside view of the standards A A.

Figure 4 is a sectional view of the desk and seat.

Figure 5 is a longitudinal view of the metallic rod x. Figure 6 is an outside view of the curved levers m m.

Figure 7 is an inside view of the curved levers m m.

Figure 8 is a view of the upper side of the curved levers m m.

Figure 9 is a sectional view of the cleats *i i*, with their India-rubber covering *o o*.

Figure 10 is a transverse view of the India rubber o on the cleats i i.

My invention consists of a new and inproved folding curved seat for school-desks, and of its combination with the parts of a desk already known, making a new combination.

The standards A A are made of cast-iron, or other

suitable material.

Fig. 2 shows the construction of the standards A A, the grooves to receive the back B, the book-shelf E, and the front F. It also shows the checks c c, and the rests r r.

The seat D is constructed upon the curved levers

m m, (figs. 6 and 7.)

These levers have grooves, divided into sections by the transverse bars n n, to receive the ends of the slats s s, s, which are secured in their places by screws, rivets, or nails.

The middle of the seat is supported by the curved

batten y, but this is not essential.

On the short arms of the levers mm, there are cleats,

i i, fig. 9, shaped like the frustum of a cone, and attached to the levers at the smaller end.

These cleats are covered with or surrounded by the

India rubber o o, fig. 10, or its equivalent.

The seat D is attached to the standards A A by the metallic rod x, fig. 5, which passes directly through the standards A A, the levers m m, and the batten y.

The seat D turns upon the metallic rod x, and when in position for use, the cleats i i bear against the checks c c, and when folded, the cleats i i come in contact with the rests r, which prevent it from striking against the back of the desk.

The India rubber on the cleats i i gives elasticity to

the seat, and prevents noise.

The sectional view of the desk and seat, fig. 4, shows

the construction and position of each part.

The back B, the book-shelf E, the front F, and the permanent part of the top T, are secured to the standards A A by screws.

The desk may be made with lids to raise, or with a permanent top, as shown in the perspective view, fig. 1.

The curves of the back B and the seat D are made upon physiological principles, for the promotion of health and comfort.

The folding seat affords great facilities for cleaning the school-room, for the movements of teachers and

pupils, and for gymnastic exercises.

I do not claim, as new, the standards A A, nor the metallic rod x, the latter having been patented, March 31, 1863, in my Letters Patent No. 38,064; but

I claim as new, and desire to secure by Letters

Patent—

1. The curved levers m m, of the seat D, with grooves divided into sections by the transverse bars n n n, to receive the ends of the slats s s s, substantially as described, and for the purpose herein set forth.

2. The combination of the curved seat D with the standards A A, rod x, the back B, the top T, and the

book-shelf E, as described.

W. HORACE SOPER.

Witnesses:

JAS. H. BOND, H. A. BOWERMAN.