C. H. PRESBREY.

SCHOOL-DESK.

No. 191,713. Patented June 5, 1877.

Fig. 4.

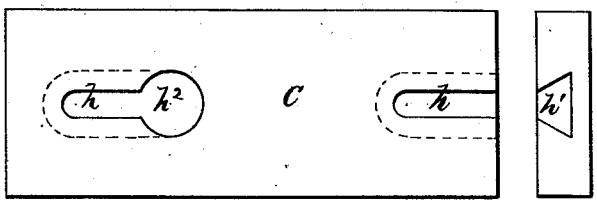


Fig. 5.

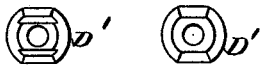


Fig. 1.

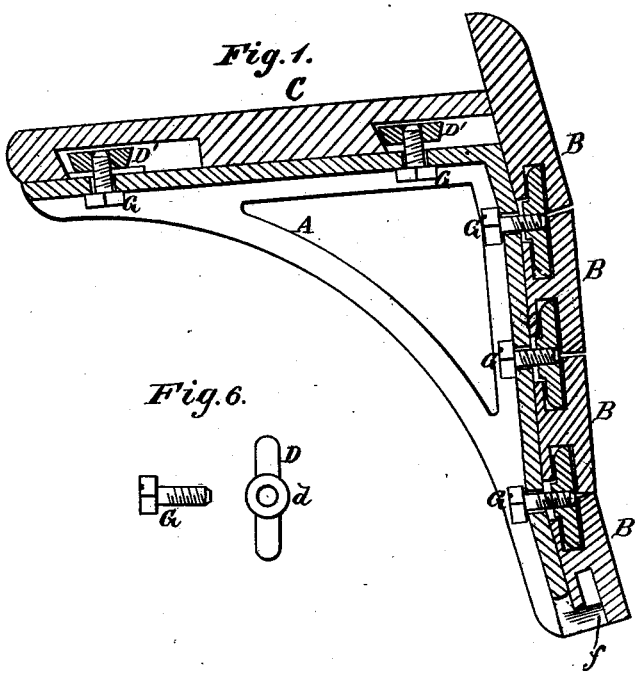


Fig. 2.

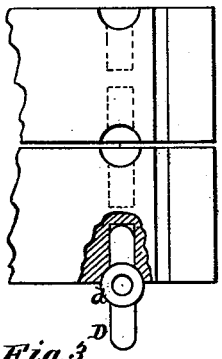
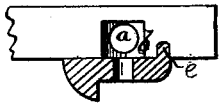


Fig. 6.

Fig. 3.



WITNESSES

Henry N. Miller

Frank Galt

INVENTOR

Chas. H. Presbrey,

Alexander Mason

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES H. PRESBREY, OF STERLING, ILLINOIS.

IMPROVEMENT IN SCHOOL-DESKS.

Specification forming part of Letters Patent No. **191,713**, dated June 5, 1877; application filed March 15, 1877.

To all whom it may concern:

Be it known that I, CHAS. H. PRESBREY, of Sterling, in the county of Whitesides, and in the State of Illinois, have invented certain new and useful Improvements in School-Desks; and 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, making a part of this specification.

The nature of my invention consists in the construction and arrangement of the means for securing or fastening the wood-work to the standards of school-desks or other similar articles, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a vertical section, showing the standard of a school-desk with the back and top embodying my invention. Figs. 2 to 6 are detailed views of parts thereof.

A represents the standard of a school-desk, which may be made of metal or wood, as desired.

B B are the slats forming the back of the seat, and C is the top or desk part.

In the edge of each slat B is bored a hole, *a*, of sufficient depth to admit one-half the length of a fluke-nut, D. The lower half of the slat is then bored out, as shown at *b*, large enough to admit easily one-half of the center circle *d* of the fluke-nut D.

Holes are then drilled in the web or flange of the standard A to correspond with the divisions of the slats B, as shown.

The standard A is also, along one edge, formed with a bead, *e*, as seen in Fig. 3, which enters corresponding grooves in the slats.

To put on the wood-work, first place the lower slat on a projection, *f*, on the standard and against said standard. Then place one end of the nut D in the hole *a* in the edge of the same slat. A screw, G, is then put through the flange of the standard, the nut being held with the thumb and finger, so that the screw will enter the hole or thread of the nut easily. Another slat is then put on the upper end of the same nut, entering the hole *a* in the bottom edge of said second slat, and then by screwing up the screw G the slats are drawn up to the standard, which will bind the slats very firmly to the standards and to each other.

When solid woods are used, as with the top C, instead of slats grooves *h h* are cut on the back or under side of the wood, said grooves being dovetailed or formed with lips, and opening either through the edge of the wood, as shown at h^1, or by a circular enlargement, h^2, of the groove on the back of the wood.

Nuts D′ are then dropped in the holes and slipped along under the lip, so as to come opposite the holes drilled in the web of the casting A, and the screws G then put in, which will draw the wood down and be very much stronger than screws.

This latter method may also be used on the slats, if desired; but I prefer the former method for them.

By these means of fastening the parts together the different parts may be prepared at the factory, and the purchaser can put them together without any other tool than a wrench or screw-driver. It does not require any exact mechanical work in boring the holes in the standards or wood-work, as the holes in the woods being larger than the flukes of the nuts they will adjust themselves to any little variation that may occur, and the gain in the slats fitting the bead or rib of the casting will bring the slats to the proper place.

As no part of the fastening is exposed to view when the seats are put up except the heads of the screws, it presents a very neat appearance compared with many other modes of fastening now in use.

The nuts will also adjust themselves, when the slats are angling, as shown.

Another advantage is that a seat may be taken down and put up any number of times without injuring the fastening parts.

This fastening can be used on any kind of seats that have a web for screws, even without the gain in the slats and the corresponding rib on the web of the casting.

I do not claim edge-recessed seat or back strips connected to the arms or standards of the frame by means of movable shanked fast-

tenings having entering projections at right angles to their shanks to enter the edge recesses of the seat or back strips, as I am aware that such are not new. I am not aware that the form of nut shown and described by me, and adjusted by a screw for tightening the slats or bars, has ever before been known.

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

1. The fluke-shaped nut D with circular center *d*, in combination with the slats B, having holes *a* and recesses *b*, and the screws G, substantially as and for the purposes herein set forth.

2. The grooves *h* in the wood C, having angling or lip sides, in combination with the nuts D′ and screws G, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 9th day of March, 1877.

CHARLES H. PRESBREY.

Witnesses:

WILLIAM E. ROSS,

E. E. HECKER.