(No Model.)

S. N. UTTER.

BLACKBOARD AND DESK.

No. 493,134. Patented Mar. 7, 1893.

Fig. 1.

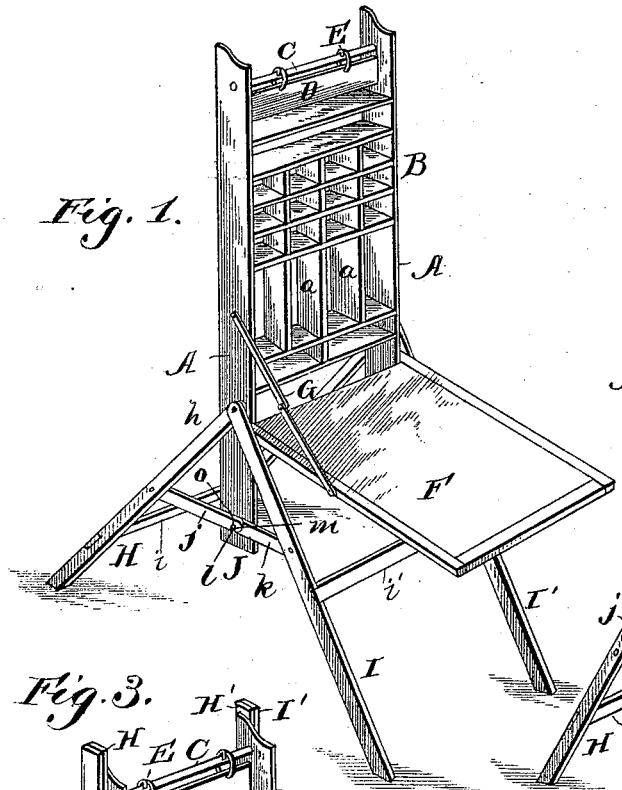


Fig. 2.

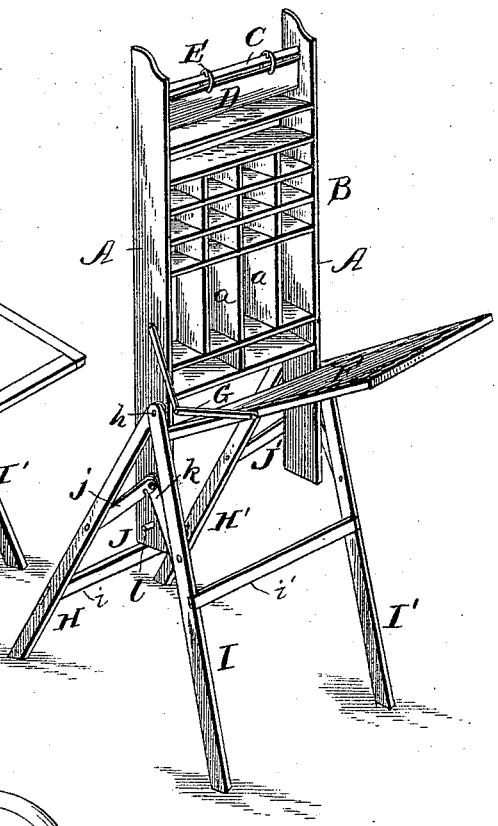
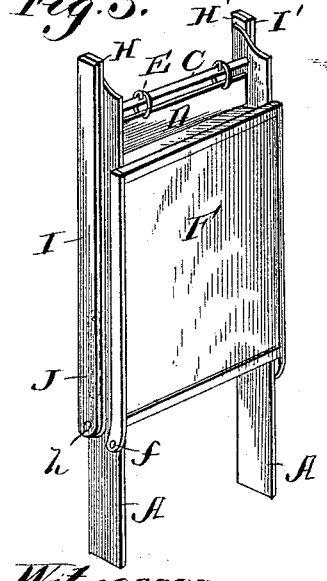


Fig. 3.



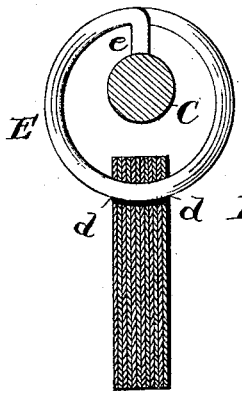


Fig. 4.

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UNITED STATES PATENT OFFICE.

SAMUEL N. UTTER, OF PITTSBURG, PENNSYLVANIA.

BLACKBOARD AND DESK.

SPECIFICATION forming part of Letters Patent No. 493,134, dated March 7, 1893.

Application filed July 27, 1892. Serial No. 441,417. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL N. UTTER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Blackboards and Desks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in blackboards and desks, and it relates, to novel means for displaying a series of views in convenient position before the pupil and to the novel construction and arrangement of devices by which the parts can be compactly folded together and held firmly and securely in place when unfolded for use.

The accompanying drawings fully illustrate my invention, in which—

Figure 1 is a perspective view showing the device unfolded in position for use. Fig. 2 is a like view showing the same partly folded, and Fig. 3 is a similar view of the same compactly folded. Fig. 4 is a detail sectional view through the series of suspended tablets.

Like letters of reference denote corresponding parts in all the figures of the drawings, referring to which—

A, A, designate the upright side pieces of the structure, and between these side pieces are arranged the shelves and partitions *a*, *a*, forming the series of compartments or pigeon holes B adapted for the storage of papers, utensils or other objects. The upper ends of these side pieces are connected and braced by a bar or rung C, which is preferably round in cross-section, as shown in Fig. 4, although other forms of bars may be used. On this bar or rung, C, are secured two or more divided suspending rings E, of the form shown very clearly by Fig. 4; and each of these rings E is passed through aligned eyelets or apertures, *d*, *d*, in the series of tablets, D, whereby the latter are hung from the bar, C, in convenient position in front of the pupil so that the characters or illustrations on the front tablet can be readily seen. These suspending rings, E, are divided and fixed to the bar, C, so that the tablets can be easily removed or replaced to bring the desired tablet into view. Each ring has one end thereof bent inwardly or radially so as to form an attaching arm *e* while the other end of the ring is carried around so as to overlap the side of the ring, said free overlapping end of the ring being free to yield or give so that the tablets can be readily placed on or removed from the rings by springing the free ends of the rings far enough away from the bodies of the rings to permit the tablets to pass said free ends of the rings. The rings are each secured to the bar C in a fixed position by having its arm *e* inserted into and secured in the bar, and each ring is thus held so that it is out of contact with the bar for practically its whole length so that the series of tablets can be easily hung from the rings and at the same time the tablets can be readily turned on the fixed rings to remove or replace them. These tablets D are provided with letters, characters, or pictures of objects.

To the uprights A, A, near the lower part thereof, below the compartments B, is pivoted the inner end of the leaf or board F, as at *f*, and to the front side of this leaf is applied or secured the coating or material forming the ground of the blackboard. The inner surface of this leaf is plain or finished to adapt the same as the writing surface of a desk when the leaf is turned down to its horizontal position, in which it is sustained by the sectional folding links G attached to the upright sides and to the edges of the leaf or board as shown.

The structure is supported by two pairs of legs H, H′, I, I′, each pair of which is pivoted at the upper ends to one of the side pieces, as at *h*, and the legs H, I, and H′, I′, are connected together by means of tie bars *i*, *i*′. The pairs of legs H, H′, and I, I′, are braced when extended by means of the folding braces J, J′. Each brace consists of two members *j*, *k*, which are pivoted to the respective legs of the pair, and the inner ends of said members *j*, *k*, are pivotally connected together, at *l*. One of the members of the brace, is provided near the pivot *l* with a notch *m* in the lower side, and when the legs are unfolded and the members thereby brought into line, this notch receives a stud or pin *o* secured to the side piece A near its lower end.

The operation of the device is obvious. To

unfold and use as a blackboard, the legs are spread apart and the braces adjusted so as to receive the studs *o* in the notches, thus steadying the device; and the tablets can be removed and replaced so as to bring the proper one to the front immediately over the blackboard surface on the vertical leaf. By lowering the leaf to the horizontal position shown in Fig. 1, the device can be used as a desk, and the leaf and legs can be compactly folded together as shown in Fig. 3.

It is evident that changes in the details of construction and form and proportion of parts can be made by a skilled mechanic without departing from the spirit or sacrificing the advantages of my invention.

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

In a blackboard, the upright side pieces, the horizontal bar C secured to the side pieces, the divided fixed rings E each having an inwardly extending arm *e* fixed to the bar C and having its free end overlapping the body of the ring, and the removable tablet D provided with the apertures in which the rings are fitted, for the purpose described, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL N. UTTER.

Witnesses:
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