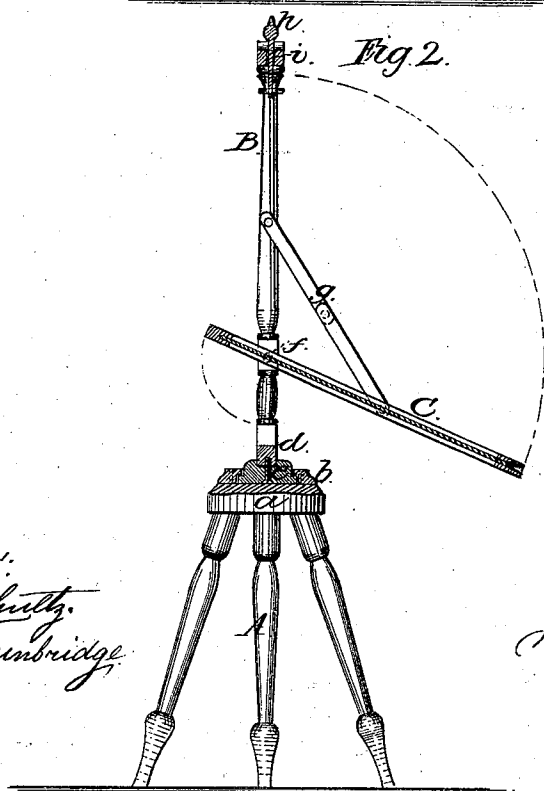
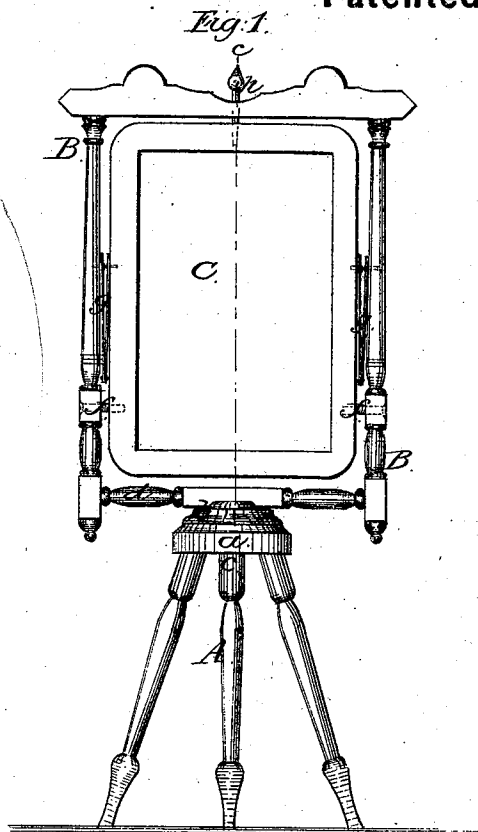


J. A. CRANDALL.
Blackboard.

No. 227,492.

Patented May 11, 1880.



Witnesses:
Willy J. A. Schultz.
John C. Tunbridge.

Inventor:
Jesse A. Crandall
by his attorney
A. Briesen

UNITED STATES PATENT OFFICE.

JESSE A. CRANDALL, OF BROOKLYN, NEW YORK.

BLACKBOARD.

SPECIFICATION forming part of Letters Patent No. 227,492, dated May 11, 1880.

Application filed December 17, 1879.

To all whom it may concern:

Be it known that I, JESSE A. CRANDALL, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Blackboard, of which the following is a specification.

My invention relates to improvements in blackboards; and the object of the improvements is to arrange the blackboard so that it can be turned on a vertical axis, and thereby present its faces in various directions; also, to so arrange the blackboard that it can be turned down and supported in an inclined position, and serve thereby the purposes of a desk.

My invention consists in pivoting the blackboard in an upright frame horizontally, so that it will swing from a vertical to an inclined position, and in pivoting the said frame to a stand or support so as to turn on a vertical axis, whereby the blackboard is adapted to be turned down so as to serve as a desk, or to be used as an ordinary blackboard, and by the pivotal connection of the supporting-frame the board is adapted to be turned so as to be viewed from any point around it, a lock being provided for holding the board vertically when desired.

In the accompanying drawings, Figure 1 is a front elevation of my improved blackboard and its support and frame, the blackboard being held in a vertical position; and Fig. 2 is a vertical cross-section of my improvement, taken on line *cc* of Fig. 1, with the blackboard turned down to serve as a desk.

Referring to the drawings, A is a stand which serves as the support for my improved blackboard. On the top *a* of the stand is a flanged ring, *b*.

B is a rectangular frame to the bottom rail, *d*, whereof, midway of its length, is fixed a circular flanged plate, *e*. The flanged plate *e* is placed on the top *a* of the stand, with its outwardly-projecting flange under the inwardly-projecting flange of the ring *b*. The plate *e* turns freely within the ring and carries the frame B with it, forming thus a swivel-connection.

C represents the blackboard. It is placed within the frame B and is connected with the

side uprights of said frame by pivots *f f*. Jointed rods *g g* are pivoted to the sides of the blackboard, and the opposite ends of said jointed rods are pivoted to the sides of the frame B at a suitable distance from the pivots *f f*.

When the blackboard is to be used in the ordinary manner it is turned on its horizontal pivots *f* until it is in the same plane as the frame, (the jointed rods *g* fold up parallel to each other,) and the blackboard is secured in this position by a pin, *h*, passed through a hole, *i*, in the top of the frame B into a corresponding hole in the top of the blackboard, (or by any other suitable device,) as shown in Fig. 1. Thus arranged, the blackboard is adapted to the ordinary purposes of mathematical demonstrations, drawing, &c., and owing to the swivel-connection of the frame B with the top of the stand, allowing said frame to be turned on a vertical axis, the faces of the blackboard can be turned so as to be exposed to view from any desired point.

When it is desired to use the blackboard as a desk, the pin or catch *h* is removed, and the blackboard is turned down on its pivots *f* (the rods *g* unfolding for this purpose) until it reaches the proper inclination, where it is supported by the jointed rods *g*, as shown in Fig. 2. Thus arranged, it is adapted to the ordinary purposes of a writing-desk, and it can be turned on its vertical axis, and thus be adapted to be used from any desired point around its center of rotation. Instead of the jointed rods *g*, suitable cords can be used.

I do not claim, broadly, a horizontally and vertically pivoted blackboard, as I am aware that such an arrangement has been employed heretofore.

I claim—

The blackboard C, pivoted horizontally to the upright frame B, in combination with the said frame, which is pivoted by the swivel-joint *b e* to the support A, with the supporting-strap *g* and lock *h*, substantially as herein shown and described.

JESSE A. CRANDALL.

Witnesses:

TOMPSON B. MOSHER,
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