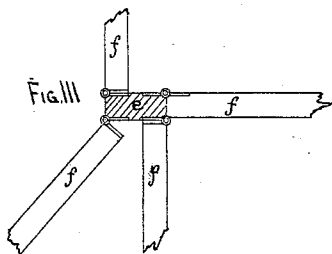
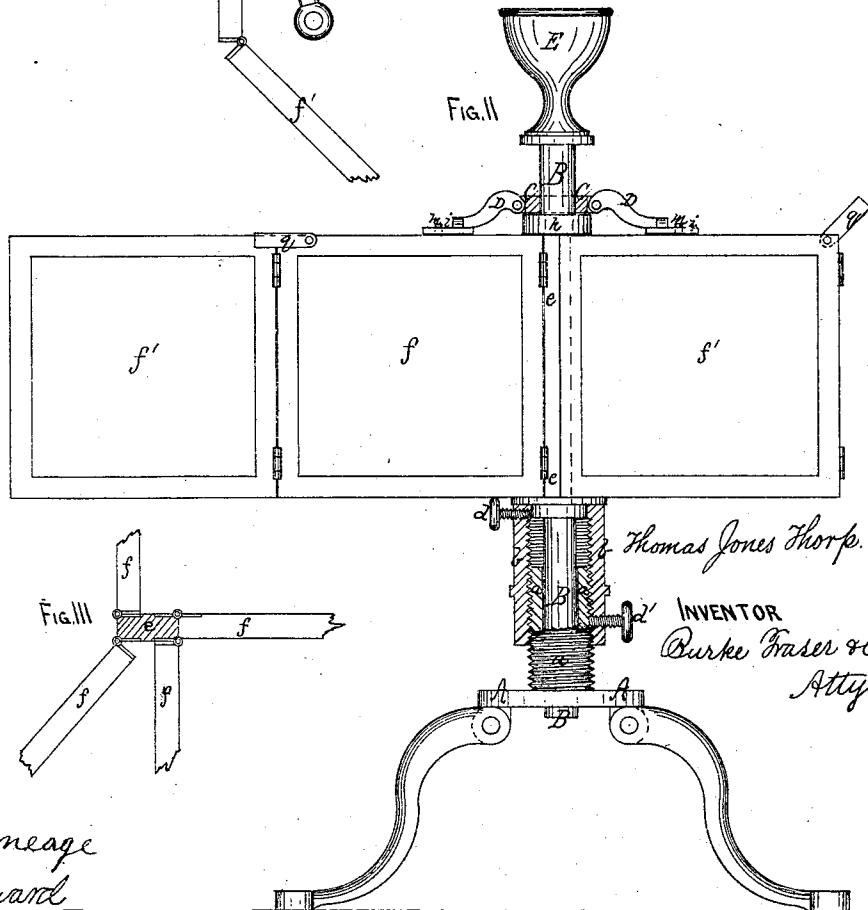
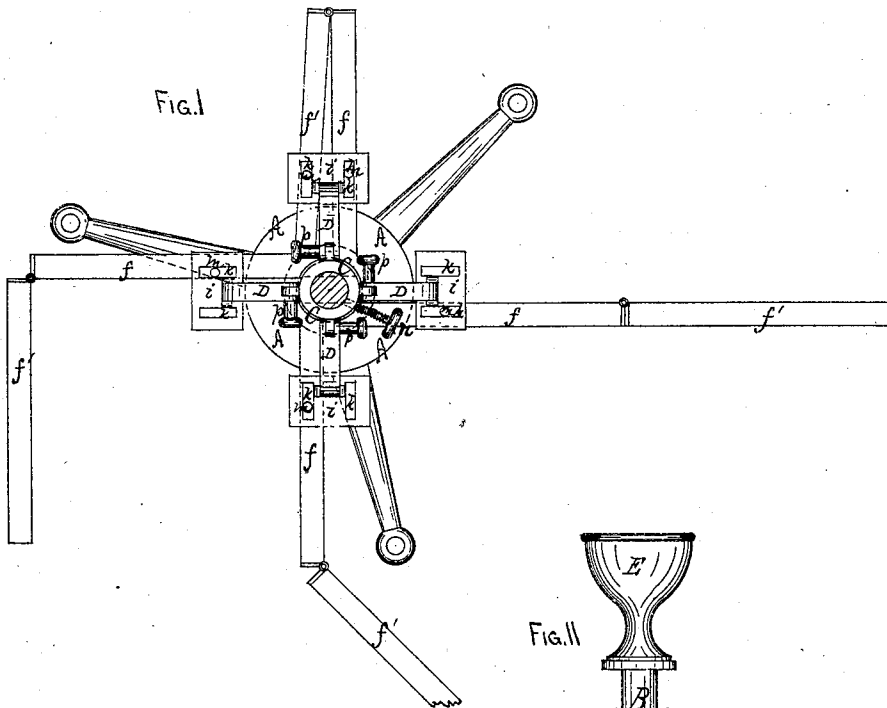


T. J. THORP.

Blackboards.

No. 135,019.

Patented Jan. 21, 1873.



WITNESSES.

Robt Heneage

C. N. Woodward

UNITED STATES PATENT OFFICE.

THOMAS J. THORP, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF HIS
RIGHT TO MARTIN TAYLOR, OF SAME PLACE.

IMPROVEMENT IN BLACKBOARDS.

Specification forming part of Letters Patent No. 135,019, dated January 21, 1873.

To all whom it may concern:

Be it known that I, THOMAS JONES THORP, assignor to himself and MARTIN TAYLOR, both of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Blackboards, of which the following is a specification:

This invention relates more particularly to blackboards used in schools, &c.; and the invention consists in providing a single upright standard surmounted by a revolving post, upon which a series of folding or spreading blackboards is hinged in such a manner that they may be folded into a small space or thrown open in any position desired, and there held by means of a series of adjustable clamps. The boards are made adjustable, higher or lower, by means of a hollow screw-cylinder working on the standard, all to be hereinafter fully explained.

In the drawing, Figure 1 is a plan showing the boards in different positions. Fig. 2 is a sectional elevation of the whole device, and showing the adjustable parts in section. Fig. 3 is a plan showing the method of attaching the boards to the standard.

A represents the base or standard on hinged legs, upon which the apparatus sits. This is provided with a central hollow screw, *a*, forming part of the stand itself, over which a cylinder, *b*, having a screw-thread cut around its interior, works, as shown. Into the top of this post a wooden post or standard, B, sits loosely, which also passes down through the hollow screw *a*. This enables the standard B to be revolved without moving the cylinder *b*, but by turning the cylinder the standard may be raised or lowered. *d d'* are two set-screws, tapped through the cylinder *b*, one to press against the standard to prevent its being turned when necessary to hold it stationary, while the other serves to hold the cylinder *b* from being turned when it is desired to hold the boards at any particular height. The central post or pivot B is continued up above the cylinder B, (in the form shown at *e*.) To this four or more blackboards, *f f f f*, are hinged (see Fig. 3) in such a manner that when opened they will be at right angles to each other. To the outer edge of each of these boards is hinged another board or wing,

f', in such a manner that they will fold back upon the first four, and enable the whole to be compactly arranged and occupy less space, or set at any angle for favorable light or use. Each joint has a locking-clasp, *g*, to hold the boards out straight, when desired. Above the boards *f* the standard B resumes its circular form, and is provided with an enlargement, *h*, upon which a clamping device, C, consisting of a collar or ring, sits, as shown. This collar has four hinged arms, D D D D, projecting at right angles therefrom. The ends are formed into a flat clamp, *i*, with openings or slots *k k'*, which sit over pins *m* in the top of each board, placed there for that purpose, and by which means each board is held in the position desired. This clamp is a very important feature of my invention, as it allows the boards to be held rigidly, while at the same time, by simply lifting the arms D, they can be changed to any position desired. The collar sitting loosely upon the center post B enables it to be revolved, but has a set-screw, *n*, engaging with the center post B, which secures it in any desired position, while the set-screws *d d'* prevent the post from turning in the standard. Each of the arms D is also provided with a set-screw, *p*, to lock them down upon the boards, if desired, or to hold them up while turning the boards.

By these simple arrangements a series of blackboards is obtained, which, when folded, will occupy less or no more space than the ordinary swinging or stationary boards; and, if more convenient, the boards can be so locked as to form an angle or triangle, and allow the same to be set in the corner of a room. The boards will usually be sixteen by four feet each for schools, giving about two hundred and fifty-six superficial feet, and allowing thirty-two persons or pupils to work on them at the same time, if desired.

When it is necessary to preserve for future use the contents of one or more boards, they may each be folded up and locked, as shown, which is an important object at times.

Its adjustability higher or lower allows it to be readily set for the use of all sizes of pupils, or to be elevated to enable the lower parts of the boards to be used with equal convenience with the upper, and vice versa. A cup, E,

for chalk, &c., will be arranged on the center post, and also one on the standard or beneath the legs.

Claims.

I claim—

1. The extension blackboard, consisting of a series of boards, *f f f f*, hinged to a central revolving post, B, each board provided with a wing, *f'*, all held in place by the adjustable clamp C and set-screws *n p*, all arranged and operating in the manner and for the purpose specified.

2. The adjustable clamping device C, set loosely on the center post B, held at any point of its revolution by the set-screw *n*, and each arm D adjusted or held by its set-screw *p*, in combination with the boards *f* and pins *m*, all constructed as and for the purpose hereinbefore described.

3. Adjusting the folding blackboards higher or lower by means of the center post B, screw-cylinder *b*, and hollow screw *a* forming part of the standard A, and held at any height by set-screw *d'*, as hereinbefore fully explained.

4. The construction of the revolving, folding, and adjustable blackboard, consisting of the boards *f f'* hinged to center pivot B, the clamp C, the standard A, formed with the hollow screw *a*, and having the screw-cylinder *b* thereon with set-screws *d d'*, all arranged and operating in the manner and for the purpose hereinbefore specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

THOMAS JONES THORP.

Witnesses:

J. R. DRAKE,

C. N. WOODWARD.