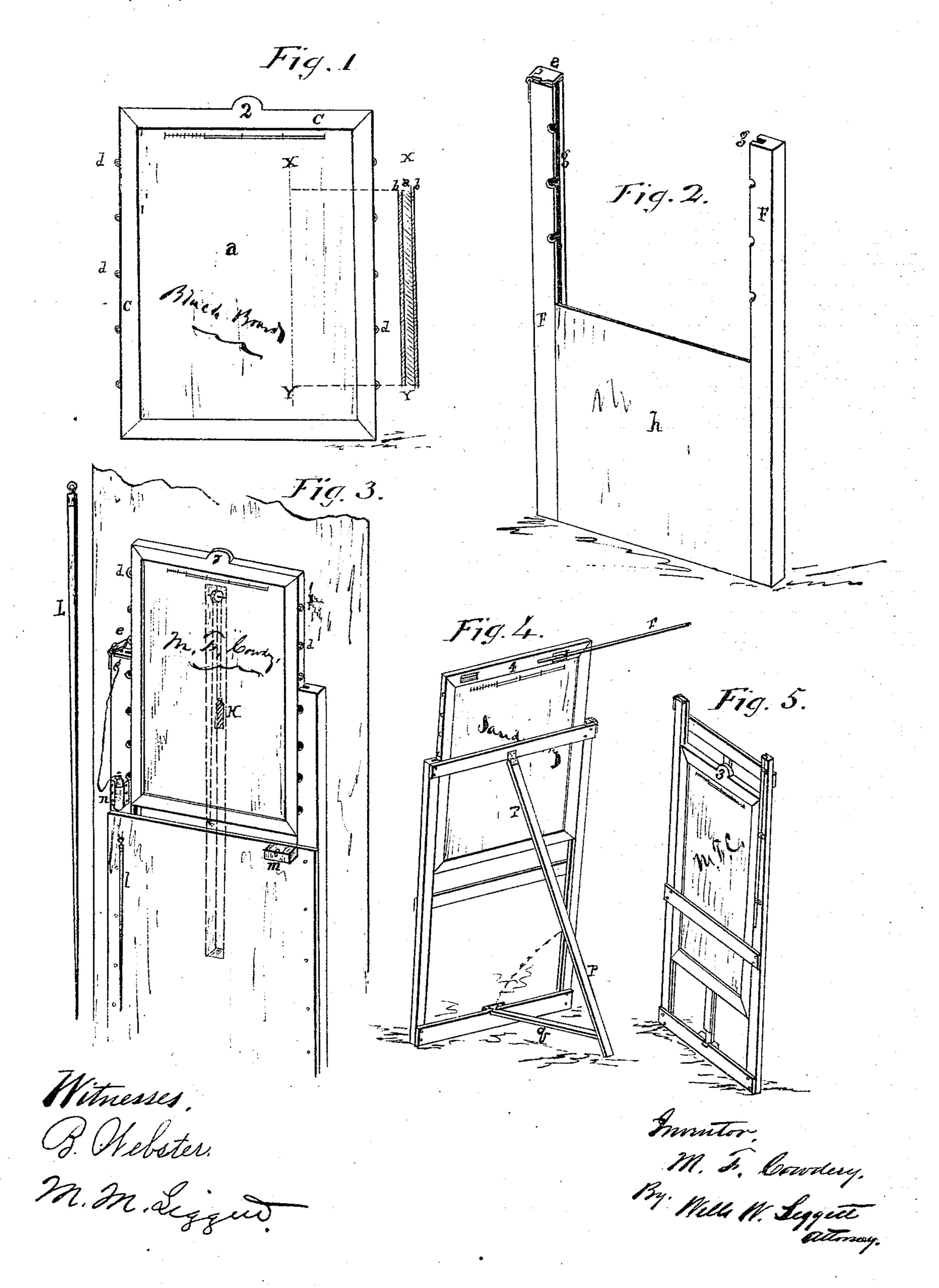
## M. F. COWDERY.

Blackboard.

No. 123,457.

Patented Feb. 6, 1872.



## UNITED STATES PATENT OFFICE.

MARCELLUS F. COWDERY, OF SANDUSKY, OHIO.

## IMPROVEMENT IN BLACKBOARDS.

Specification forming part of Letters Patent No. 123,457, dated February 6, 1872.

SPECIFICATION.

Be it known that I, MARCELLUS F. Cow-DERY, of the city of Sandusky, county of Erie, State of Ohio, have invented a new and Improved Blackboard for Schools, and for other similar purposes; and I declare the following to be a full, clear, and exact description of same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing and model forming part of this specification.

My invention relates to forming a complete portable or stationary, reversible, and sliding blackboard; combining an improved slate, frame, pointer, crayon-receptacle, and rubber with a sliding bar to hold maps or charts; uniting practicability with utility and econ-

omy.

The frame consists of two upright standards provided with grooves to receive the sides of the frame inclosing the slate, and in which the slate can be slid up or down and suited to the height of the scholar. I propose usually to form a wainscoting from the floor up to a height sufficient, when the blackboard is slid down, to hide it from view—if necessary to preserve the characters scrolled upon it, or to relieve the apartment of unnecessary gloom. I propose, when practicable, to retain the board at any required height by means of a counterpoise-weight attached, by means of a pulley and cord, to the middle of the bottom of the slate-frame. I attach this to the bottom piece of the frame because the pulley over which the cord passes can be placed at least the height of the blackboard lower than if attached to the top piece, and thus avoid the unsightly appearance otherwise attendant. It may be attached sometimes to the top piece.

When impracticable to use the counterpoise, as in the portable blackboards or in rooms not previously prepared, I retain the slate in position by means of staples (which, being round, do not catch the clothes in reversing) attached to the side of the frame of the board itself, which, falling upon a catch, prevent the blackboard from sliding down.

I do not propose to limit myself, however, to this particular device for holding the slate in position.

One of the standards is so constructed that the frame of the blackboard may be readily removed from the grooves, reversed, and re-

placed by the scholar.

The drawing of the stationary board shows one device, and the drawing of the portable blackboard shows another device in which the outer lip of one of the grooves is hinged and retained by buttons, admitting of the grooves being opened to facilitate reversing. I do not limit myself to these devices, however; others may be employed.

Each slate, whether portable or stationary, is provided with the unit of measure plainly stamped on the frame; and the slates are numbered for each school, that the scholar may be known by his number; and the numbers are large enough to be plainly seen from any

point of the room.

In the portable blackboard I propose to do away with the wainscoting and brace the standards with a cross-piece at or near the top on the back side. Hinged to the middle of this cross-piece is a prop or brace extending down to the floor, to prevent the blackboard from falling backward. Near the bottom of this prop, on the side adjacent to the frame, is a stiffening or retaining brace, hinged at one end to the prop, and provided at the other end with a dovetail tenon, which, falling into its counter-mortise in the cross-piece at the bottom of the standards, makes the structure rigid, and prevents spread or collapse.

In Figure 1, c is the frame of the blackboard itself, provided with number and unit of measure. d are the staples. In Fig. 2, F are the standards; g, the grooves; h, the wainscoting; and e, the catch. Fig. 3 is a view of the permanent blackboard supplied with weight-counterpoise k, pointer l, crayon-box m, and rubber n, with separate enlarged view of pointer provided with metallic ferrule and ring. Fig. 4 is a view of portable blackboard, showing the brace or prop p, the stiffening-brace q, and sliding bar r upon which

to hang a chart or map. Fig. 5 is a perspective view of the portable blackboard when folded together.

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

The reversible and sliding blackboard, pro-

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vided with the device for turning the same, herein described.

M. F. COWDERY.

Witnesses:

M. E. McLouth,

O. C. McLouth.