(No Model.)

W. H. WHITTEMORE.

BLACKBOARD.

No. 308,296. Patented Nov. 18, 1884.

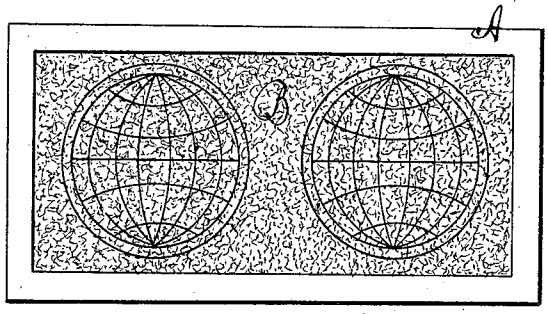


Fig. 1

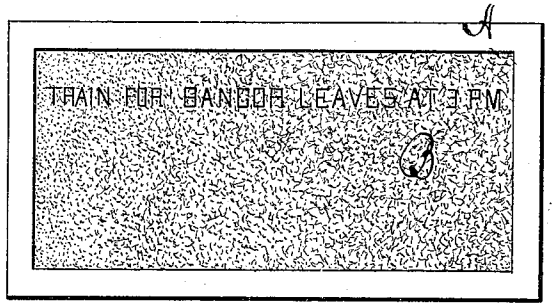


Fig. 2

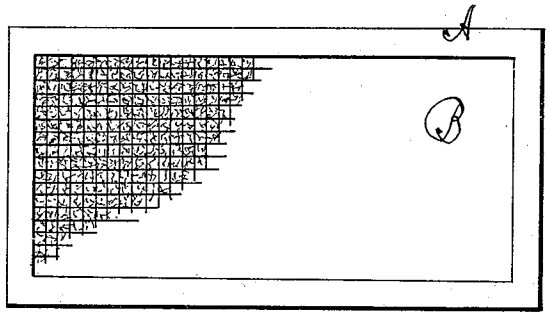


Fig. 3

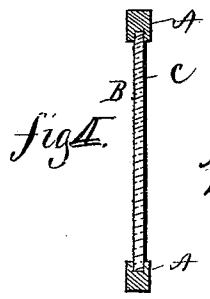


Fig 4.

Witnesses:-
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William H. Whittemore
By his Atty
Herbert G. Briggs

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM H. WHITTEMORE, OF DEERING, MAINE, ASSIGNOR OF ONE-HALF TO EDMUND S. HOYT, SAMUEL FOGG, AND GRENVILLE M. DONHAM, OF PORTLAND, MAINE.

BLACKBOARD.

SPECIFICATION forming part of Letters Patent No. 308,296, dated November 18, 1884.

Application filed December 1, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WHITTEMORE, residing in (Wordfords) Deering, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Blackboards; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

In the accompanying drawings, forming a part of this specification, I exhibit views of an improved writing board or tablet designed for various purposes and uses.

Figure 1 represents a board or tablet for use in schools for map-drawing and teaching geography. Fig. 2 shows a tablet for use in railroad stations. Fig. 3 shows a tablet, partly plain and partly lined, for use in object-drawing. Fig. 4 is a vertical central section through the slate.

Like letters of reference in the several figures indicate corresponding parts.

The invention has direct relation to a new and useful writing board or tablet, which in use will prove to be very durable and easy of operation, and to possess many other elements of superiority over any of the many styles of blackboards, writing-boards, school-tablets, &c., now sold in the markets. To this end my invention consists in certain details of construction, which will be hereinafter fully described, and the special improvements which are believed to be new pointed out in the claim.

In its mechanical parts my writing-board is very simple, consisting of a glass writing-panel and a protecting-frame.

A shows the frame. This frame is usually made of strips of wood molding of any convenient size and design.

B shows the writing-panel. This panel is made of thick glass, roughened or ground on one side and perfectly smooth on the other. As the panel constitutes the chief feature of my invention, I will describe its construction and method of preparation at some length.

As stated, the panel is made of roughened or ground glass. The roughened side I call the "writing side," the smooth side, the "back side." An even coating of black paint, *c*, or other black compound is applied to the back side of the panel. By reason of the transparent qualities of the glass the black coating on the back side is reflected through the panel, and the front side presents a black surface analogous to that of a common blackboard or slate-tablet. As soon as the black paint is thoroughly dry and hard, I rub the front side with emery-paper to reduce the sharp and rough points left by the grinding-machine. I next apply a bath of vitriol to the front surface. This vitriol bath continues about ten minutes, more or less, according to the state of the ground surface. The action of the emery-paper and vitriol bath tend to remove all minute sharp points, which, if allowed to remain, would act as files to wear off the end of a pencil or crayon.

The several steps enumerated having been taken, a writing board or tablet is produced upon the writing-surface of which a slate-pencil or chalk crayon can be used with the same results as when used upon an ordinary blackboard or slate-tablet.

While the results are the same, my invention possesses certain very decided advantages over the ordinary form of blackboard, &c.

Hitherto in the construction of blackboards, tally-boards, &c., the custom has been to make them so that the pencil or crayon came in direct contact with the black writing-surface. This method of construction was defective, because the continuous use of a pencil or other writing-point and the repeated applications of an eraser all tended to destroy the luster of the writing-surface and necessitate frequent renewals of the same. In the use of my invention no such difficulty arises, because the writing-point does not come in contact with the black surface, and cannot until the body of the glass panel is worn through. Thus it will be readily seen that the writing-surface must remain perfect for an indefinite period.

When it is necessary to remove any pencil or chalk marks from the writing-surface, all that is necessary is to rub the writing-surface with an eraser or moist cloth, and the surface will be left just as bright and lustrous as before.

To prepare my invention for a great variety of uses I have devised the following method: After the compound on the back side becomes

rd and dry I place a stencil or other guide on it, and with a sharp instrument trace y desired outline upon the back of the panel. ese traced lines are then filled with some ight-colored paint, and the design stands t plain and distinct on the front side. For ample, to prepare a tablet for map-drawing, should stencil on the back of the panel the tlines of hemispheres, and trace the great rcles, lines of latitude and longitude. With ese lines definitely and correctly fixed the pil could fill in the geographical outlines ith great ease. Fig. 1 shows a tablet thus epared.

My invention can be used as an ordinary ate-tablet, or it can be enlarged and used as blackboard. When used as a blackboard, I ould use large sheets of ground glass, and t them firmly in the plastering of the wall. I am aware that heretofore glass has been roughened on one side for use in drawing-slates; also that paper-weights and like devices have had pictures or figures pasted on the back, so that the picture face or the figures could be readily seen from the upper surface of the glass.

What I claim as my invention, and desire to secure by Letters Patent, is—

As an article of manufacture, a vitreous writing-tablet having one side painted or covered with a black compound, and the other made suitably smooth by grinding and rubbing and treating, as described.

In testimony that I claim the foregoing as my own I have affixed my signature in the presence of two witnesses.

WILLIAM H. WHITTEMORE.

Witnesses:

JOHN F. BARRETT,

H. G. BRIGGS.