

(No Model.)

E. J. STEWART.

SCHOOL SLATE.

No. 333,483.

Patented Dec. 29, 1885.

Fig. 1.

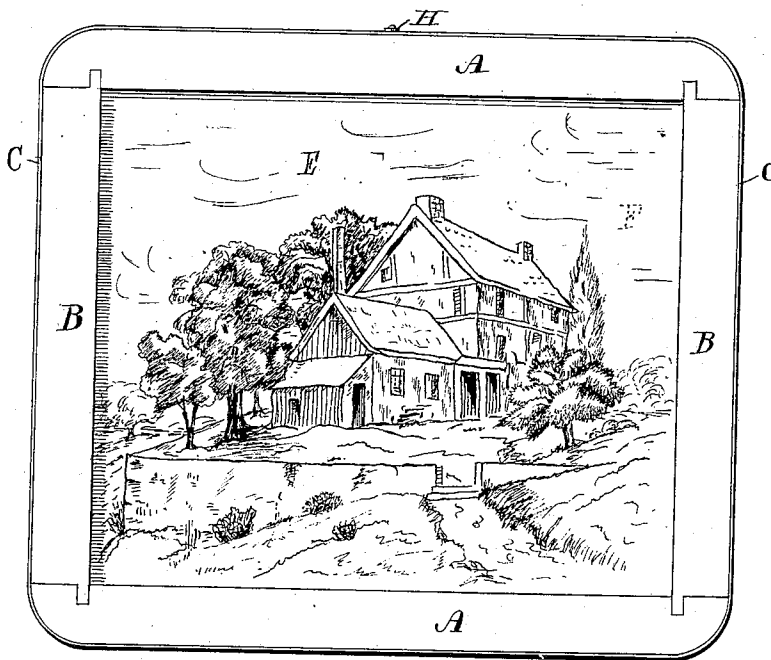


Fig. 2.

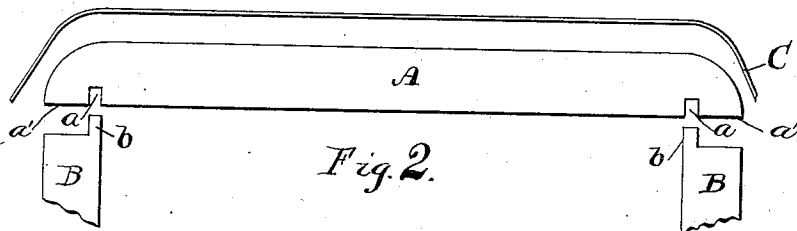


Fig. 3.

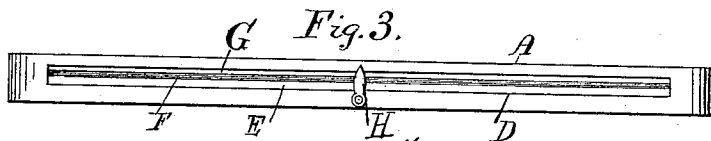
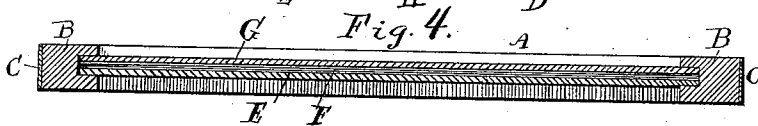


Fig. 4.



Witnesses:

E. D. Smith

Edmond J.

Inventor:

Edward J. Stewart
by Henry Calver, Atty.

UNITED STATES PATENT OFFICE.

EDWARD J. STEWART, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO
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SCHOOL-SLATE.

SPECIFICATION forming part of Letters Patent No. 333,483, dated December 29, 1885.

Application filed December 16, 1884. Serial No. 150,479. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. STEWART, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Slates, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to provide slates of such construction that while they may be very cheaply manufactured they will be neat and attractive in appearance and comparatively strong, and also to furnish slates of the character above indicated which are adapted for use both as transparent or tracing slates and as ordinary writing-slates.

In the drawings forming part of this specification, Figure 1 is a plan view of a slate embodying my invention. Fig. 2 is a detached view of a part of the frame, showing the construction by which the corners thereof are joined. Fig. 3 is an edge view, and Fig. 4 a longitudinal section, of my improved slate.

The frame of my slate is composed of side pieces, A, and the end pieces, B, these pieces being joined at the corners of the frame by the tenons *b*, formed on the inner sides of the end pieces, entering mortises *a* on the inner sides of the side pieces. The tenons *b*, being on one side of the said end pieces, are easily formed by cutting away the material on one side thereof only, and their position is such that the mortises *a*, into which they fit, are as far removed as possible from the ends of the side pieces, thus leaving the portions *a'* of wood outside of the said mortises of such a length that the corners of the frame will be but little weakened by the mortises. The side and end pieces of the frame, joined as above indicated, are secured together by glue, in the usual manner. The corners of the frame are rounded, as shown, and a band, C, of veneer, preferably of some hard and ornamental wood, is then glued to the edge of the frame, said band being neatly joined at its ends, so as to leave a smooth outer surface to the frame. This band of veneer, besides giving an attractive finish to the frame, serves to strengthen the same, as will be obvious.

To contribute to cheapness and lightness, an artificial slate or tablet is preferably used for the writing-slate, said artificial slate having silicate or slightly-roughened surfaces, which are impervious to moisture, on a backing of pasteboard or card-board, and these surfaces may be either black or white, according to whether it is desired to adapt them to be written on with a slate-pencil or a lead-pencil. By making one surface white and the other black the same tablet will be adapted for use with both kinds of pencils.

In constructing my slate for a combined transparent or tracing and writing slate, a slotted opening or mortise, D, is made through one of the side or end pieces of the frame, said mortise extending the entire length of such side or end piece, so that the ground glass or transparent tablet E, the picture-sheets F, (to be traced,) and the writing slate or tablet G may be inserted through said mortise or removed from the frame through the same at will. A fastening device, preferably consisting of a turn-button, H, serves to secure the said glass, picture-sheets, and slate or tablet in place in the frame. The writing slate or tablet G thus makes a backing for the picture-sheets, and when formed of artificial slate, as above indicated, a very cheap and light combination-slate is secured.

Instead of forming the tenons *b* on the end pieces of the frame and the mortises *a* on the side pieces thereof, it will be obvious that this construction may be reversed; but that which is shown is deemed preferable.

It will also be obvious that parts of my invention may be used without the other features thereof. For example, the frame having the veneer binding may be used as an ordinary writing-slate frame.

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

1. A transparent and writing slate consisting of a frame having a mortise through one edge and an encircling band of veneer, transparent and writing slates and picture-sheets adapted to be passed through said opening, and a fastening device for securing said slates and sheets in place, substantially as set forth.

2. A transparent and writing slate consisting of a frame having mortise-and-tenon joints near its corners on its inner side, a mortise through one edge, and an encircling band of veneer, transparent and writing slates and picture-sheets adapted to be passed through said opening, and a fastening device for securing said slates and sheets in place, all substantially as hereinbefore set forth.

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

EDWARD J. STEWART.

Witnesses:

CHARLES A. STEWART,
THOS. H. STEWART.