

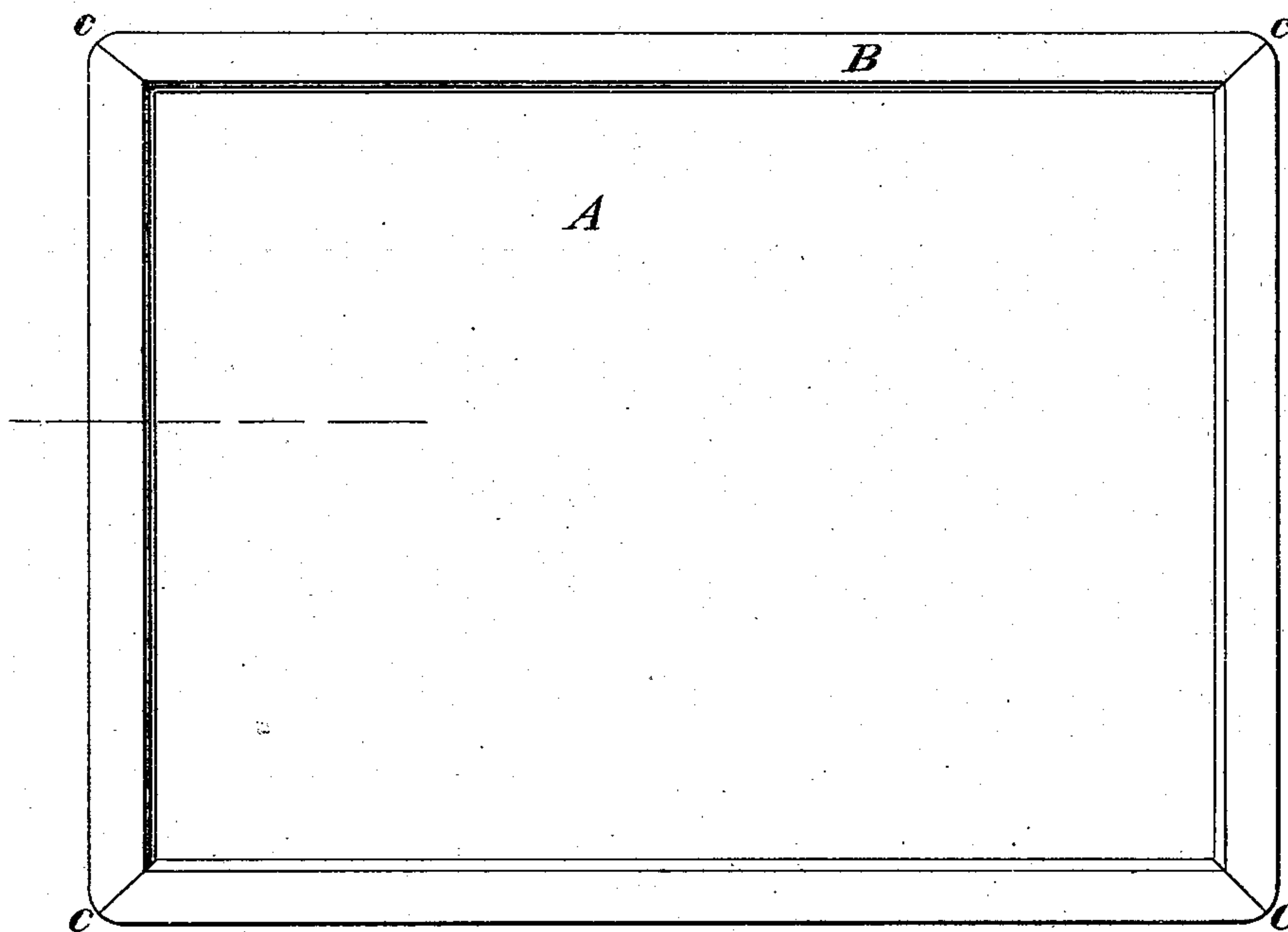
J. W. HYATT.

SLATES.

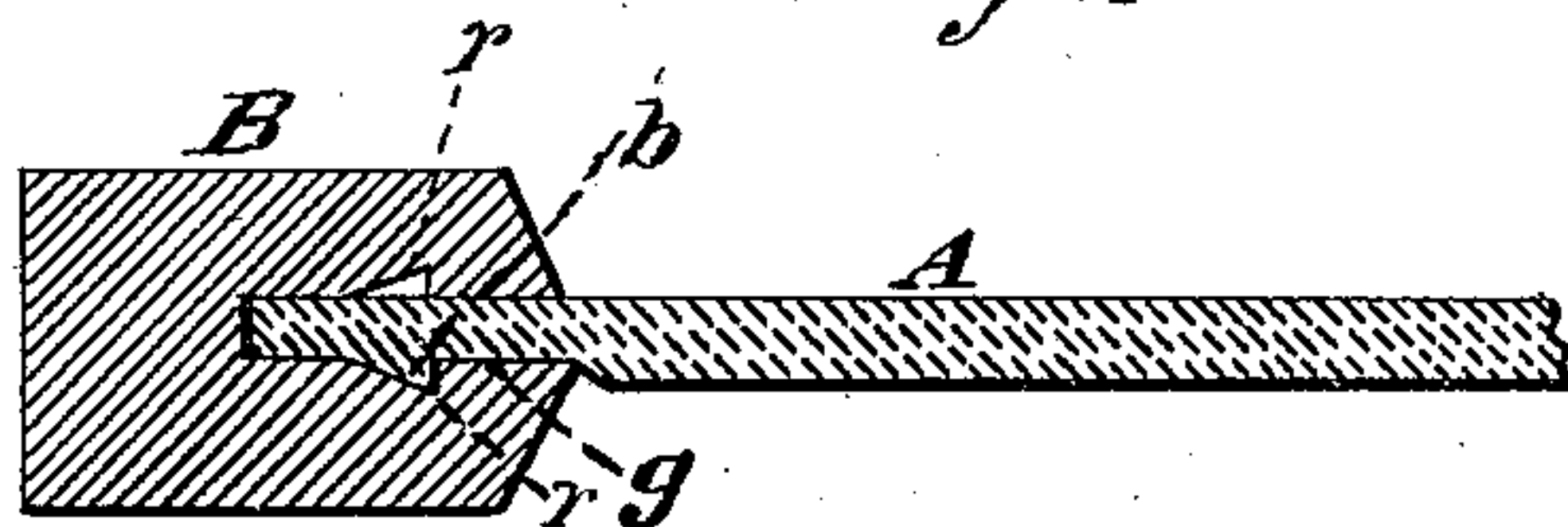
No. 187,146.

Patented Feb. 6, 1877.

*Fig. 1*



*Fig. 2*



Witnesses:

Michael Ryan  
Fred. Haynes

John W. Hyatt  
by his Attorney  
Brown & Allen

# UNITED STATES PATENT OFFICE

JOHN W. HYATT, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN SLATES.

Specification forming part of Letters Patent No. 187,146, dated February 6, 1877; application filed June 28, 1876.

*To all whom it may concern:*

Be it known that I, JOHN W. HYATT, of Newark, in the county of Essex and State of New Jersey, have invented an Improvement in School-Slates; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

The object of this invention is to obtain for school use, and for other purposes, a frame slate, whose frame or border is stronger and more securely attached to the slate than that of any of the slate-frames heretofore manufactured.

The invention consists in a framed slate having each side piece of its frame or border attached directly to the margin of the slate itself, independently of the other sides.

It also consists in the construction of the marginal portion of the slate and the side faces of the grooves provided for its reception in the frame, with projections and recesses, which enter the one into the other, in such manner as to fasten the several sides of the frame directly and securely to the slate.

By this invention I am enabled to dispense with mortises and tenons or other fastenings at the corners of the frame, and, in fact, to obviate the necessity of any connection between the several side pieces thereof.

Figure 1 in the accompanying drawing represents a slate framed according to my improved method. Fig. 2 represents a partial cross-section of the same.

A represents the slate, and B the frame. The frame B, preferably, has miter-joints at the corners *c*; but other modes of fitting the side pieces of the frame together at its corners may be used, as the joints at the corners form no part of my invention.

The projections and recesses on and in the margin of the slate and side faces of the grooves in the side pieces of the frame may be of various forms; but I prefer to make them of dovetail form, and they are so represented in the drawing, and will be so described in the specification.

The several side pieces of the frame each has a groove, *g*, cut on the inner side, and a dovetailed recess, *r*, is cut in one or both the side walls of said groove, and parallel with

the inner side of the part of the frame in which said groove and recess is cut, the wider part of said dovetailed recess being nearest the said inner side of the frame-piece, and the said recess extending the whole length of the groove in each part of the frame. The outer borders of the slate are then cut away to leave dovetailed projections *b* extending along near each edge of the said slate, and of dimensions corresponding with the dovetailed recess *r* in the several parts of the frame B.

The borders of the slate need cutting, as described, only on one side of said slate, even when two recesses, *r*, are cut in each of the several parts of the frame, the cutting of two recesses in each of said parts of said frame only being done for convenience, and one such recess being all that is required for the attachment of each part of the frame.

The slate being prepared as described, the several parts of the frame are pressed onto the border of said slate, the elasticity of the wood allowing the said parts of said frame to be so pressed or driven onto the said slate-border, the grooves *g* in the parts of said frame opening to admit the dovetailed projections *b*, which, when they have passed sufficiently into the said grooves *g*, enter the recesses *r*, and the elasticity of the wood closes the parallel walls of the groove *g* down upon the border of the slate, presses the projections *b* firmly into the recesses *r*, and securely attaches the frame.

When miter-joints are used at the corners *c*, if the said joints are nicely fitted, it will be very difficult, if not impossible, to force off the frame without breaking the slate.

I claim—

1. A framed slate having its frame composed of separate side pieces, each independently attached to the margin of the slate itself, substantially as herein described.

2. The combination, with the margin of the slate and the face of the groove in the side piece of the frame, of a projection on the one and a recess in the other, substantially as and for the purpose herein specified.

JOHN W. HYATT.

Witnesses:

HENRY T. BROWN,  
MICHAEL RYAN.