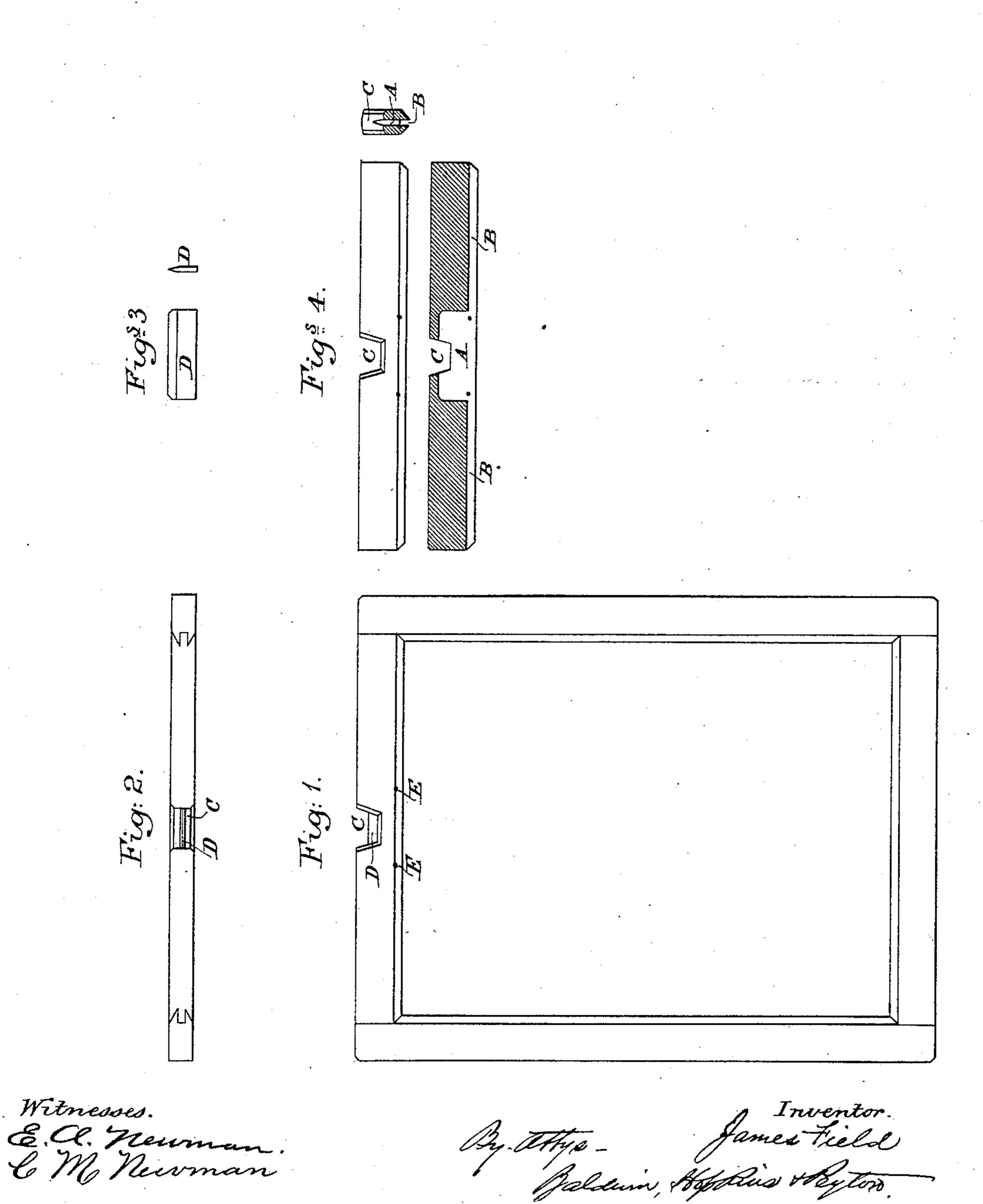
## J. FIELD.

KNIFE BLADE ATTACHMENT FOR SLATE FRAMES.

No. 354,544.

Patented Dec. 21, 1886.



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

## United States Patent Office.

JAMES FIELD, OF RUSSELL'S FLAT, MALVERN, CANTERBURY, NEW ZEALAND.

## KNIFE-BLADE ATTACHMENT FOR SLATE-FRAMES.

SPECIFICATION forming part of Letters Patent No. 354,544, dated December 21, 1886.

Application filed August 7, 1886. Serial No. 210,322. (No model.)

To all whom it may concern:

Be it known that I, James Field, a British subject, residing at Russell's Flat, Malvern, Canterbury, New Zealand, have invented certain new and useful Improvements in Writing-Slates, of which the following is a specification.

This invention relates to an improvement in slates of the class which have knife blades for sharpening pencils fixed in their frames.

In accordance with my improvement a recess in the form of the knife-blade is made in the frame by deepening the groove or rabbet into which the edge of the slate-slab is received. 15 The knife is narrower than the width of the frame, and the portion of the edge of the knife required for use is exposed by notching away the frame on the outer side until the recess in which the knife is deposited is reached. The 20 outer notch is shorter than that containing the knife. The portion of the edge within the notch is exposed sufficiently to admit the point of a pencil being sharpened thereon. In this way the knife-blade is easily and conveniently 25 fixed, and its edge is shielded, so that the hands of the user cannot be injured by it.

In order that my said invention may be most fully understood and readily carried into effect, I will proceed to describe the drawings to hereunto annexed.

Figure 1 is a plan of a slate with a knife-blade combined with it in accordance with my invention. Fig. 2 is an edge view of the same.

Fig. 3 shows the knife-blade separately; and Fig. 4 shows the top rail of the frame, which 35 is recessed to receive the knife-blade.

The inner notch or knife-containing recess (marked A) consists of a deepening of the groove or rabbet B at the inner edge of the rail, into which the edge of the slate-slab is 40 received.

C is the shorter notch on the outer side of the rail, which intersects the inner notch, A, to expose the knife-edge.

D is the knife-blade, and E E are pins driven 45 into the frame beneath the inner edge of the knife-blade, to keep the blade in place.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, 50 I declare that what I claim is—

The combination, with the slate-frame having the inner notch, A, formed by deepening the rabbet B, into which the edge of the slate-slab is received, and the shorter outer notch, 55 C, extending inward from the outer edge of the rail and intersecting the inner notch, A, of the knife-blade D, fixed in the inner notch, with a portion of its edge exposed by the outer notch, as and for the purpose set forth.

JAMES FIELD.

Witnesses:

J. F. Ward,
U. S. Consular Agent.
W. Charters,
Clerk.