

W. A. MILLER.

Slate-Frame.

No. 164,019.

Patented June 1, 1875.

Fig 1

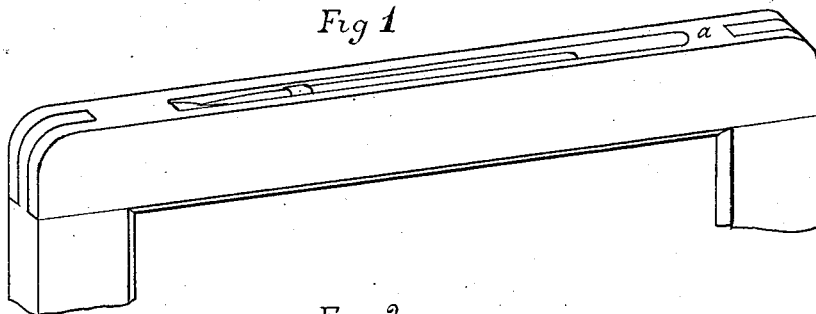


Fig 2

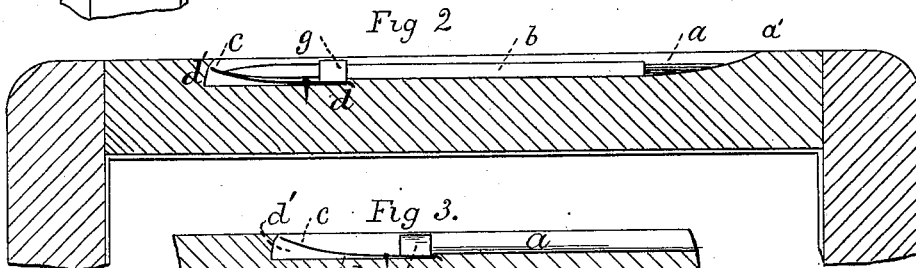


Fig 3

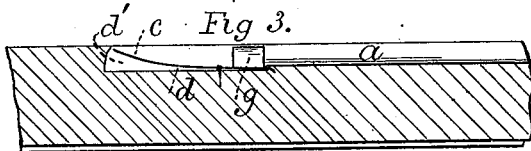


Fig 4

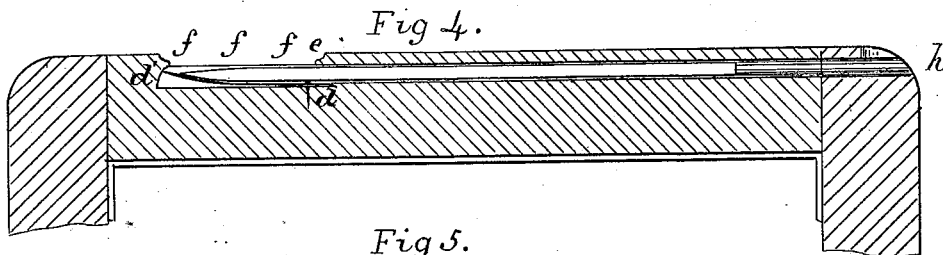


Fig 5

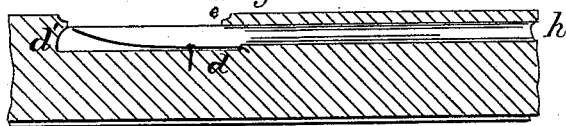
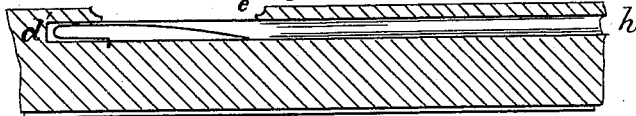


Fig 6



Attest.

A. P. Lacey
R. S. Lacey

Inventor.

Wm Allen Miller

UNITED STATES PATENT OFFICE.

WILLIAM ALLEN MILLER, OF PATERSON, NEW JERSEY.

IMPROVEMENT IN SLATE-FRAMES.

Specification forming part of Letters Patent No. **164,019**, dated June 1, 1875; application filed April 17, 1875.

To all whom it may concern:

Be it known that I, WM. ALLEN MILLER, of the city of Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Slate-Frames; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in slate-frames, whereby I provide upon or within the frame a convenient and safe means of carrying and preserving the pencil. It consists in the construction and arrangement of the several parts, as hereinafter fully explained, and pointed out in the claim.

In the drawings, Figure 1 is a perspective, and Fig. 2 a longitudinal sectional, view of a slate-frame with my invention attached, and having a pencil inserted. Fig. 3 is a detail view, with pencil removed; and Figs. 4, 5, and 6 are detail views of a modification of my invention.

a is a groove formed in the edge or side of a slate-frame. It is made of suitable dimensions to receive the pencil, and allow the latter to slide freely therein. One end is countersunk, and recessed to receive the spring, hereinafter described, and the point of the pencil. The other is beveled or sloped to the surface of the frame, with a long incline, as shown at *a'*, to facilitate the issue or removal of the pencil therefrom. *b* is the pencil. *c* is a spring, placed in the countersunk end of the groove *a*. It has one end fixed to the bottom of the countersink *d'* by any suitable means. Its other end curves upward toward the outer surface of the frame, and holds the pencil, as hereinafter described. *d'* is a recess formed in frame at the end of the groove *a*, to receive the pencil-point and the flexible end of the spring *c*. It affords perfect protection from injury for both the pencil-point and the spring. *g* is an open sleeve, which may be formed on and as a part of the spring *c*; or it may be

made distinct and separate from the spring, and secured in the groove *a* by its own fastening. It is placed near the fixed end of the spring *c*. It is so constructed as to receive and hold larger or smaller pencils, its sides springing apart to admit the former. The frame is suitably mortised or countersunk to receive it in proper place.

When a small pencil is inserted, it will be held by the action of the spring *c* pressing it up against the top of the sleeve. Large pencils may be held by the sleeve *g* alone.

Figs. 4, 5, and 6 show a modification of my invention, in which I use a barrel, *h*, formed in the frame, with an opening and countersink, *f*, in which is placed the spring. The end of the barrel near the fixed end of the spring performs the same function with reference to the spring as the sleeve in Figs. 1, 2, and 3.

Any suitable form may be given to the spring. In Fig. 6 is shown a form and mode of securing the spring in the groove, by which the use of tacks or pins is dispensed with.

In use, the pencil is placed in the groove. The frame is then slightly inclined, when the pencil will, by its own gravity, pass into or through the sleeve, and will be held in place. The pencil may be readily removed by gently pressing downward with the finger against the end of the pencil and spring, and pushing the former back and beyond the sleeve, when, if the slate be inclined, the pencil may be discharged into the hand.

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

The combination, with the groove *a*, having the long bevel or incline *a'*, and countersink *d'*, of the recess *d'*, spring *c*, and sleeve *g*, for the purposes specified.

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

WM. ALLEN MILLER.

Witnesses:

A. P. LACEY,
R. S. LACEY.