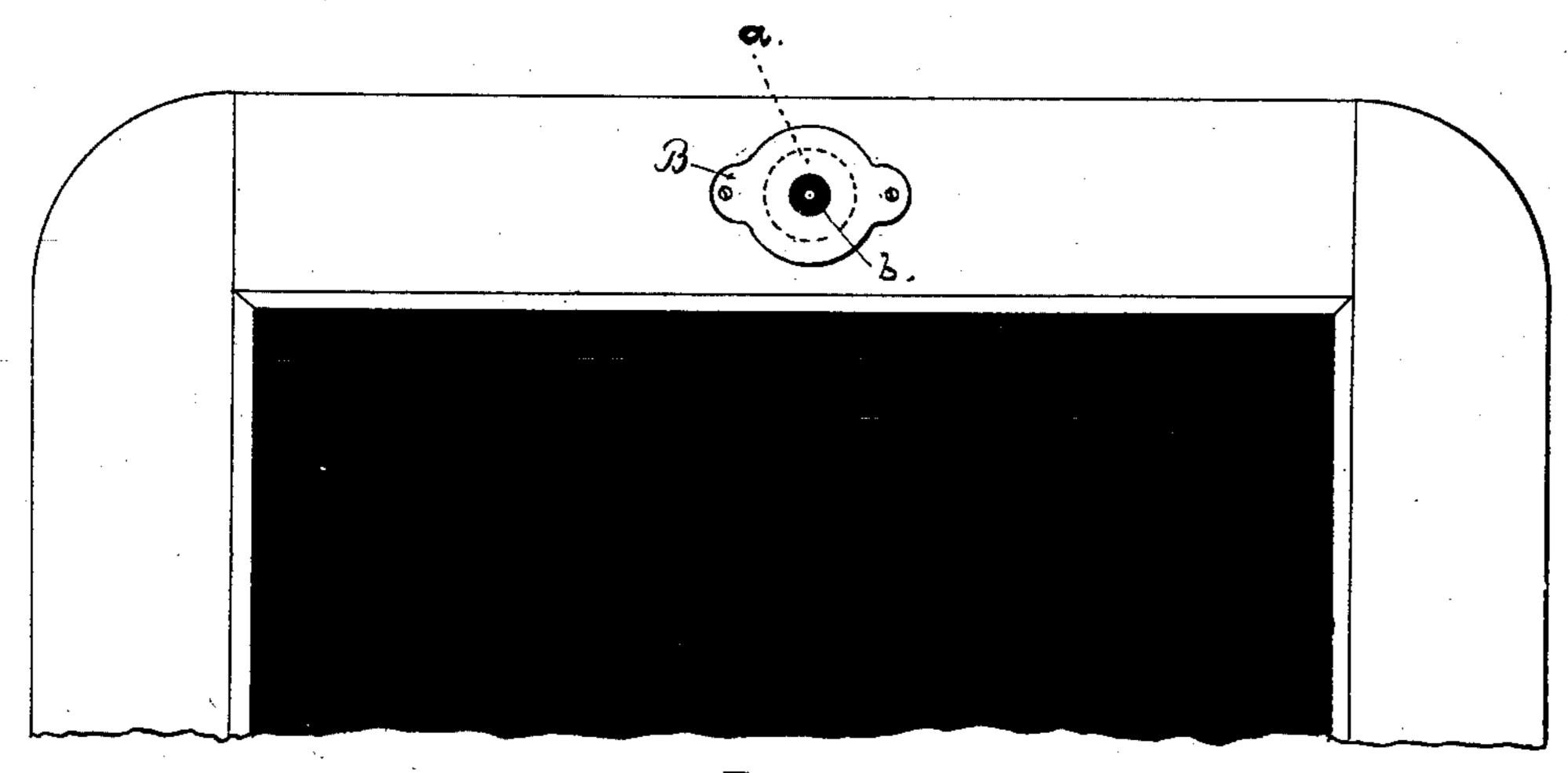
(No Model.)

W. P. KIRKLAND.

SLATE PENCIL SHARPENER.

No. 285,757.

Patented Sept. 25, 1883.



 $Fig.\,1$

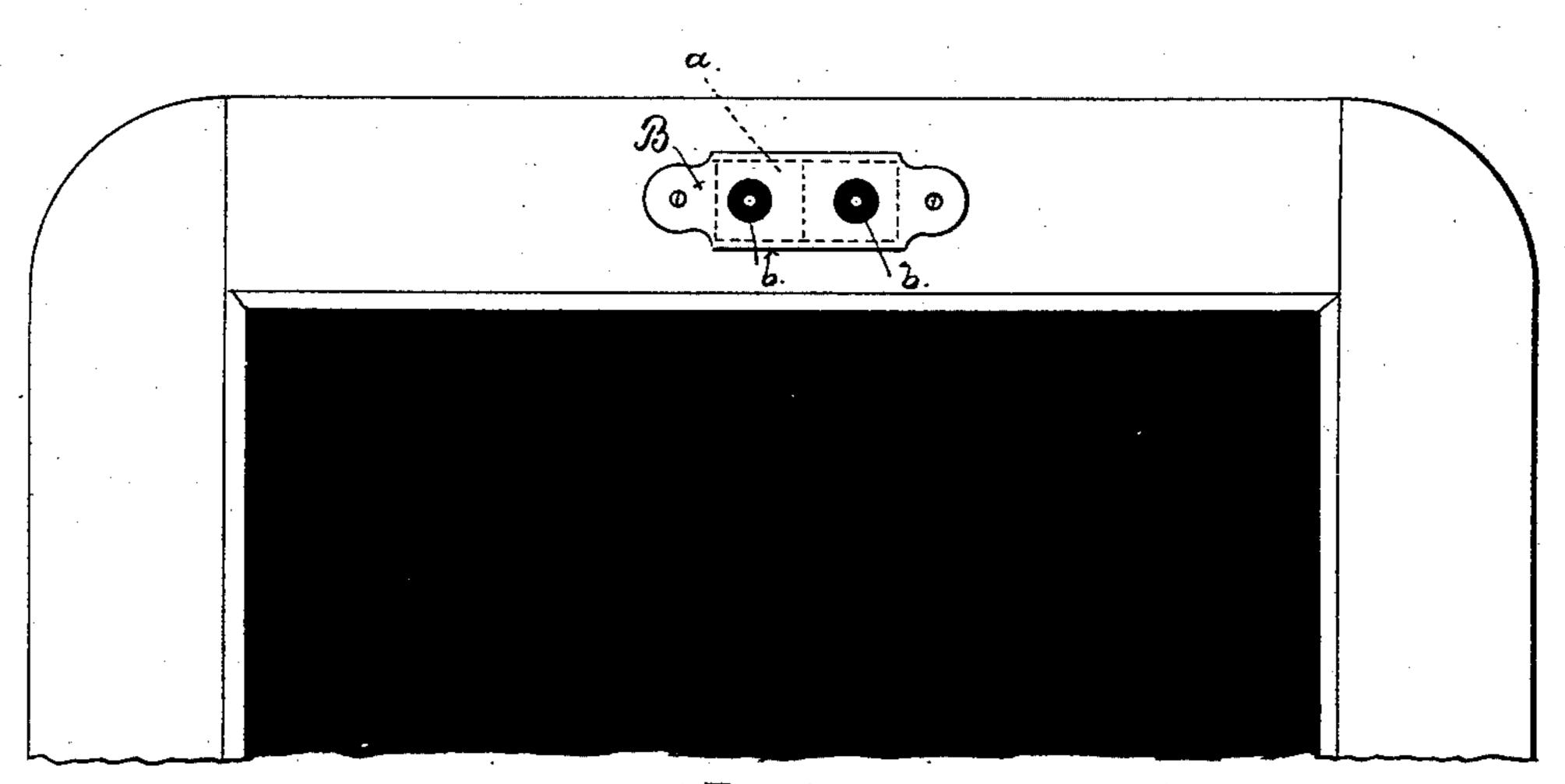


Fig. 2.

3 3 3 3 4 C.

Inventor:

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Tiq.3.

By his Atty

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J. M. Howney

Witnesses:

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United States Patent Office.

WILLIAM P. KIRKLAND, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO GEORGE B. DAVIS, OF SAME PLACE.

SLATE-PENCIL SHARPENER.

SPECIFICATION forming part of Letters Patent No. 285,757, dated September 25, 1883.

Application filed March 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. KIRK-LAND, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented certain new and useful Pencil-Sharpening Attachments to Slate-Frames; and I do hereby declare that the following is a full, clear, and exact description of my said invention, reference being had to the accompanying drawings.

My invention relates to slate-pencil sharpening or pointing devices fixed in or otherwise combined with the slate-frame, so as to

be always at hand ready for use.

The following description fully explains my said invention and the manner in which I proceed to make, use, apply, and carry out the same, the accompanying drawings being referred to by letters and figures.

In the said drawings, Figures'1 and 2 show the application and attachment of my pencil-sharpening device in two forms to a slate. Fig. 3 is a cross-section through the sharpener

and surrounding wood of the frame.

In applying my invention to a slate I proceed substantially as follows: A hole, as a, Figs. 1 and 2, being first formed through the slate-frame, either round or square in crosssection, and either of uniform size or with 30 tapering walls, I press into it and fill it up with a composition composed of fine steel fil; ings, emery, or similar matter, and an adhesive substance, such as glue or liquid cement. The surfaces or portions of this filling presented 35 at both sides of the frame are then brought down smooth and flush. Two thin plates or escutcheons, B B, are then provided somewhat larger than the hole in the frame, and having small apertures bb', that (b) in one plate being 40 large enough to take in the end of a slate-pencil of ordinary thickness, while the corresponding hole, b', in the other plate is considerably smaller, it being simply large enough to permit passage of the pointed end of the 45 pencil. These two plates are fastened to the

slate-frame on opposite sides and directly over

the filled hole α , and with the centers of the

apertures as nearly as possible over the cen-

ter of the body of filling, and also in direct line with each other. When these two plates 50 are thus fixed in place, and while the filling composition C is still soft, I introduce a small pointed tool through the larger hole b, and press it down into the body of filling until its point protrudes from the smaller hole b'. This 55 tool should have about the same taper that is to be given the sharpened pencil, so that when withdrawn it leaves a conical cavity in the filling C, which, when set and hardened, forms the grinding or sharpening chamber.

As thus constructed and applied, my device furnishes a means always at hand of pointing slate-pencils in a ready and noiseless manner. It is easily and cheaply applied to slates without any special construction or character of 65 frame being required, and it is an invaluable

attachment for school purposes.

Instead of a single one being used, I can apply two or more of such devices with different kinds or characters of filling, to give 70 several grades of grinding substance—a coarse one to do the sharpening or grinding down and a finer one to finish and point the pencil.

In Fig. 2 I have represented a single cavity with two kinds of filling and two separate 75 grinding-orifices arranged after this last described manner; but Fig. 1 shows the invention in its simplest forms.

tion in its simplest form.

I reserve the right to make separate application for patent for the improved manner of 80 forming or producing the sharpener in the slate-pencil frame.

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

A slate provided with a sharpener for pencils in the frame thereof, consisting of a gritty or abrading composition with a central aperture, set in a cavity in the frame, and the holding-plate, B secured on either side, as set 90 forth.

WM. P. KIRKLAND. [L. s.]

Witnesses:

EDWARD E. OSBORN, F. M. DOWNEY.