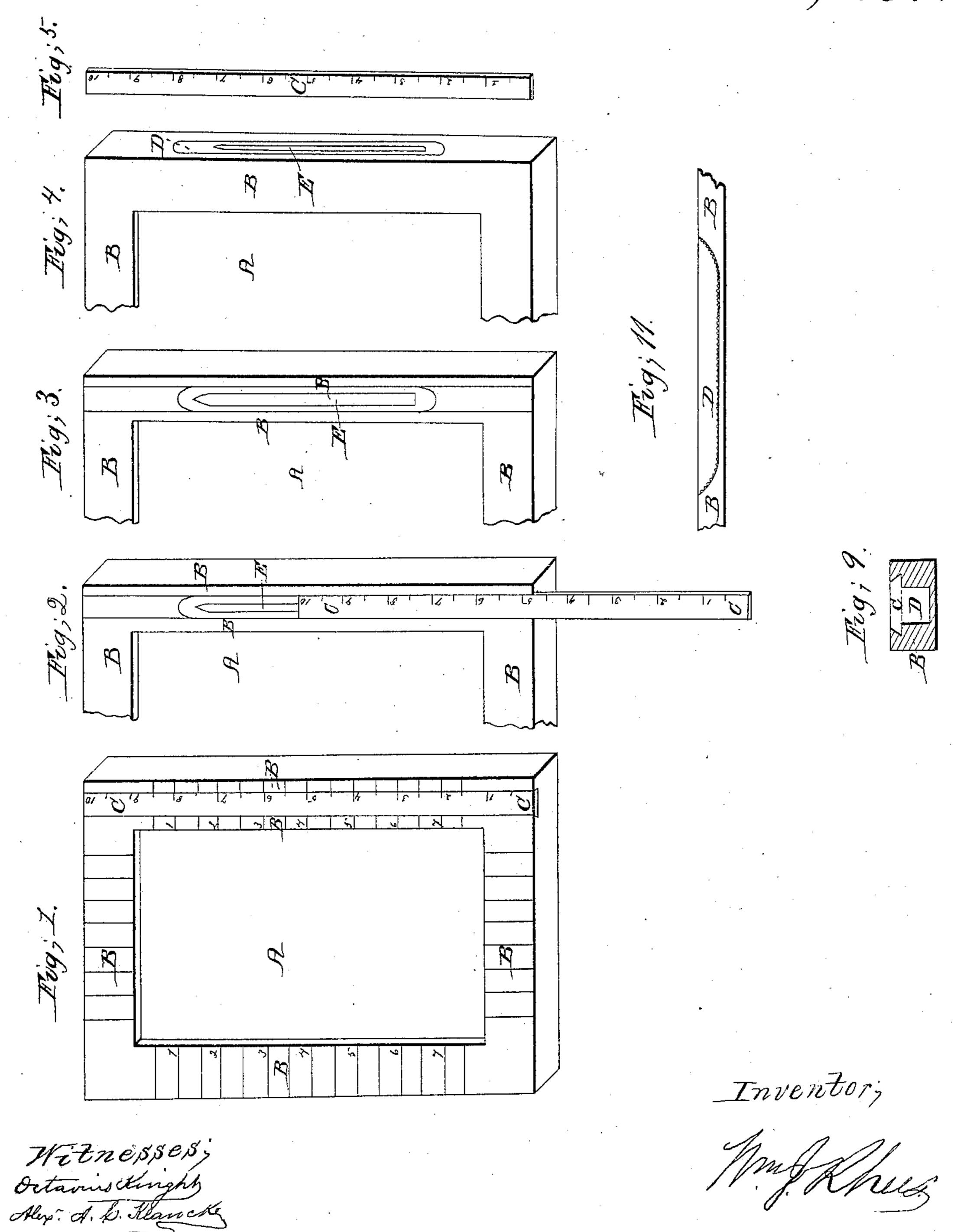
M. J. Bes,

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1961,253,

Patented Jan. 15, 1867.



Anited States Patent Effice

WILLIAM JONES RHEES, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 61,253, dated January 15, 1867.

FRAME FOR ARTIFICIAL SLATES.

The Schedule referred to in these Petters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM JONES RHEES, of Washington city, District of Columbia, have invented a new and useful improvement in Frames for Slates and attachments; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon. In

Figure 1 in said drawings, A represents a slate or sheet of argillaceous stone, porcelain, ivory, wood, &c., within a wooden frame, B, with my slide ruler C thereon, and the lines and figures on the frame for a gauge.

Figure 2 shows the slide ruler C partly removed; and

Figure 3, the same, wholly removed, exhibiting a recess or depression, D, beneath the same, to serve as a receptacle for slate or lead pencils, &c., E, and which may also be prepared for pencil sharpening. In

Figure 4, the recess or depression D, to be used as a pencil holder and sharpener, is shown in the edge of a slate frame.

Figure 5 shows the ruler or gauge C removed from the frame.

Figure 9 is an enlarged section across the middle of the frame B, fig. 3, to show the groove in which the ruler or lid C slides, and the recess or hollow D, which constitutes the pencil holder and sharpener.

Figure 11 is a longitudinal section of the frame B, showing the depression or receptacle D, the surface of

the latter being covered with a suitable rough material for pencil sharpening.

The name slate is universally applied to the article used in schools and elsewhere for frequent writing and erasure, whether such articles are made of argillaceous material, of ivory, of porcelain, of metal, of prepared paper, wood, or other substance. The present invention consists in certain improvements in the frames of all such slates, whereby economy and convenience are secured and important advantages are obtained, as shall be hereinafter described.

To enable others skilled in the arts to make and use my invention, I will proceed to describe the same.

In slates of rigid and brittle materials, as stone, porcelain, and ivory, it is impracticable to make hollow frames, by turning the edges thereof, and hence wooden or other frames are made to surround said slates, and I form receptacles in such frames by mortising, sawing, boring, or cutting grooves in them, or otherwise making hollows or recesses (D, figs. 2, 3, 4) in which to deposit a pencil, pen, rubber, knife, file, &c. In the bottom or sides of said grooves or hollows, or of one of them in each frame, which may be in the side of the frame, (figs. 2 and 3,) or the edge thereof, (fig. 4,) I arrange a pencil sharpener, fig. 11, D, either by inserting and attaching thereto a piece of sand paper, glass paper, emery paper, or cloth, or coating the material of the frame with glue or its equivalent for the purpose, and then covering the same with sand, emery, powdered glass or stone, or other snitable material; or a solid metal, as a file or other sharpener, may be inserted and fixed therein. The hollow D, formed as described, and to be used as a receptacle for pencils, &c., is then to be protected by a suitable covering, (C, figs. 1, 2, 5,) which should preferably slide over this concavity, and be made flush with the surface of the frame. This slide, C, should be made of hard wood, metal, gutta percha, or other hard substance, or be so fortified as to retain a good edge and perfect straightness, in order that it may serve the purpose of a ruler in drawing straight lines. The edges of the slide C should have such a shape as to correspond with or fit into the sides of the groove in the frame, so as to allow it to be moved in said groove when pressed with the fingers, and yet to retain its place, either by friction or by a spring or other mechanical contrivance. This slide C may also have engraved or otherwise marked upon it, on one or both sides, cross lines and figures or other characters indicating measures of length. On one or more sides or parts of the frame B, I also propose to indicate measures of length by marks, indentations, figures, &c., such marks being used in connection with the ruler C in drawing straight lines across the slate. These marks will also be of use in training the eye of a child to make straight lines, even without applying the ruler, and will enable it to acquire a quick and ready perception of measures of length. What is usually denominated a black-board is in every respect a slate constructed on an extended scale, whether made of wood, slate, metal, or any of the materials used for the purpose; and it is manifest that a black-board to which the devices herein apply, falls strictly within the scope of my invention and claim. It will thus be seen that, by my invention or improvement, great advantages are secured to all who use the ordinary slate, by the provision I have made for combining with said slate a pencil depository, a ruler,

a gauge, a pencil-sharpener, and a slate-cleaner, without increasing the size or weight of the slate or adding materially to its cost. The machinery or implements necessary to apply my improvements are of a simple character, most of them, if not all, now being in use in mechanical establishments.

Claim.

Having thus described my invention, what I claim, is-

- 1. The combination of a hollow in a slate frame, to be used as a receptacle for pencils, sharpeners, and other utensils, with a suitable covering constituting a ruler and gauge, substantially as described.
 - 2. Marking upon said ruler so arranged measures of length, substantially as shown and described.

3. Marking upon the frame of a slate measures of length, substantially as described.

In testimony whereof, I hereunto subscribe my name, this twenty-second day of October, A. D. 1866.

WM. J. RHEES.

Witnesses:

OCTAVIUS KNIGHT, ALEX'R A. C. KLAUCKE.