(No Model.)

E. W. SMITH & J. B. WALTON.

SLATE PENCIL SHARPENER.

No. 500,257. Patented June 27, 1893.

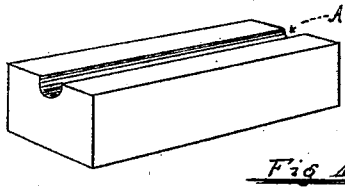

Fig 1.

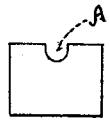

Fig 2.

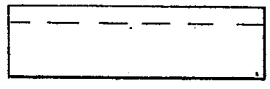

Fig 3.

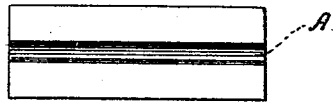

Fig 4.

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UNITED STATES PATENT OFFICE.

EDWARD W. SMITH AND JAMES B. WALTON, OF DAYTON, OHIO.

SLATE-PENCIL SHARPENER.

SPECIFICATION forming part of Letters Patent No. 500,257, dated June 27, 1893.

Application filed October 8, 1892. Serial No. 448,263. (No model.)

To all whom it may concern:

Be it known that we, EDWARD W. SMITH and JAMES B. WALTON, citizens of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Slate-Pencil Sharpeners, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to new and useful improvements in slate pencil sharpeners.

The nature of our improvements consists in the combination of ingredients to be hereinafter named, in their proper proportions, and the embodiment of the resulting composition in a manner most desirable for the purpose of our invention.

In the accompanying sheet of drawings making part of this specification, Figure 1 represents a perspective view of our improved pencil sharpener. Fig. 2 shows an end view. Fig. 3 represents a side elevation. Fig. 4 is a plan.

The letter "A" denotes the U-shaped channel extending longitudinally therein.

Our composition consists of the following elements of matter combined in the proportions and manner stated: plaster of paris, one-third part; coarse emery, one-third part; dry cement, one-third part; or an equal part of the three above named ingredients—that is to say that for every ounce of plaster of paris, an ounce, each of coarse emery, and dry cement, are added. The manufacture of these substances into a grinding or sharpening device is accomplished in the following manner: The substances are commingled first, in a mortar or other suitable vessel, and well stirred together, so as to make one inseparable substance. Then a sufficient quantity of water is added to transform the dry substance into a plastic or mortar-like compound, of a consistency suitable for forming into the desirable shape. The plastic material is then placed in suitable molds conforming in shape to that shown in the drawings. The process of hardening or petrifaction rapidly ensues and for this reason a greater quantity of the materials should not be intermixed than can conveniently and rapidly be formed in the molds.

We have found by experiment that the proportions above set forth obtain the best results and variations thereof are not expedient. We have found from actual tests that long usage and wear have little or no effect in lessening or removing the grinding surface of our device.

Having fully described the invention, what we claim, and desire to secure by Letters Patent, is—

1. A block or other substance, having a U-shaped channel extending longitudinally on a surface thereof, said block presenting a grinding surface and consisting of the herein-described combination of plaster of paris, coarse emery, and dry cement, in equal proportions, as shown and described.

2. A slate pencil sharpener consisting of a block of composition of equal parts of plaster of paris, coarse emery, and dry cement combined in the manner herein described; said block having a U-shaped channel extending longitudinally through the surface thereof and adapted to admit of a slate pencil being inserted and moved therein, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

EDWARD W. SMITH.
JAMES B. WALTON.

Witnesses:
HARVEY CONOVER,
JOHN A. HILLER.