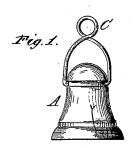
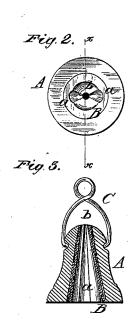
## E. D. MILLER. Pencil-Sharpener.

No. 202,183.

Patented April 9, 1878.





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## JNITED STATES PATENT OFFICE.

EDWARD D. MILLER, OF BLOOMINGTON, ILLINOIS.

## IMPROVEMENT IN PENCIL-SHARPENERS.

Specification forming part of Letters Patent No. 202,183, dated April 9, 1878; application filed March 13, 1878.

To all whom it may concern:

Be it known that I, EDWARD D. MILLER, of Bloomington, in the county of McLean, and in the State of Illinois, have invented certain new and useful Improvements in Slate-Pencil Sharpeners; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, and in which-

Figure 1 is a side elevation; Fig. 2, a plan view; and Fig. 3 is a section on the line x x, Fig. 2.

This invention relates to improvements in

the class of slate-pencil sharpeners, and has for its object to provide a simple and cheap article, whereby slate-pencils may be pointed with ease and facility, and which can be used by children or other persons without being easily injured or gotten out of order by being used for the purposes for which it is intended.

Heretofore slate-pencil sharpeners have been formed from a conical shell, within which a number of radial cutters or a series of fileblades have been arranged, the shell having an opening or openings, through which the material removed from the pencil is allowed to escape. Such construction of sharpeners is objectionable, for the reason that the cutters or file-blades would soon become loose and  $\operatorname{get}$ out of order, thus rendering them useless, while at the same time, being quite complicated, a serious objection as to the cost of construction has resulted in keeping them out of the market.

My invention is intended to obviate the above-cited defects; and to this end the invention consists of a slate-pencil sharpener, as a new article of manufacture, consisting of a shell formed of wood or other suitable material, the recess being conical in shape, and the inner wall coated with emery, and provided with one or more radial grooves to allow of the ready escape of the material removed from the pencil.

In the drawing, A represents a shell of any desired shape, made of wood, lead, paper, or | Patent, is-

other suitable material, the recess B of which is made conical in shape. The inner wall of the shell is coated with a lining or composition of cement and emery or sand, by which the pencil, when placed in said conical recess and turned therein, is quickly reduced to a sharp point. The inner wall of the shell is also provided with one or more radial grooves, a, by which the material removed from the pencil is allowed to escape, thus preventing the sharpener from clogging. It is also provided with a hole, b, in the top, which can be used in cleaning the sharpener, or can be blown through, freeing the sharpener from dust. The sharpener is further provided with a ring, C, by which it can be attached to a ribbon and be worn around the neck, or to a watchchain, or be carried in the pocket.

The shell is made in any desired shape, (bell shape being preferred as more ornamental,) and the recess of which is made conical in form, and one or more grooves formed in the inner wall. The cement is then applied with a brush or other suitable article, and the emery or sand poured in the conical recess. The emery or sand not sticking to the sides is then poured or emptied out, and a severe pressure by any kind of tool fitting in said recess will smooth or press the emery to the surface of

the inner wall.

The method of using the sharpener is to turn the pencil in the conical recess made for its reception first one way and the other until the desired point is obtained.

The sharpener can be readily cleaned out with a stick or small brush, or by blowing

through the small hole b at the top.

I am aware that a cylindrical shell the inner wall of which is coated with emery or sand, and flaring outward from its base, and provided with a revolving holder or carrier for the pencil, is old; but such construction is also open to the same objections as the conical shells having radial cutters or file-blades; and such I do not desire to claim, broadly, as my invention; but,

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

As a new article of manufacture, the herein-described slate-pencil sharpener, consisting of the shell A, having the hole b and the recess B, made conical in shape, and the inner wall coated with a composition or lining of cement and emery or sand, and provided with one or more grooves, a, as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of February, 1878.

EDWARD D. MILLER.

Witnesses:
THOS. SLADE,
HIRAM E. HADLEY.