M. C. STONE.

Combined Pencil-Sharpeners and Pencil-Point Protectors

No. 219,127. Patented Sept. 2, 1879.

Fig. 1.

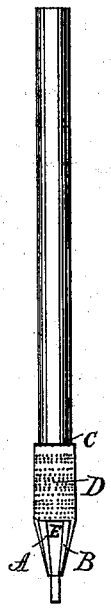


Fig. 2.

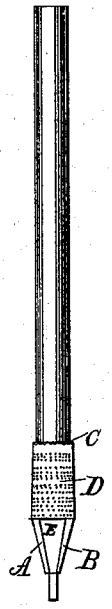


Fig. 3.

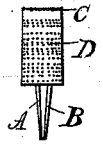
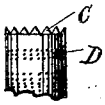


Fig. 4



Witnesses:

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UNITED STATES PATENT OFFICE.

MARVIN C. STONE, OF FALLS CHURCH, VIRGINIA.

IMPROVEMENT IN COMBINED PENCIL-SHARPENER AND PENCIL-POINT PROTECTOR.

Specification forming part of Letters Patent No. **219,127**, dated September 2, 1879; application filed March 27, 1879.

To all whom it may concern:

Be it known that I, MARVIN C. STONE, of Falls Church, in the county of Fairfax and State of Virginia, have invented certain new and useful Improvements in Combined Pencil-Sharpener and Pencil-Point Protector, of which the following is a specification.

Figure 1 is a front view of the sharpener with a pencil inclosed, showing the size of the aperture between the cutting-edges when the sharpener is new. Fig. 2 is a view of the same when the aperture has become enlarged by the process of grinding sufficiently to admit of two cutting-edges instead of one. Fig. 3 is a view of the same when the converging portion of the sharpener has been nearly consumed by grinding away the cutting-edges. Fig. 4 is an enlarged sectional portion, showing the cutter C, which is used to reduce the size of pencils that are unusually large.

Like letters of reference refer to like parts in the drawings.

A is a cutting-edge, made by sharpening a part of the conical portion of the sharpener.

D is the outer milled or roughened surface of the cylindrical portion of the sharpener, provided with a true bore.

C is a cutter formed upon the base of the cylindrical portion of the sharpener, which is used to reduce the diameter of pencils of large size.

E is a liberal opening before the cutting-edge, which allows the pencil to be forced upon the cutting-edge.

The invention consists in a combined pencil-sharpener and pencil-point protector to be worn on the pencil, whose outer surface is roughened and provided at its base with a cutter, C, and having a true bore, and terminating in a conical end, which is provided with a non-inset cutting-edge, before which is a liberal opening.

If the opening E were small, it would be found necessary to "set in" the cutting-edge A at a certain angle, in order that it might operate upon the pencil, and it would also be found advantageous to cut out the inner portion of the cylinder D, in order to give the pencil a little play and facilitate the cutting of the same.

By my invention both of these things are avoided. The liberal opening E enables the pencil to be forced upon the cutting-edge A, which then operates with ease at its natural angle, and may be so used until the whole of the converging or conical portion of the sharpener is consumed by use and occasional grinding, as indicated in Fig. 3.

If the opening E were small and the cutting-edge A were set in, the sharpener would become useless as soon as the cutting-edge should become slightly reduced by grinding the same.

The liberal opening E renders possible two cutting-edges acting in opposite directions, in place of one, from the time that the opening has attained the size of nearly one-half the circle until the converging portion of the sharpener becomes nearly consumed; but when the sharpener is new only one cutting-edge had better be used, as, while in this condition, the pressure of the pencil as it passes a cutting-edge reversely is apt to dull it. When the opening becomes larger the pencil rides free from the reverse edge, and does not dull it.

I wish to distinguish between pencil-sharpeners made of thin sheet metal, whose cutting-edges are elastic and unstable, and my own, in which the cutting-edges are firmly supported and remain rigid. In the case of the former class a liberal aperture in front of the cutting-edge will have no favorable effect, as the cutting is done by the compression of the edge upon the pencil by means of the fingers or otherwise.

Moreover, so far as I know, no means have yet been discovered of preventing sharpeners of this class from wrenching or twisting out of shape from use.

I call attention to the fact that my invention relates to pencil-sharpeners to be worn on the pencil, and made out of a good quality of steel, which is wrought into shape by boring and turning or otherwise, in such a manner that the cutting-edges are rigid and firmly sustained in place; and for this class of pencil-sharpeners my invention has utility and value.

By withdrawing the pencil partly into the sharpener, the latter will be found a convenient point-protector.

The cutter C reduces large pencils to its own diameter, and aids in keeping the sharpener in place.

The outer surface of the cylinder D is roughened to enable the hand to grasp it firmly.

What I claim as my invention, and desire to secure by Letters Patent, is—

A combined pencil-sharpener and point-protector consisting of the cylindrical body portion, roughened upon its exterior, and provided with a cutter, C, formed upon its base, and having a true bore, and terminating in a conical end, which is provided with a liberal opening and a non-inset cutting-edge, substantially as shown and described.

MARVIN C. STONE.

In presence of—
JOS. T. K. PLANT,
A. C. RICHARDS.