

W. H. KEYES,  
Pencil-Sharpener.

No. 199,448.

Patented Jan. 22, 1878.

Fig. 1.

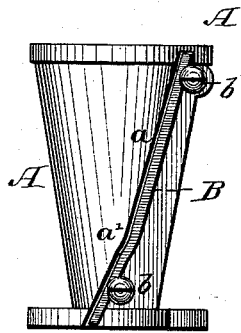


Fig. 2.

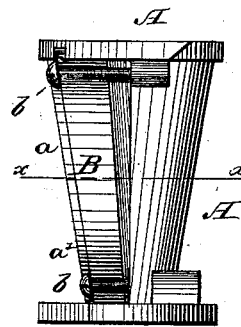


Fig. 3.

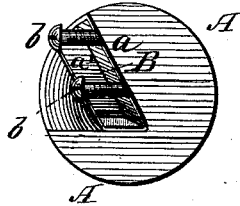
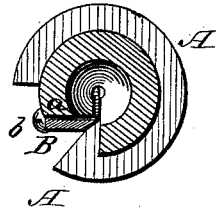


Fig. 4.



Witnesses:

*P. Dieterich.*  
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# UNITED STATES PATENT OFFICE.

WALTER H. KEYES, OF EAST PRINCETON, MASSACHUSETTS.

## IMPROVEMENT IN PENCIL-SHARPENERS.

Specification forming part of Letters Patent No. **199,448**, dated January 22, 1878; application filed December 15, 1877.

*To all whom it may concern:*

Be it known that I, WALTER H. KEYES, of East Princeton, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Pencil-Sharpener; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in a pencil-sharpener having a knife adjustable by means of screws, and having a knife crooked either by springing or forging, and set at such an angle with the point of the pencil that it will cut the pencil a little faster, in proportion to the circumference, at the point than it does back on the pencil, as will be hereinafter more fully set forth.

In the annexed drawings, to which reference is made, and which fully illustrate this invention, Figures 1 and 2 are side views of my improved pencil-sharpener. Fig. 3 is an end view of the same; and Fig. 4 is a horizontal section on the line *x x*, Fig. 2.

A represents the conical barrel or body of the pencil-sharpener, provided with an inclined opening along the side to receive the knife-blade B. The knife B rests against a shoulder, *a*, which has a bend or angle at *a'*, as seen in Fig. 1, so that the knife will be bent at this point, and the edge of its lower end be slightly beyond the wall of the hole or core of the barrel A. This bend in the knife begins just before the point of the pencil.

In this sharpener, if the pencil is pushed in

very hard, the knife cannot cut so fast in proportion at the back as at the point of the pencil. The pencil, therefore, binds at the back, and the tendency is to throw the pencil out of the barrel, instead of (as when the knife has a uniform slope with the taper of the pencil, and cuts equally as fast in all places in the taper) tearing the pencil to pieces.

The knife-blade B is made adjustable, so that it can be sharpened an indefinite number of times.

I have shown the blade adjusted by means of screws *b b* passing into the face, which the blade rests on. Thus the ends of the knife will pass under the heads of the screws; but the knife may be slotted and the screws pass through slots.

The bend in the knife need not be very great—only so as to shave off the lead at a little more of an obtuse angle than the wood. The bend in the knife may be made by forging it in proper shape, or by simply springing in into shape.

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

In a pencil-sharpener consisting of a conical barrel, A, and knife-blade B, the blade adjusted by means of screws *b*, and arranged with a bend, substantially as described, whereby the point will be cut a little faster than the wood, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WALTER H. KEYES.

Witnesses:

WM. H. BROWN,  
E. S. BROWN.