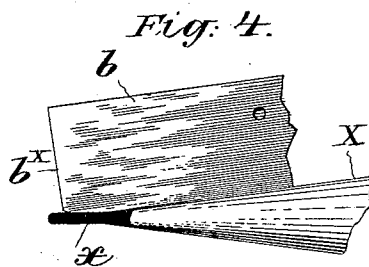
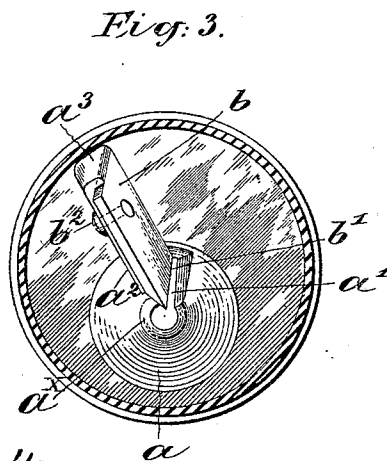
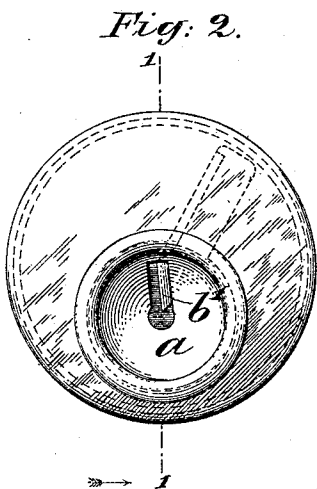
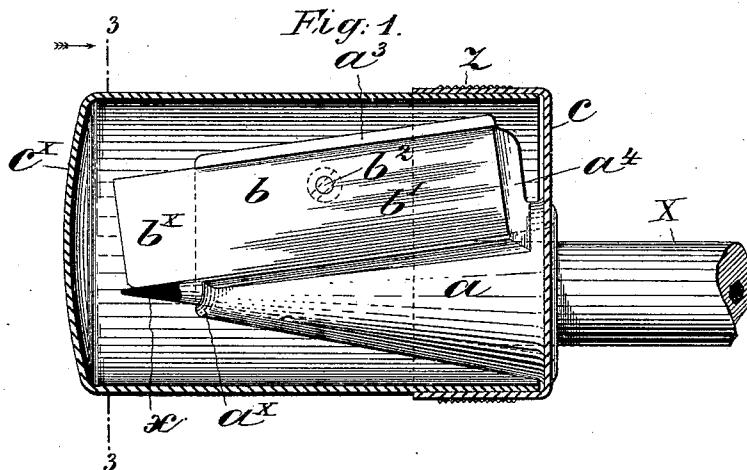


(No Model.)

A. H. MOORE.
PENCIL SHARPENER.

No. 496,128.

Patented Apr. 25, 1893.



WITNESSES:
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UNITED STATES PATENT OFFICE.

ALFRED H. MOORE, OF BROOKLYN, NEW YORK.

PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 496,128, dated April 25, 1893.

Application filed September 1, 1892. Serial No. 444,796. (No model.)

To all whom it may concern:

Be it known that I, ALFRED H. MOORE, a citizen of the United States, and a resident of the city of Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Pencil-Sharpener, of which the following is a specification.

My invention relates to the class of conical hand sharpeners or pointers for pencils, and the object of the invention is to produce a simple and inexpensive pencil pointer, which may be re-sharpened when it becomes dull, and which is adapted to point the lead of the pencil with less liability of breakage than with the common form of sharpener.

My invention will be fully described hereinafter and its novel features carefully defined in the claims.

In the accompanying drawings which serve to illustrate my invention, Figure 1 is a side view of the sharpener with the housing in section on line 1, 1, in Fig. 2. Fig. 2 is an end elevation of the sharpener, the view representing the right-hand end as seen in Fig. 1. Fig. 3 is an end view of the sharpener, the housing being in transverse section on line 3, 3, in Fig. 1. Fig. 4 illustrates a modification in the form of the edge of the blade.

All of the views are on a scale about double the natural size, and the pencil is shown in position in Figs. 1 and 4.

a represents a conical receiver for the pencil, somewhat similar in form to those of the sharpeners in common use and having a longitudinal slit, *a'*; formed in one with the receiver is a blade-support, *a²*, which has a side-flange or shoulder, *a³*, and an end-flange or shoulder, *a⁴*. The blade, *b*, is a flat plate of steel, beveled to form a cutting edge, *b'*, and secured removably to the support by a screw, *b²*. The back of the blade rests against the shoulder *a³*, and the lower end thereof rests against the shoulder *a⁴*. The blade *b* projects considerably beyond the open, lesser end, *a^x*, of the conical receiver *a*, whereby the pointing of the lead is effected after its exposed tip is protruded wholly beyond the end *a^x* of the receiver.

In Fig. 1, the pencil, *X*, is shown in position in the receiver *a*, with the wood trimmed down until the exposed lead, *x*, is protruded wholly beyond the lesser end of the receiver,

and has been pointed by that portion *b^x*, of the blade *b*, which projects beyond the receiver.

It is well understood by those who use pencil pointers of this general class, that while the blade will usually trim off the wood properly the lead is apt to be broken when it is denuded and the blade begins to trim and point it. This difficulty arises, as I believe, mainly, from the binding of the lead in the conical tip of the receiver, caused by its springing laterally under the pressure of the cutting edge of the blade. The blade and the inner wall of the receiver are caused to grip and hold the lead, which is thus twisted and broken off by the turning of the pencil. Therefore I make the blade to extend beyond the end of the receiver to such an extent that while the blade is trimming and pointing it, the denuded portion of the lead will be free to yield somewhat to the laterally applied pressure of the blade and not be clamped against rotation. The extent of projection of the blade beyond the end of the receiver will be or should be about equal to the length of the denuded portion of the lead.

Although made from hardened steel the blade will in time become dull, and while in this condition it will not properly point the pencil, tending rather to crush and tear it. If the blade is removable and the support is so constructed that the blade may be removed and replaced properly, without difficulty, it may be resharpened by means of a hone or fine stone, without difficulty. I provide for this, by securing the blade in a flanged support by means of a screw, as described.

In order that the débris from the cutting may be collected the sharpener is inclosed in a housing composed of a cup-like base, *c*, to which the receiver *a* is rigidly secured at its base, and a removable cap, *c^x*, which fits snugly into the base *c*. The user grasps the base *c* between the thumb and finger of one hand, and turns the pencil with the other. To prevent the base of the housing from turning in the grasp it has, or may have, a roughened exterior surface, as seen at *z*, in Fig. 1. The cap *c^x*, forms a receptacle for the débris from the pencil, and after the latter has been pointed the cap may be removed and cleaned or emptied.

The blade *b* may be modified as to its cut-

ting edge, so as to give a variety of forms to the lead of the pencil. Fig. 4 shows the extremity of the blade which trims the lead slightly beveled, the same figure also showing the form of point such a blade will give to the lead.

Having thus described my invention, I claim—

1. As an improved article of manufacture, a pencil sharpener comprising a conical, slotted receiver, *a*, for the pencil and a blade, *b*, secured to said receiver and extending beyond the lesser extremity of the receiver to an extent equal to, or substantially equal to the denuded portion of the lead, whereby the pointing of the latter is effected after it protrudes beyond the receiver, as set forth.

2. As an improved article of manufacture, a pencil sharpener comprising a conical, slot-

ted receiver, *a*, provided with a support *a*², for the blade, and back flanges on said support, a securing screw, and a blade, *b*, mounted on said support and held removably thereon by said screw, as set forth.

3. As an improved article of manufacture, a pencil sharpener comprising a conical, slotted receiver, *a*, a blade-support, a blade secured to said support, and a housing comprising a base, *c*, of cup form, secured rigidly to the base of said receiver, and a removable cap, *c*^x, which fits into said base, as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ALFRED H. MOORE.

Witnesses:

HENRY CONNETT,
HERBERT BLOSSOM.