(No Model.)

E. F. BUMPUS.

PENCIL SHARPENER.

No. 437,285. Patented Sept. 30, 1890.

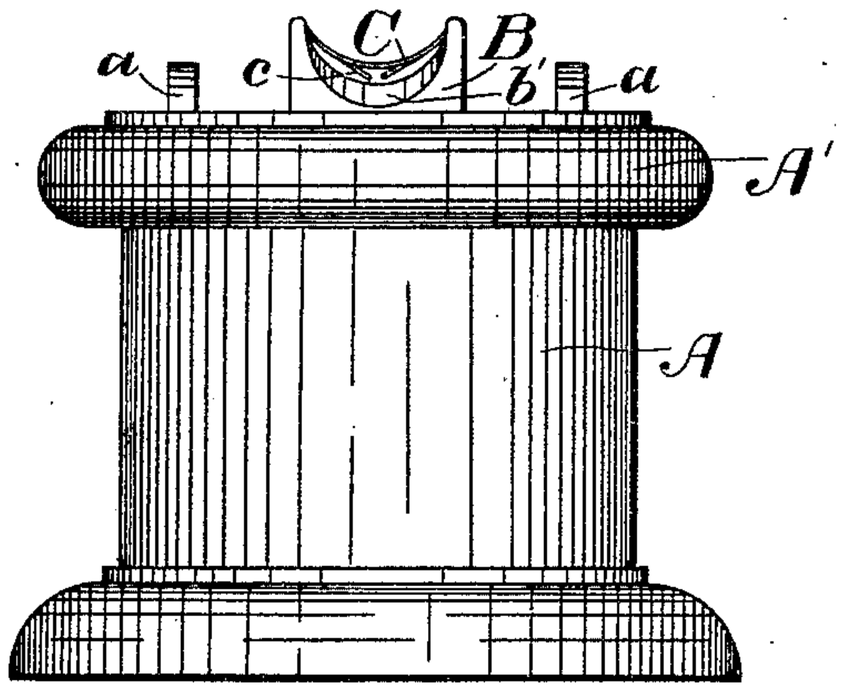

Fig. 1.

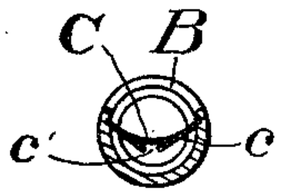

Fig. 5.

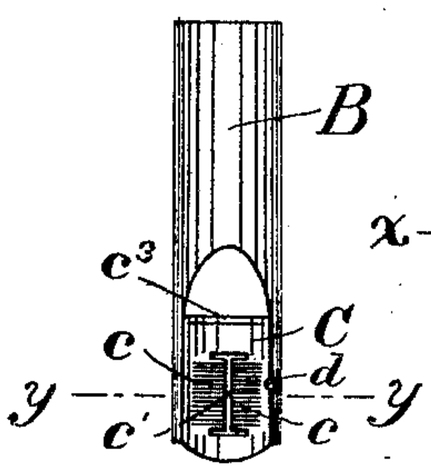

Fig. 4.

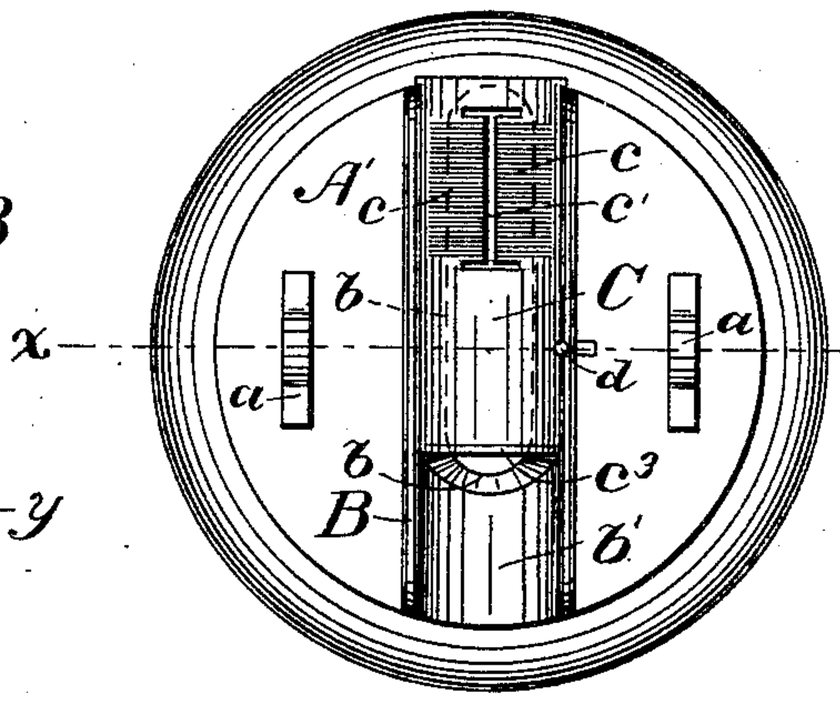

Fig. 2.

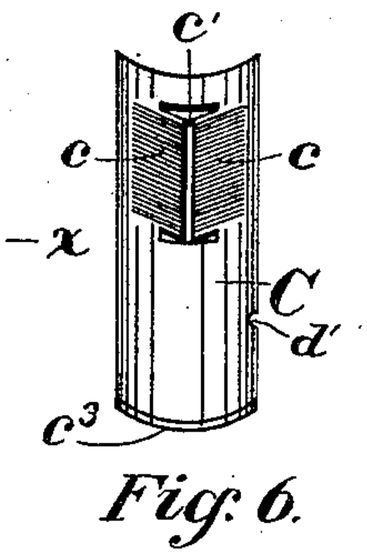

Fig. 6.

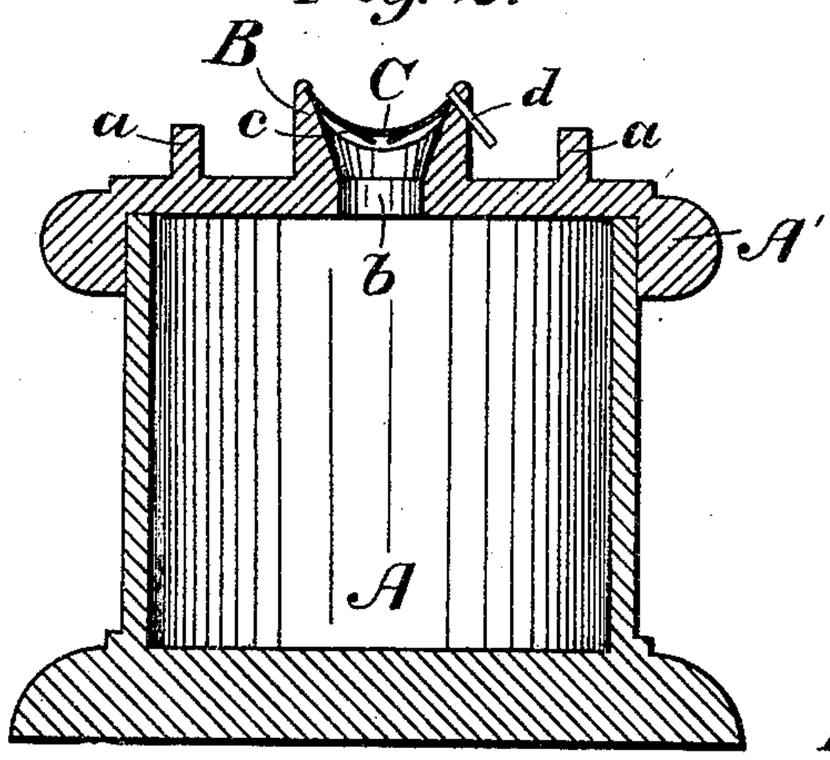

Fig. 3.

Witnesses
Albert E. Leach
M. N. Thompson

Inventor
Ebenezer F. Bumpus
by Wm. D. W. Bowse
Atty.

UNITED STATES PATENT OFFICE.

EBENEZER F. BUMPUS, OF BOSTON, MASSACHUSETTS.

PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 437,285, dated September 30, 1890.

Application filed April 28, 1890. Serial No. 349,827. (No model.)

To all whom it may concern:

Be it known that I, EBENEZER F. BUMPUS, a citizen of the United States, residing at Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Pencil-Sharpeners, of which the following is a full specification.

My invention consists of an improved sharpener for pencils, containing a cutting knife-edge for the wood portion of the pencil, and a peculiarly shaped file for pointing the lead. One form of sharpener, as hereinafter described, is constructed with a hollow standard or base forming a receptacle to contain shavings and lead-filings, this form being also useful as a paper-weight. In its simpler form the sharpener is made without a standard, but in convenient shape for use as a point-protecting pencil-tip. In both forms the cutter portion is identical.

Referring to the accompanying drawings, Figure 1 is a front elevation of my improved sharpener mounted on a standard. Fig. 2 is a plan view of the sharpener and the cover of the standard. Fig. 3 is a vertical section in the plane of $x\ x$, Fig. 2, through the sharpener and standard. Fig. 4 shows a simpler form of sharpener without the standard. Fig. 5 is a section on line $y\ y$, Fig. 4; and Fig. 6 is a perspective plan view of the cutter detached.

B is a grooved or hollow shell, which contains the cutter C. This cutter consists of a thin concave metal piece, provided at one end with the curved knife-edge c^3 and having near the other end a file having a slit c' through it at the bottom of the hollow of the cutter, arranged in such a manner that the lead filings and dust may sift down through the said slit. The file portion of the cutter is preferably made on two wings $c\ c$ struck down from the material of the cutter, as clearly shown in the drawings, in such a manner as to form a steep slope on each side for the pencil-dust to slide down toward the slit c'. The cutter C is set into the top of the grooved shell B, being held therein by its edges in such a manner as to be readily detached therefrom, as shown. For this purpose I preferably provide one edge of the cutter C with a nick d', through which passes the pin d, held in the material of the shell, the construction being such that by simply moving the pin out of engagement with the nick the cutter may be removed for sharpening. The curve of the cutter transversely is flatter than that of the groove in the shell, being of greater radius, so that a crescent-shaped space is left between the under surface of the cutter and the groove of the said shell. In its simpler form, as shown in Figs. 4 and 5, the end of the shell B is preferably made cylindrical and hollow in such a manner that the sharpener may be used as a point-protecting pencil-tip. The pencil is sharpened by drawing the point along the knife-edge c^3 of the cutter, the shavings passing along in the space under the cutter and passing out at the rear, the sharpener being held firmly or supported on a desk or table. When the wood portion of the pencil is sharpened, the lead is pointed by means of the file $c\ c$, the dust falling through the slit c'. I prefer, however, to mount the sharpener upon a base or standard A, as shown in Figs. 1, 2, and 3, made hollow to form a receptacle for the shavings and lead-dust. This standard may be made in any form or of any desired material. I preferably cast it in metal, and so design it that the device, aside from its use as a sharpener, may serve as a convenient paper-weight for the desk.

A′ is the cover, fitting over the receptacle A to close the same, and having secured thereto or cast therewith the grooved or hollowed shell of the sharpener. The shell B in this form and the top A′ of the receptacle are provided with an opening b under the cutter, having tapered sides, as shown in Fig. 3, to guide the shavings into the receptacle. The front of the shell B is preferably beveled out, as at b', Fig. 1, for the point of the pencil to move in while being sharpened. To sharpen the pencil, the sharpener and standard are firmly held on the desk and the pointed end of the pencil is drawn over the cutting-edge c^3, the shavings all falling into the receptacle beneath. The lead is pointed, as before, by means of the file c at the rear of the cutter, all dirt and shavings being, however, in this case received in the receptacle A; hence the extreme cleanness of this form of device.

For convenience, I preferably provide the cover A′ of the standard with ears a, between

which and the shell B spaces are formed to hold pencils, pens, &c.

I claim—

1. In a pencil-sharpener, the combination, with a grooved shell, of a separate detachable concave cutter having a curved knife-edge and held by its side within the groove of the shell, whereby a discharge-space is left between the said cutter and the groove of the shell, substantially as and for the purposes described.

2. In a pencil-sharpener, the combination, with a grooved shell, of a separate detachable curved cutter having inwardly and downwardly sloping wings *c c* struck from the material of the cutter with the slit *c'* between them, the said wings being provided with file-surfaces, substantially as described.

3. In a pencil-sharpener, the combination, with a grooved shell, of a concave cutter held by its edges in the groove of the shell and a hollow receptacle, provided with a cover supporting said shell, both shell and cover having an opening into the receptacle under the cutter, substantially as and for the purposes described.

4. In a pencil-sharpener, the combination, with a grooved shell, of a concave cutter held by its edges in the groove of the shell and having both a slitted file and a curved knife-edge, and a hollow receptacle provided with a cover supporting said shell, both shell and cover having an opening into the receptacle under the cutter, whereby both shavings and lead-dust are conducted into the receptacle, substantially as described.

5. In a pencil-sharpener, the combination, with a grooved shell, of a detachable cutter held by a movable pin within said shell, substantially as and for the purposes described.

In witness whereof I have hereunto set my hand.

EBENEZER F. BUMPUS.

Witnesses:
W. B. H. DOWSE,
ALBERT E. LEACH.