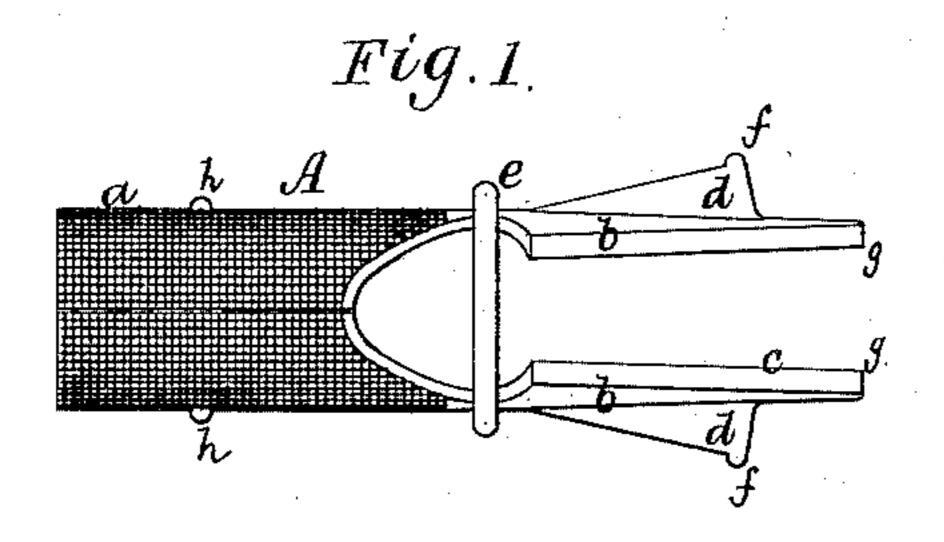
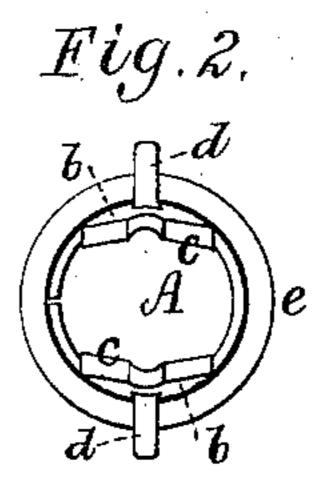
(No Model.)

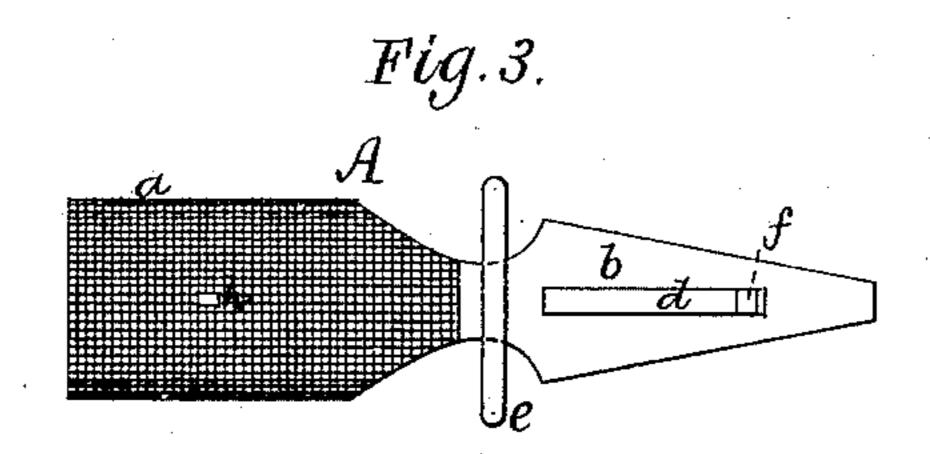
## B. T. WHITEHOUSE PENCIL SHARPENER.

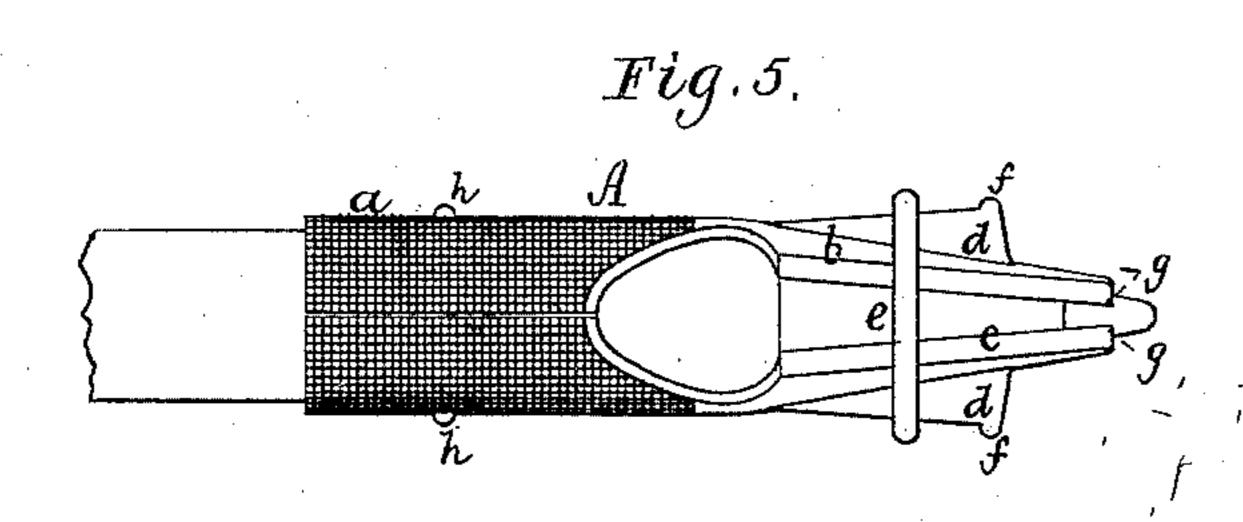
No. 409,380.

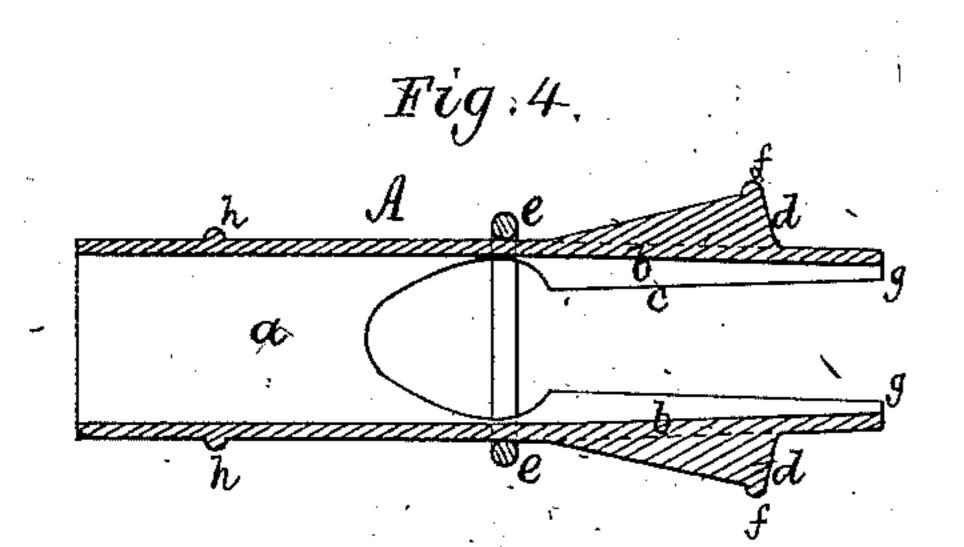
Patented Aug. 20, 1889.











Witnesses.

A. F. Spen WE Piper Inventor,

Berganin J. Whitehouse by Singleton & Piper atty's

## United States Patent Office.

BENJAMIN T. WHITEHOUSE, OF DOVER, ASSIGNOR OF ONE-HALF TO CHRISTOPHER W. JACKSON, OF PORTSMOUTH, NEW HAMPSHIRE.

## PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 409,380, dated August 20, 1889.

Application filed April 1, 1889. Serial No. 305,599. (No model.)

To all whom it may concern:

Be it known that I, Benjamin Titcomb Whitehouse, a citizen of the United States, residing at Dover, in the county of Strafford and 5 State of New Hampshire, have invented certain new and useful Improvements in Pencil-Sharpeners; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 and figures of reference marked thereon, which form a part of this specification.

Figure 1 is a top view, Fig. 2 an end view, Fig. 3 a side elevation, and Fig. 4 a longitudinal section, of a pencil-sharpener as made in accordance with my invention. Fig. 5 is a top view of the fastener as applied to a pencil and in position for sharpening the same.

The nature of my invention is defined in the claim hereinafter presented.

In the drawings, A denotes the sharpener, the body a of which is tubular and has ex-25 tending from it two spring-arms b b, tapered as shown, the edges c c of said tapered portions being cutting-edges and are set so as to project a little beyond the interior curved surface of said arms. Projecting from the 30 outer surface of the said arms b b are wings d, against the inclined edges of which a ring e bears when slid from the body of the sharpener onto said wings to force the edges of the tapered arms b against the tapered portion of 35 the pencil, as shown in Fig. 5, and causes the cutting-edges c of each tapered arm to enter the wood of the pencil when it is revolved within the sharpener and simultaneously remove from opposite portions of the conical 40 part of the pencil a thin shaving.

By inspection of Fig. 5 it will be observed that, as seen in top view, the edge of the cutters c stands obliquely to the axis of the pencil instead of in a line with it, as is the case with pencil-sharpeners heretofore in use.

Consequently the wood is removed from the pencil with a drawing cut, which leaves it in a smoother state than when cut with the ordinary sharpener; and as the sharpener has two cutters to act on opposite sides of the 50 pencil, as shown, the pencil can be sharpened in half the time that it can be with the ordinary sharpener.

The body of the sharpener is milled, as shown, to facilitate the holding of it, and the 55 wings d are provided with stops f to prevent the ring e from being pushed over the ends of the wings, it being intended that when the ring e is against the stop f the points g g of the arms shall nearly touch each other.

After the pencil is sharpened the ring e should be slipped back onto the body a, which is provided with stops h to keep the said ring on the sharpener, and the sharpener should be drawn back on the pencil, so that the outer 65 ends of the arms b shall be as far back as the base of the conical part of the pencil. The pencil can then be used as desired. In this way the sharpener can be kept on the pencil and be always in a convenient position for use 70 when required to sharpen the pencil.

Having described my invention, what I claim is—

The pencil-sharpener consisting of the tubular body a, the tapering spring-arms b, each 75 arm having a cutter c, and a wing d, with a ring e arranged on said sharpener, said ring when pushed onto the wings forcing the spring-arms against the conical part of the pencil arranged therein and causing the cut-80 ters c to remove shavings therefrom when the pencil is revolved, substantially as shown and set forth.

In testimony whereof I affix my signature in presence of two witnesses.

BENJAMIN T. WHITEHOUSE.

Witnesses:
S. N. PIPER,
M. P. PIKE.