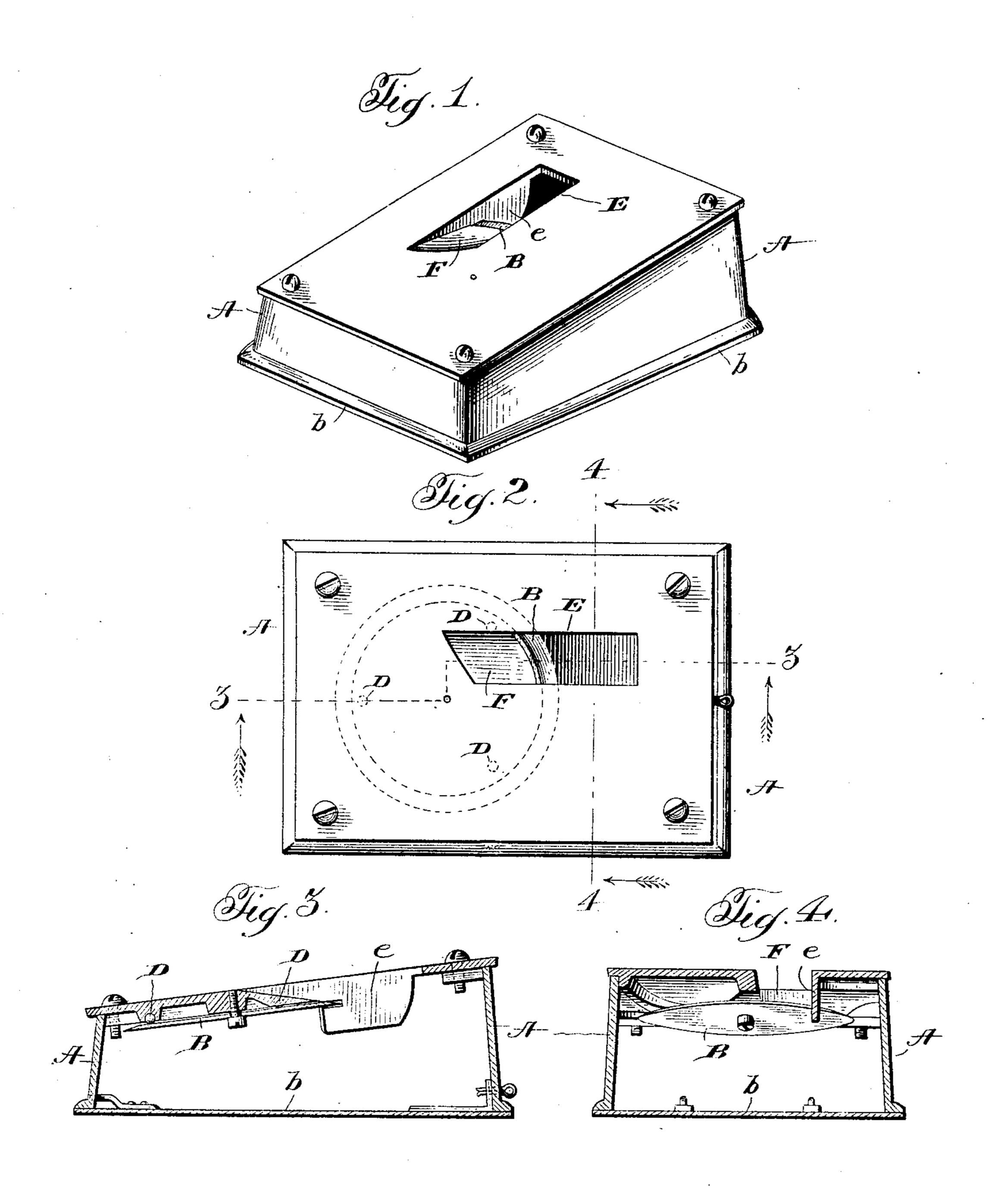
W. B. HOPKINS. PENCIL SHARPENER. APPLICATION FILED JUNE 6, 1905.



Witnesses: Jas Cosquetchinson. Mor is W. Aveus Milliam B. Nopkmo, by Prindle and Williamson Attorneys:

UNITED STATES PATENT OFFICE.

WILLIAM B. HOPKINS, OF CINCINNATI, OHIO.

PENCIL-SHARPENER.

No. 803,762

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed June 6, 1905. Serial No. 264,027.

To all whom it may concern:

Be it known that I, William B. Hopkins, of Cincinnati, in the county of Hamilton, and in the State of Ohio, have invented a certain new and useful Improvement in Pencil-Sharpeners; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a pencil-sharpener embodying my invention. Fig. 2 is a top plan view thereof. Fig. 3 is a section on the line 3 3 of Fig. 2, and Fig. 4 is a detail

section on the line 4 4 of Fig. 2.

The object of my invention is to provide a pencil-sharpener which, among other qualities, will possess those of simplicity of construction and efficiency in and ease of operation; and to these ends my invention consists in the pencil-sharpener having the construction substantially as hereinafter specified and claimed.

In the embodiment of my invention which I have selected for illustration I employ a comparatively shallow oblong box A, which constitutes both a support for the cutter B, which consists of a disk, and a receptacle for the shavings or cuttings, the bottom b of the box being readily detachable to permit the emptying out of it of the shavings or cuttings

when desired.

The disk-form cutter B has its circumference sharpened, and it is pivoted or journaled to the under side of the top of the box A, so 35 that it may be turned freely, and to avoid | friction and insure its free turning balls D are interposed between the upper side of the disk cutter and the top of the box. In the top of the box A there is an opening E, that 40 exposes a portion of the edge of the disk cutter B, and said opening is elongated or in the form of a slot, and its long sides extend oblique to the disk cutter. Overlying the disk cutter and extending from a point just with-45 in its cutting edge and upward and outward is an inclined surface F, that lies between extensions of the long sides of the opening E, which inclined surface F forms a table or rest for the pencil to be sharpened.

In sharpening a pencil the end thereof is placed within the opening E and against the exposed cutting edge of the disk cutter and also against the long side of the opening farthest from the axis of the disk cutter and the pencil drawn outward. As the direction of

movement of the pencil is in a path that is oblique to a radius of the cutter disk that intersects such path at the circumference of the disk, the latter being free to turn will revolve so that the cutting of the pencil is due 60 both to the drawing of the pencil over the cutter and the revolution of the latter. Besides assisting in the cutting operation the revolution of the disk cutter, as described, is useful as presenting another portion of the 65 cutting edge of the disk cutter in position for a succeeding cut.

In order to form a lateral support for the point of the pencil and prevent the breaking of the lead, the side wall of the slot against 70 which the pencil is held is extended downward in the form of a lug e adjacent the disk

cutter.

It will be evident that by the use of my pencil-sharpener a pencil can be sharpened 75 quickly and satisfactorily and without breakage of the lead, and as its construction is extremely simple its cost of manufacture will be low and it cannot get out of order. As the cutter has an edge formed on the periphery of a disk and as the latter revolves so that new portions of the cutting edge are presented for use, the device can be used a long time before a new cutter or resharpening of it is necessary.

Of course it is to be understood that the precise construction and arrangement of parts shown and described is not essential to obtaining the advantages of my invention, for these may be secured in different forms of 90

embodiment.

Having thus described my invention, what I claim is—

1. A pencil-sharpener, comprising a pivoted cutter free to turn on its pivot by the 95 engagement of the pencil with the cutter and an obliquely-lying pencil-guide.

2. A pencil-sharpener, comprising a pivoted disk and an obliquely-lying pencil-guide said disk being free to turn under the pres-

sure of the pencil thereon.

3. A pencil-sharpener, comprising a revoluble cutter, and a support for the latter, having an opening for a pencil that has pencil-guiding surfaces that are oblique with reference to the cutter.

4. A pencil-sharpener, comprising a box having an opening, and a disk-form cutter pivoted within the box, and having a portion of its edge exposed by said opening, the di- 110

rection of the opening being oblique relative to the cutter.

5. A pencil-sharpener, comprising a revoluble cutter, a support for said cutter, antifiction-bearings between the cutter and the

support, and an oblique pencil-guide.
6. A pencil-sharpener, comprising a revoluble cutter, an oblique pencil-guide, and a

lateral pencil-supporting surface adjacent the edge of the cutter.

In testimony that I claim the foregoing I have hereunto set my hand.
WILLIAM B. HOPKINS.

Witnesses:

Woolfolk Henderson, B. M. Hopkins.