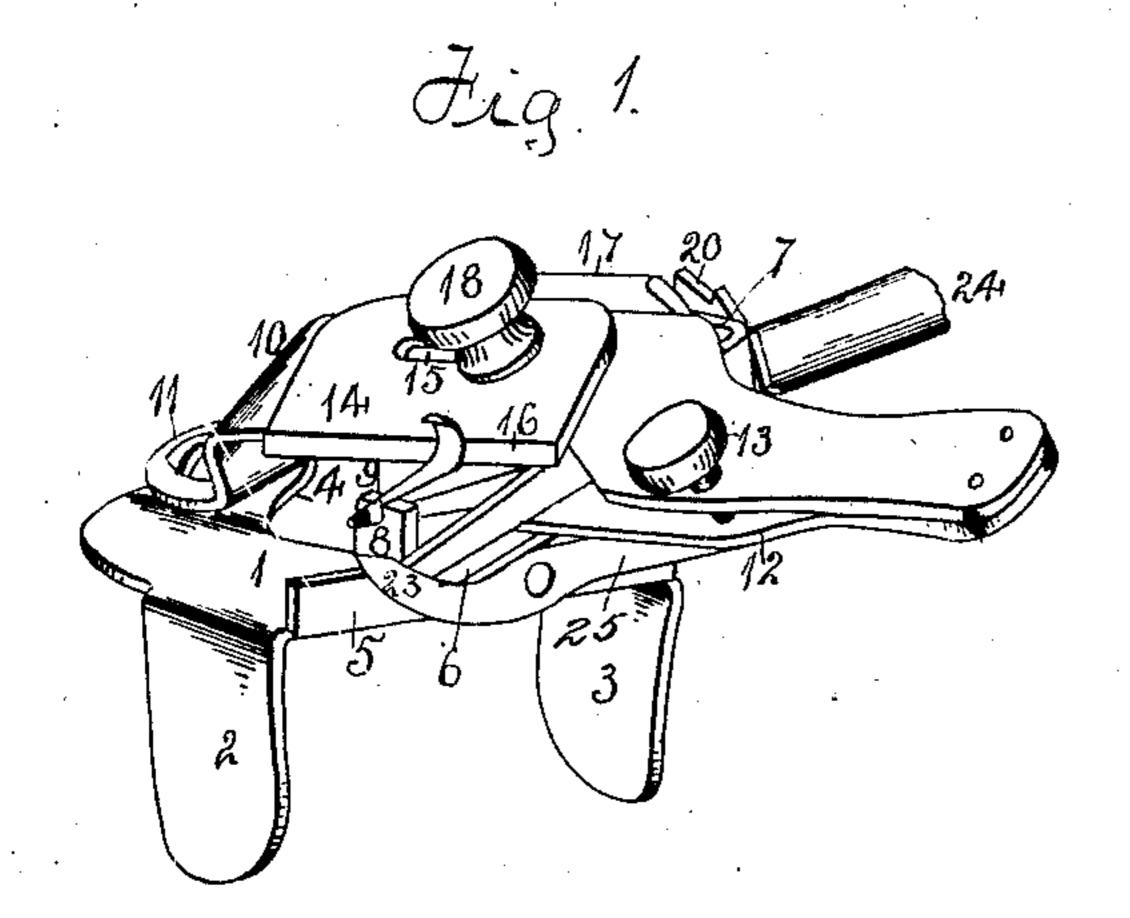
No. 830,663.

PATENTED SEPT. 11, 1906.

O. E. HAMMOND,
PENCIL SHARPENER,
APPLICATION FILED APR. 18, 1906.



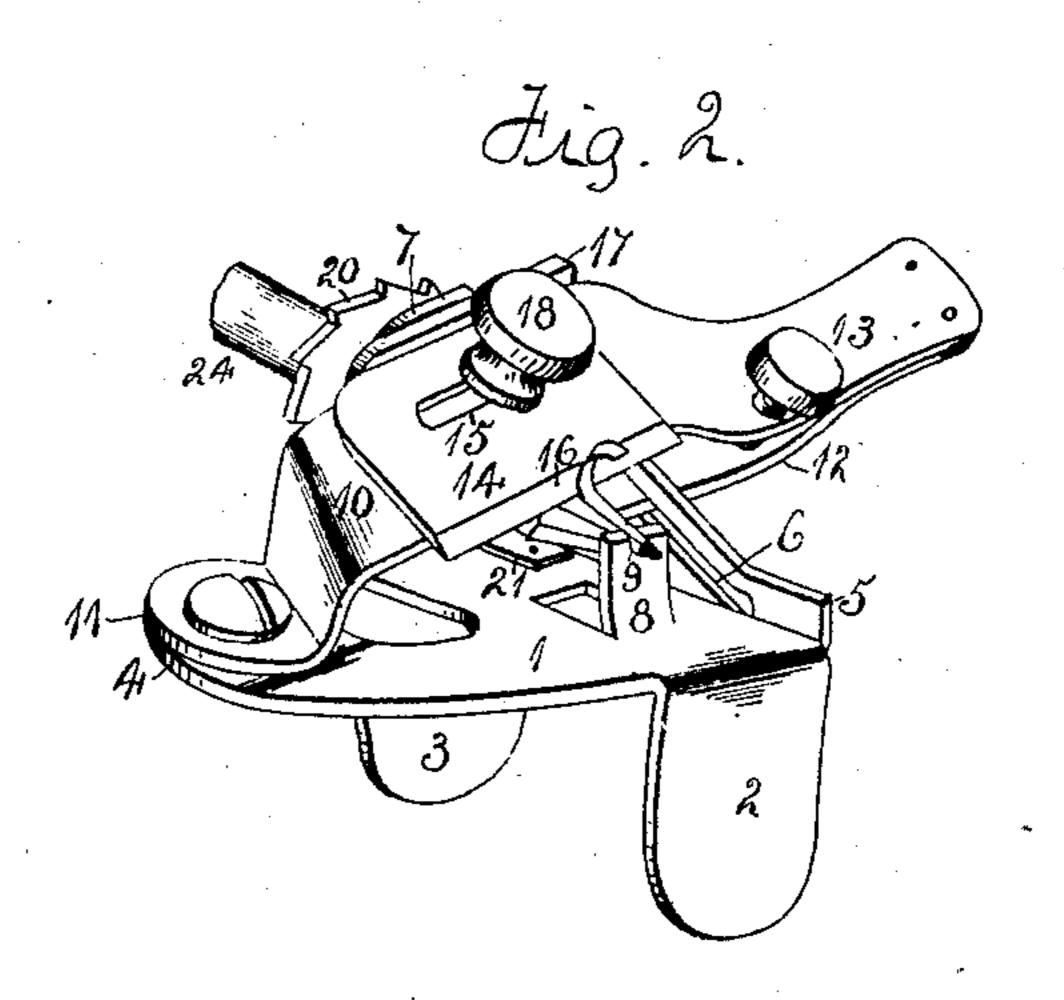


Fig. 3.

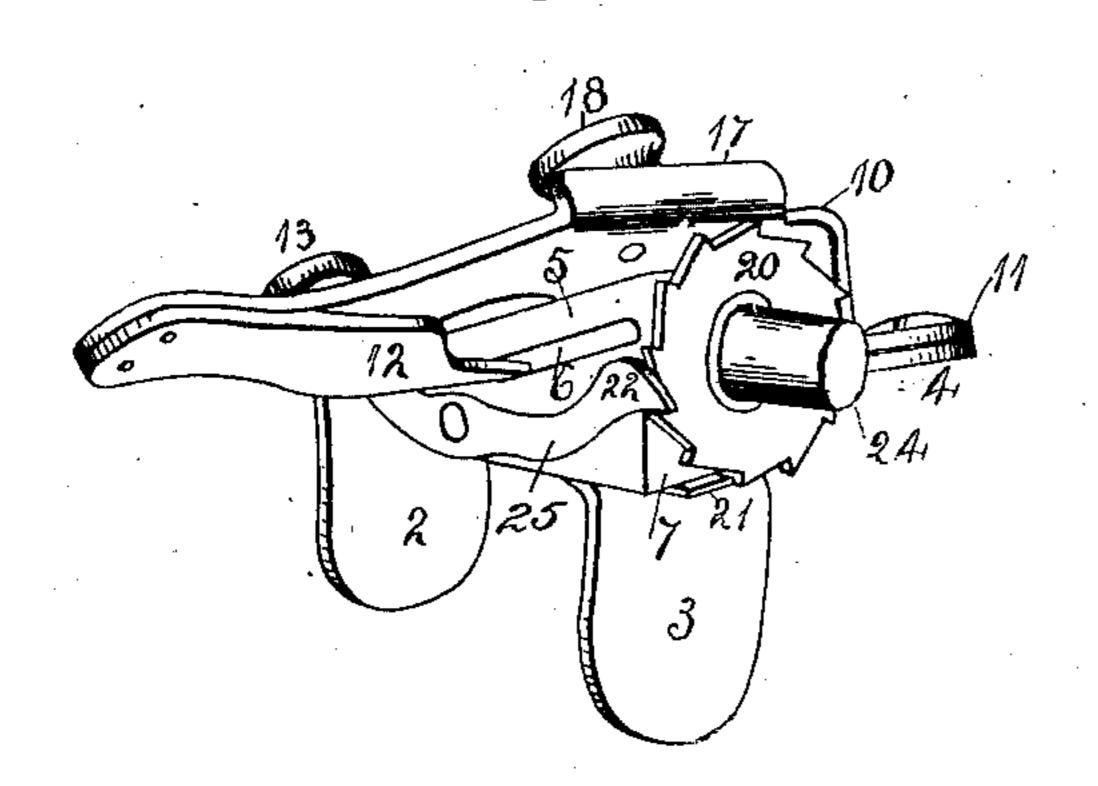
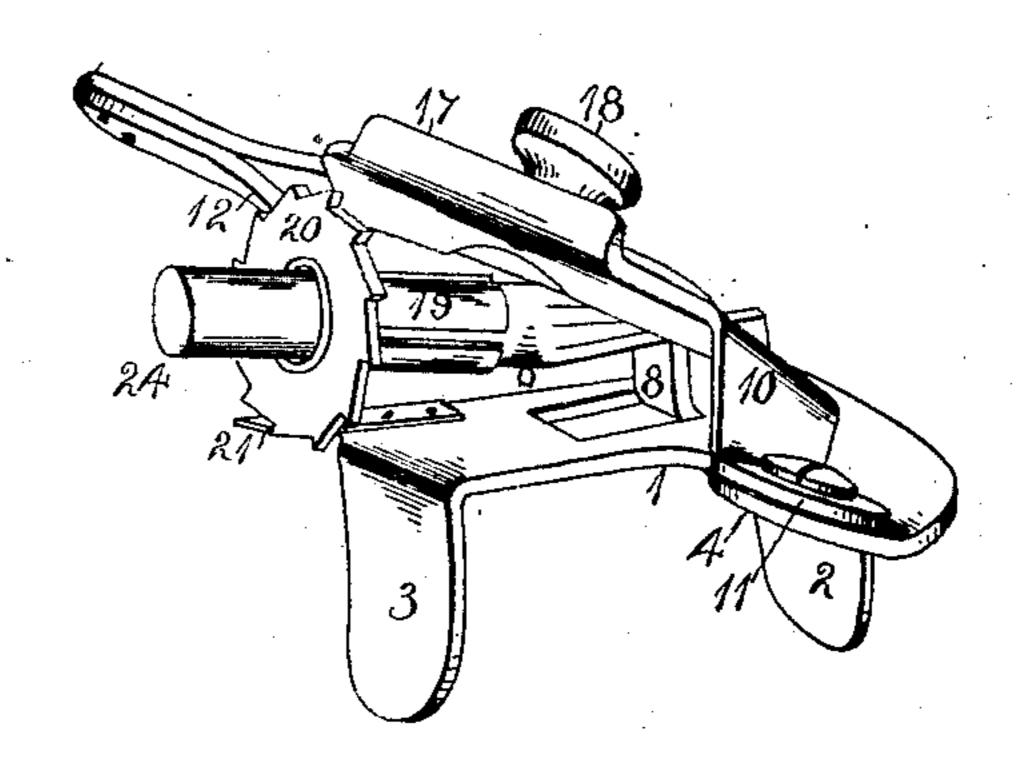


Fig: 4.



Witnesses: R. G. Southworth. E. Behel.

Owen E. Hammond.
By a.O. Behel.

## D STATES PATENT OFFICE.

OWEN E. HAMMOND, OF BELVIDERE, ILLINOIS.

## PENCIL-SHARPENER.

No. 830,663.

Specification of Letters Patent.

Patented Sept. 11, 1906.

Application filed April 18, 1906. Serial No. 312,435.

To all whom it may concern:

Be it known that I, OWEN E. HAMMOND, a citizen of the United States, residing at Belvidere, in the county of Boone and State of 5 Illinois, have invented certain new and useful Improvements in Pencil-Sharpeners, of which the following is a specification.

The object of this invention is to construct a pencil-sharpener in which the pencil is re given a partial rotation with each movement

of the knife.

In the accompanying drawings, Figures 1 and 2 are perspective views of my improved pencil-sharpener as seen from the front. 15 Figs. 3 and 4 are perspective views of the pencil-sharpener as seen from the rear.

The main support for the operative parts in this instance is stamped from sheet material and formed into the main plate 1, having 20 the two depending lugs 2 and 3, by which the support is held by the hand of the user.

The section 4 of the main plate is bent or formed at an angle to the plate, its highest edge being at the rear. A side 5 of this main 25 plate is turned up at right angles to the main plate and is formed with a slot 6, which is located in an incline with respect to the main plate, its highest end being at the rear of the main plate. The rear end of this side plate 5 30 is turned at right angles thereto and forms a support for the pencil-support. From the main plate is stamped and formed up the pencil-point guide 8, having a notch 9 in its upper edge.

The knife-support 10, formed of sheet material, has its end 11 pivotally connected to the section 4 of the main plate. In this instance the knife-support has a section 12 riveted to its under face at its handle end and 40 has its free end located in the inclined slot 6. The knife-support overlies the inclined end 5. A screw 13 has a screw-thread connection with the knife-support, and its end rests against section 12. As the section 12 is

45 formed of spring material, the action of the screw 13 is to hold the knife-support more or less elevated above the inclined side 5 for a

purpose to appear hereinafter.

A knife 14 has a lengthwise slot 15 and a 50 beveled cutting edge 16. The back of the knife is located against the upturned edge 17 of the knife-support. A screw 18 passes through the slot 15 of the knife into the knifesupport, and by means of which the knife 55 māy be adjusted in the direction of its length and clamped in its adjusted position.

The section 4 of the main plate 1 is located in the same plane as the inclined end 5, which permits the knife to move freely along the inclined end and passes over the lead-guide 8. 60 By means of the screw 13 the knife can be held at varying distances above the leadguide 8.

A pencil-support comprises the slotted tubular section 19 and the ratchet-toothed 65 wheel 20. This support is held by the end 7 in a manner to permit it to rotate. A springplate 21 is secured to the main plate 1 and engages the teeth of the ratchet-toothed wheel 20 to prevent the wheel from rotating 7° backward.

To the inclined side 5 of the main plate is pivoted a bar 25 about midway of its length. The rear end 22 of this bar engages the teeth of the ratchet-toothed wheel 20. The for- 75 ward end 23 of this bar, as shown in the drawings, is located across the inclined slot 6.

In the drawings the lead-pencil 24 is located in its support 19, and the lead thereof is located in the lead-guide 8. The knife-sup- 80 port is then oscillated, which on its downstroke will cause the knife to cut a shaving from the pencil, and this cutting action will hold the pencil firmly within the lead-guide 8—that is, it will feed the pencil down as the 85 wood and lead are reduced by the cutting process. The knife-support when near the end of its downward stroke will bring the section 12 thereof against the lower end 23 of the pivoted bar and cause it to be rocked on 90 its pivot, thereby raising the rear end 22 of the bar so that it will stand across the inclined slot 6 and which will present the upper end 22 of the bar in connection with one of the teeth of the ratchet-toothed wheel 20. 95 Owing to the end portion 22 of the bar 25 being of spring material, it will yield laterally to permit it in its upward movement to pass a tooth of the ratchet-wheel. The upward movement of the knife-support will cause 100 the rear end 22 of the bar to be depressed, which will rotate the ratchet-toothed wheel 20 one tooth. This intermittent rotary movement of the ratchet-toothed wheel will cause the pencil-holder to rotate, which will present 105 a new surface to the knife in its next downward movement. At each complete oscillation of the knife-support the pencil-holder is turned a part of a revolution, and this is accomplished by the knife-support.

I claim as my invention— 1. A pencil-sharpener comprising a main

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plate, an edge to the plate having an inclined surface and a slot extending parallel with the inclined surface, a knife supported and movable over the inclined surface and having a section guided in the slot, and means for holding the knife-support separated from the section in an adjustable manner.

2. A pencil-sharpener comprising a main

plate, an edge to the plate having an inclined surface and a slot extending parallel with the inclined surface, a knife supported and movable over the inclined surface and having a section guided in the slot, and a screw adapted to hold the knife-support separated from

15 the section in an adjustable manner.

3. A pencil-sharpener, comprising a main plate, a knife pivoted to the plate, a pencil-holder revolubly supported by the plate, a ratchet-wheel connected with the pencil-length to the main plate and located in the path of the movement of the knife and to be operated by the knife at each of its movements and one end of the bar engaging the ratchet-wheel.

4. A pencil-sharpener, comprising a main plate, a pencil-holder removably supported

by the plate, a ratchet-wheel connected to the pencil-holder, a bar pivoted about centrally of its length to the main plate and located in the path of the movement of the knife and to be operated by the knife at each end of its movement, one end of the bar being of spring material and engaging the ratchetwheel.

5. A pencil-sharpener comprising a main plate, a lead-guide formed from the plate, a pencil-holder rotatably supported by the plate, a ratchet-wheel connected to the pencil-holder, one edge to the plate having an inclined surface and a slot extending parallel with the surface, a knife pivoted to the plate and movable over the inclined surface and having a section guided in the slot, a bar pivoted about centrally of its length to the main 45 plate and located in the path of the movement of the knife and to be operated by the knife at each of its movements and one end of the bar engaging the ratchet-wheel.

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Witnesses:

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