

932,724.

Patented Aug. 31, 1909.

FIG. 1.

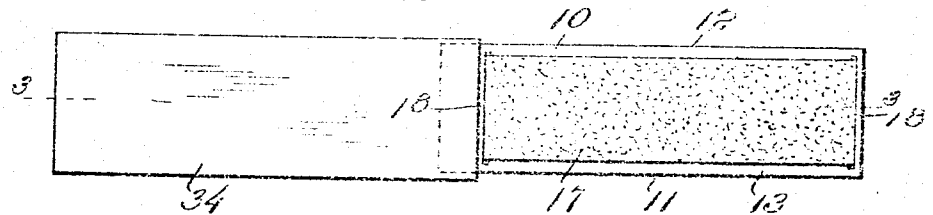


FIG. 2.

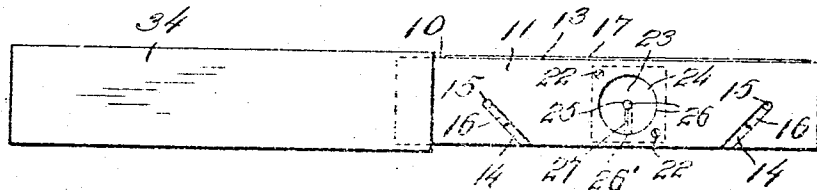
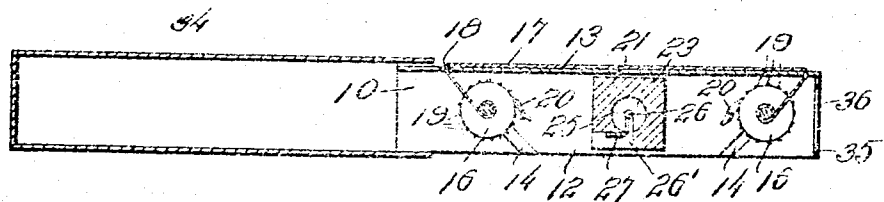


FIG. 3.



Witnesses
E. F. Smith
E. L. Chandler

Inventor
E. F. Smith
By Woodward & Chandler
Attorney

UNITED STATES PATENT OFFICE.

ERNEST F. SMITH, OF BEDFORD, OHIO.

PENCIL-SHARPENER.

932,724.

Specification of Letters Patent.

Patented Aug. 31, 1909.

Application filed January 14, 1908. Serial No. 410,857.

To all whom it may concern:

Be it known that I, ERNEST F. SMITH, a citizen of the United States, residing at Bedford, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Pencil-Sharpener, of which the following is a specification.

This invention relates to pencil sharpeners, and has for an object to provide a device of this character which may be manufactured at the relatively low figure and which effectively serves to sharpen the pencil to the desired length without breaking the lead.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a top plan view of the present sharpener showing the cover therefor extended to form a handle. Fig. 2 is a side elevational view of the same, Fig. 3 is a vertical longitudinal sectional view on the line 3—3 of Fig. 1.

Referring now more particularly to the drawings, there is shown a pencil sharpener 10 comprising a metallic frame having spaced side walls 11 and 12 respectively and a connecting top 13. The side walls 11 and 12 are provided with pairs of slots 14, which are arranged to receive trunnions 15 formed at the ends of spools 16. As shown, the slots are located with a pair at each end portion of the walls, the slots of each wall converging downwardly toward each other, and opening through the lower edges of the wall. The spools 16 are provided with an endless sheet of emery cloth 17, and this cloth is arranged to lie upon the top 13 and is arranged for movement in passages 18 formed in the top, outwardly of the upper ends of the slots 14 as shown. It will thus be seen that the emery cloth may be wound from one spool to the other. The spools 16 are each provided with ratchet wheels 19 arranged for engagement by dogs 20, and it will be observed that the spools are held with the cloth 17 taut and thus arranged to hold the spools with their trunnions at the upper ends of the slots.

Located between the walls 11 and 12, and

located between the ends of the frame, there is shown a metallic block 21, which holds the walls in spaced relation. The block 21 is secured between the walls by screws 22 or other similar fastening means and is provided with a transversely extending passage 23 having an enlarged end 24 and a reduced end as shown at 25, and these passages are arranged to lie in line with corresponding passages 26 formed in the walls 11 and 12 respectively. The block 21 is provided upon its under side with a transversely extending slot 26', and this slot is arranged to communicate with the passage 23, as shown.

The block 21 upon its under side is provided with an adjustable blade 27 arranged to extend partly within the passage 23 and the slot 26. There is thus formed a sharpener for cutting away the wood of a pencil.

A metallic casing 34 is provided and effectively serves to house the sharpener when not in use, and this casing also serves as a handle when the sharpener is in use. In use, the casing 34 is extended and is held in one hand and the pencil is placed with one end in the passage 23. The pencil is revolved, and is shaved by the knife 27. The lead of the pencil may be sharpened to the desired point by rubbing the same upon the emery cloth. The frame of the pencil sharpener at its outer end is provided with a wall 35, and an opening 36 is formed in this wall so that the finger may be inserted there-within to revolve the adjacent spool.

What is claimed is:

1. As an article of manufacture, a pencil sharpener formed of a metallic plate bent to produce spaced side walls and a connecting top, said side walls having downwardly converged slots formed therein adjacent to their ends, said slots opening through the lower edges of the walls, the slots of the two walls registering in pairs, spools having trunnions removably engaged in the slots, said top having transverse slots formed therein outwardly of the upper end of the first named slots, a strip of abrasive material engaged at its ends with the spools and extending through the slots of the top and over the portion of the top between its slots, to be supported by said portion, and a detent for each spool arranged to hold the spool with the strip taut to prevent disengagement of the trunnions from the slots.

2. In a pencil sharpener, the combination with a body portion including spaced walls

and a connecting top, said top having a transverse slot adjacent to each end, said side walls having downwardly converged slots formed therein, one adjacent to each end, the
5 upper end of said converged slots lying inwardly of the transverse slots, the slots of the two walls registering with each other, of a pair of spools having trunnions removably engaged in the pairs of registering slots, a
10 strip of abrasive material engaged with the spools and extending through the slots of

the top and over the portion of the top between the slots, and a detent for each spool, said detent being arranged to hold the spools with the strip taut. 15

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

ERNEST F. SMITH. •

Witnesses:

A. H. CUSTIN,
G. W. SCHMALTZ.