

W. K. Foster.
Pencil Sharpener.
N^o 20,056. Patented Apr. 27, 1858.

Fig: 2.

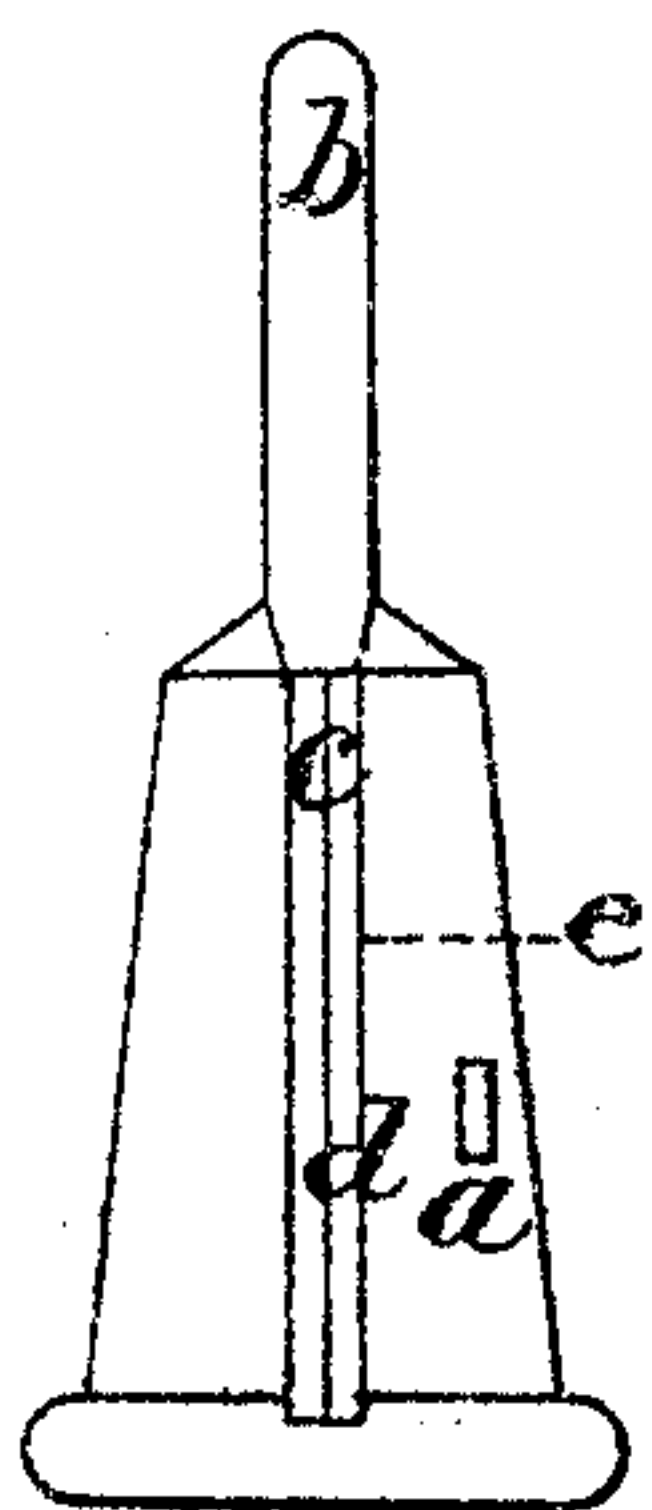


Fig: 1.

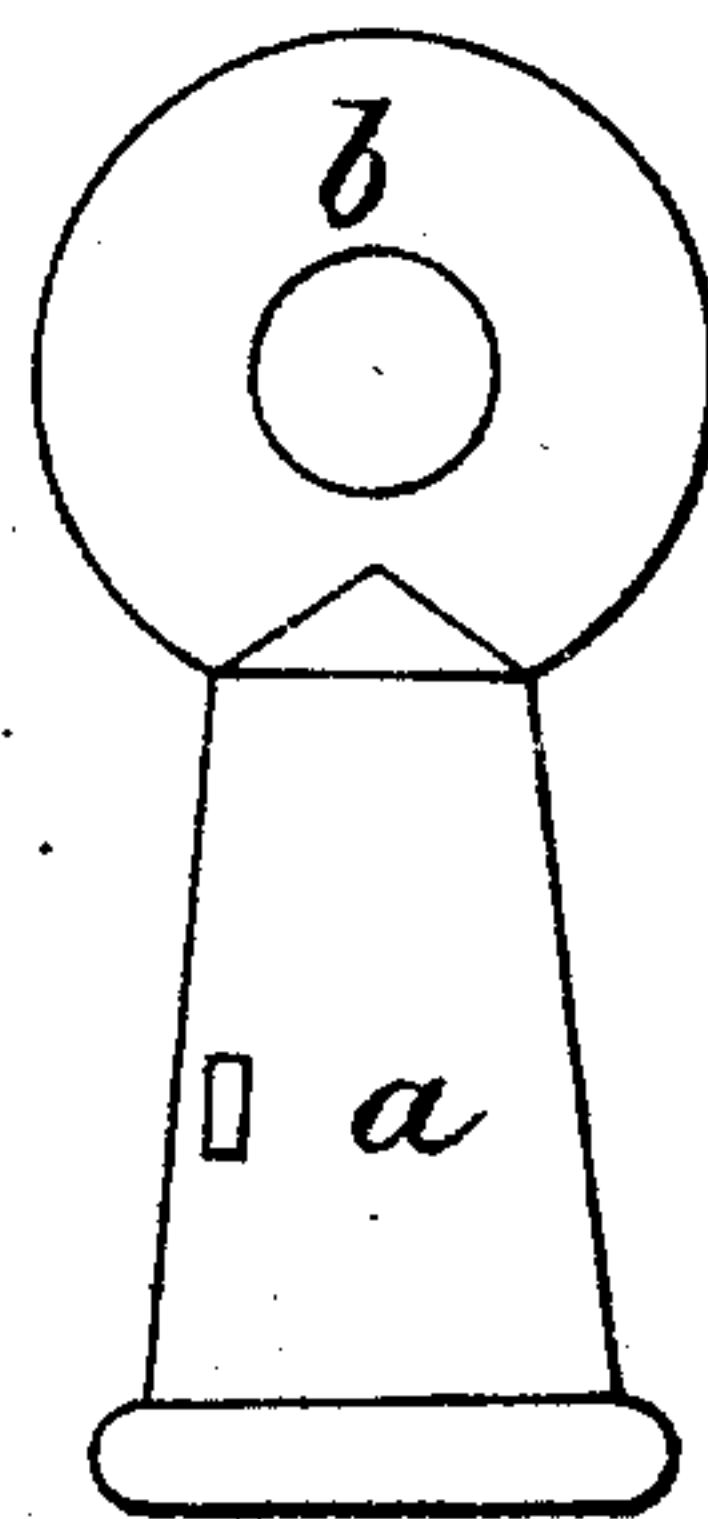


Fig: 5.



Fig: 3.

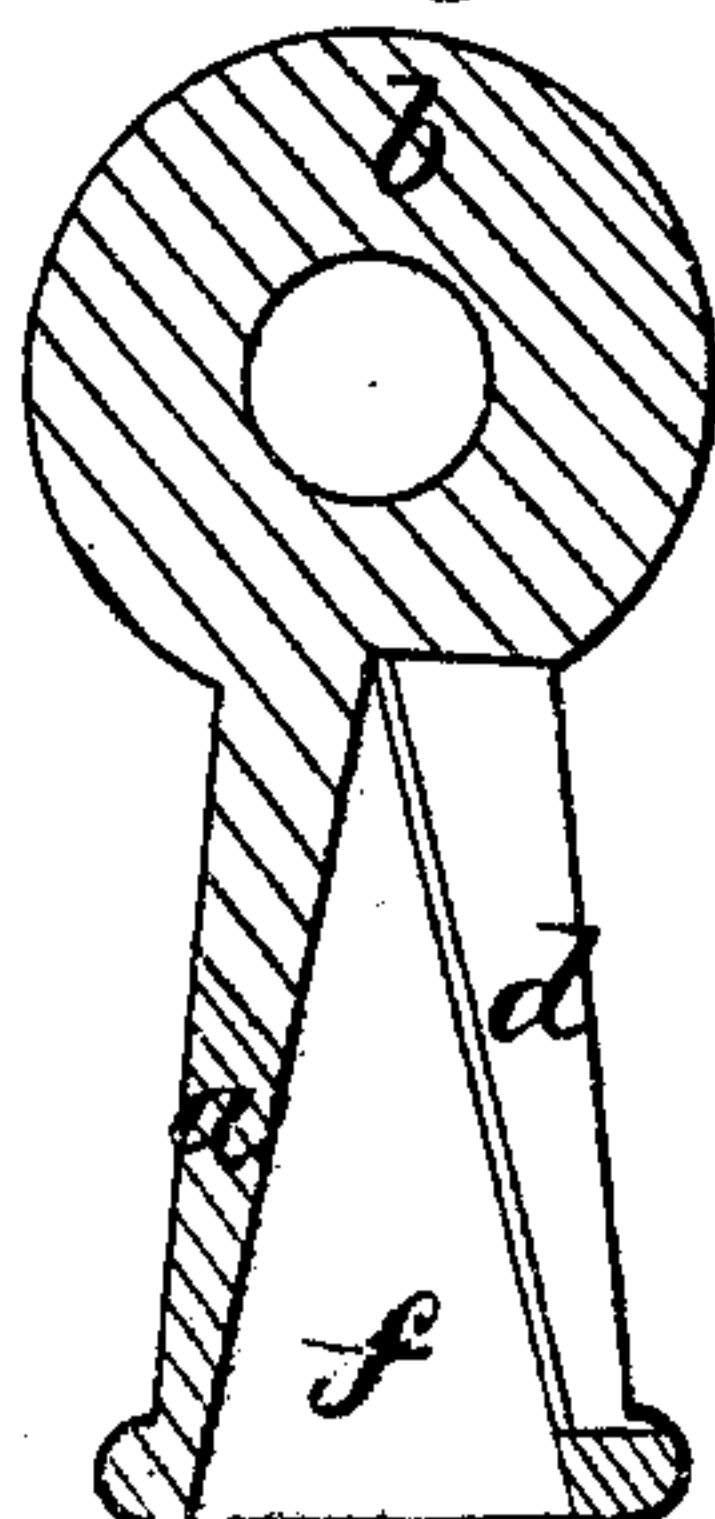


Fig: 4.



UNITED STATES PATENT OFFICE.

WALTER K. FOSTER, OF BANGOR, MAINE.

PENCIL-SHARPENER.

Specification of Letters Patent No. 20,056, dated April 27, 1858.

To all whom it may concern:

Be it known that I, WALTER K. FOSTER, of Bangor, in the county of Penobscot and State of Maine, have invented a new or

5 Improved Instrument for Sharpening or Pointing Lead-Pencils; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

10 Figure 1, denotes a side elevation of the said instrument such being taken so as to exhibit a broadside view of the handle. Fig. 2, is another side elevation taken so as to exhibit an edge view of the handle and show

15 the chip mouth and cutting knife of the instrument. Fig. 3, is a longitudinal section, and Fig. 4, a transverse section of the said pencil sharpener, while Fig. 5, denotes a side view of its cutting knife.

20 The said "pencil sharpener" consists in a hollow, conical holder or body, *a*, and a metallic or steel cutting knife, *d*, constructed, arranged, and applied together as hereinafter described. The body, *a*, is made with

25 a handle *b*, having the form of a flat annulus or ring as shown in the drawings, such handle being attached to the upper or lesser end of the bell shaped body. Within the body there is a conical chamber, *f*, whose

30 mouth is at the lower or larger end of the body. This conical chamber is furnished with a slot or chip mouth made through its side as shown at *c*, in Figs. 2 and 4, such slot extending from the top nearly down to

35 the bottom of the body or holder. The knife, *d*, is employed in connection with the conical chamber, *f*, and its chip mouth, *c*, and is arranged therein as shown in the drawings. In forming the body or holder, *a*,

40 and connecting the knife, *d*, to it, the holder is cast in a mold and on the steel knife, *d*, previously placed in the mold, the holder being so founded or cast upon the knife as to embrace it upon its opposite sides and

45 back and project on the front or outer surface of the knife (as shown at, *e*, in Figs. 2 and 4) so as to have one side of the chip mouth arranged a short distance back of the cutting edge of the knife and standing at a

50 right or obtuse angle with the outer surface of the knife. The disposition of the metal not only serves to support the knife under the outward and lateral pressure which is exerted upon it while the instrument is in

55 use, but it answers to reflect and turn the chips in such manner as to enable the instru-

ment to cut the lead as well as the wood of a pencil to great advantage, particularly when the said wood is cross grained. The conical chamber, *f*, within the holder or body, *a*, 60 serves not only to support the end of the pencil but to truly guide it to the knife and cause the knife to cut or reduce such end to a conical taper or shape.

In forming the body of the instrument I 65 usually cast it of "Britannia metal" or some analogous composition.

In operating with the instrument, a person holds it in one hand by its handle, and with the other he introduces endwise into 70 its chamber, *f*, a pencil and presses and rotates the pencil therein so as to turn the said end of the pencil against the cutting edge of the knife, the knife being set in the cham-

ber in such manner as to cut away the wood 75 and lead of the pencil while such is in rotation and reduce the same to a conical form. This little article so made is very durable and efficient in use and can be afforded at a

small expense in comparison with that with 80 which other devices hereinafter referred to for sharpening pencils or pointing wood or metal can be produced.

The cutting knife, although a piece of metal entirely separate from the holder, is 85 not held in place by any device separate from the body or holder. Therefore, the instrument, when considered as a whole, is different from others hereinafter referred to and in comparison to them is an article far 90 superior for the purpose for which it is intended.

I am aware of the male center turning machine for which a patent has been re- 95 fused to William C. Whipple and Wales French in June 1853. I am also aware of the invention described in the French patent of M. Lahausse, dated June 30th, 1853, and therefore I do not claim such. My in- 100 vention differs materially therefrom, for in manufacturing the device of Whipple and French the body of the tool and the cutter are either made in one very hard piece of metal, such as iron or steel, or the cutter is made separate and applied so as to be 105 adjustable. The device of Lahausse differs from mine inasmuch as it is only a block of hard metal having a kind of semi-conical recess. My invention, although embodying some of the principal features of these, con- 110 tains an improvement in its structure by which it can be made at a very trifling ex-

pense in comparison to either of the others. Its blade is a separate piece of metal from the holder and is confined to the latter by the act of founding or casting it, the holder
5 being so cast and arranged on and with respect to the blade that the whole article becomes an improved manufacture.

Therefore what I claim is—

10 An improved article of manufacture, or a pencil sharpener made substantially as described, that is of a steel or cutting blade, and a cast metal body as specified, cast or founded on the said blade so as not only to confine it in its proper place with respect to
15 the conical cavity of the body or holder, but so that the metal of the body or holder shall embrace opposite sides and the back of the

blade and terminate at or near the cutting edge of the blade by a surface made to stand at a right angle or thereabout to the outer
20 surface of the knife, the same, when the instrument is in use, serving not only to support the knife under pressure against its inner surface and cutting edge, but also to
25 turn a chip or shaving so as to enable the sharpener to operate to great advantage on the lead and wood of the pencil particularly when the wood is cross grained.

In testimony whereof I have hereunto set my signature.

WALTER K. FOSTER.

Witnesses:

R. H. EDDY,

F. R. HALE, Jr.