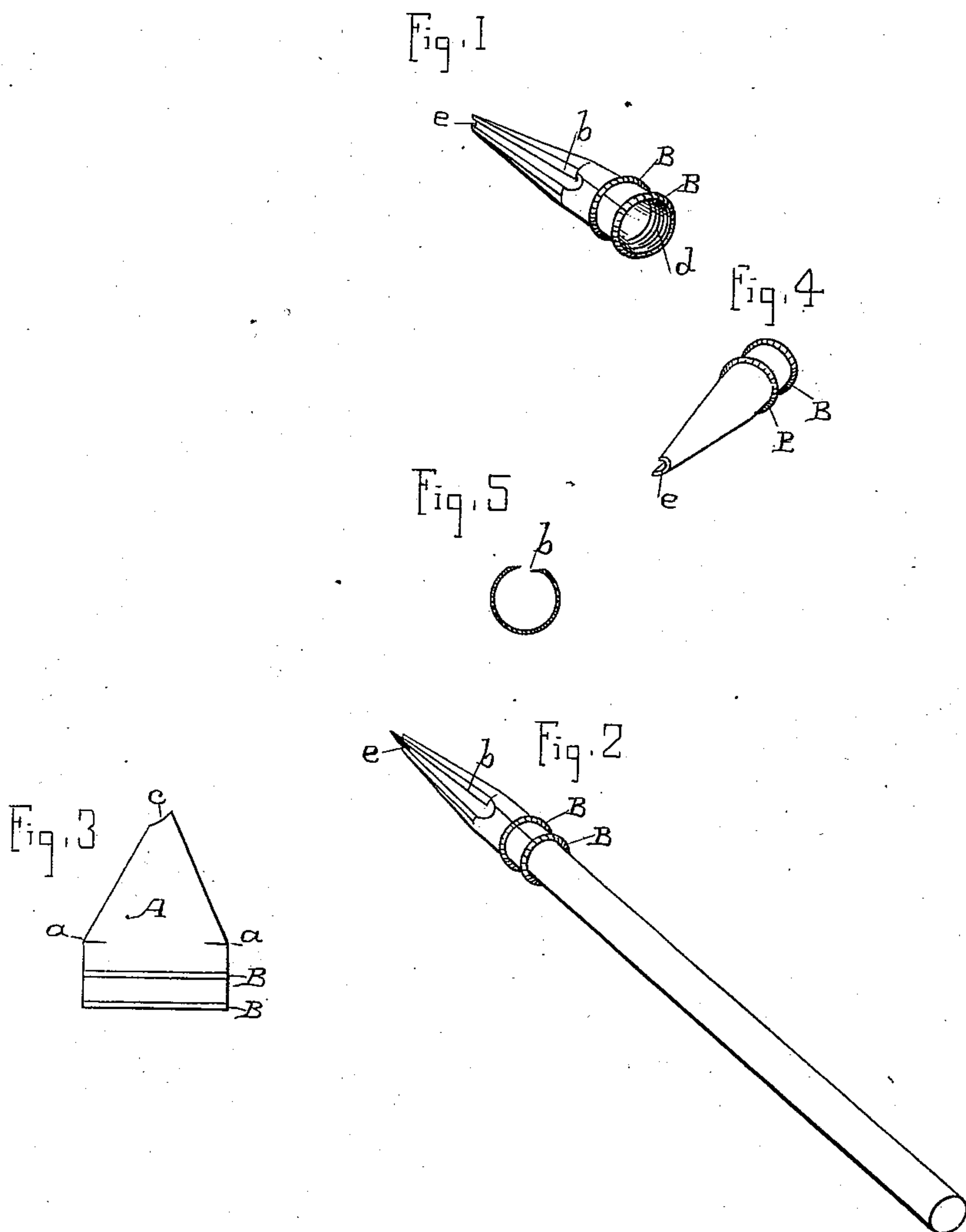


(No Model.)

J. KRAKER.
PENCIL SHARPENER AND POINT GUARD.

No. 557,402.

Patented Mar. 31, 1896.



Witnesses,
J. A. Boyless

Inventor,
Joseph Kraker
By Devey & Co
attys

UNITED STATES PATENT OFFICE.

JOSEPH KRAKER, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO CHARLES J. WAGNER, OF SAME PLACE.

PENCIL-SHARPENER AND POINT-GUARD.

SPECIFICATION forming part of Letters Patent No. 557,402, dated March 31, 1896.

Application filed September 6, 1895. Serial No. 561,688. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH KRAKER, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Pencil-Sharpeners and Point-Guards; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device for sharpening pencils and for protecting the point from breakage or injury.

It consists in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a view of my device. Fig. 2 shows it applied to the pencil. Fig. 3 shows the sheet stamped out before bending into shape. Fig. 4 shows the lead-cutting edge. Fig. 5 is a cross-section through the cone.

The object of my invention is to provide a pencil-sharpening device with a means for always retaining it upon the pencil and advancing it as occasion requires during the sharpening, so that the device remaining on the pencil will serve to protect the point and prevent breakage.

In the construction of my pencil-sharpener I form blanks A of thin sheet steel made tapering or triangular toward one end and having parallel sides extending a short distance from the opposite end intersecting the angular sides, as shown. At the point of intersection the angles are slit or cut a short distance in line toward each other, as shown at

a. The blank is then bent by any suitable machinery and the rectangular portion forms a short cylinder, while the tapering portion forms an elongated cone, as shown in Fig. 1.

The apex of the cone is cut diagonally either by cutting the blank, as shown at c in Fig. 3, before it is rolled into shape, or by grinding off the point upon an emery-wheel after the cone has been formed. Upon one side the cone is also ground off until an open slot is made extending from the apex to the base of the cone, one of the edges b of the open slot essentially coinciding with the junction of the two meeting edges. This edge is slightly bent inward and forms the cutting edge by which the pencil is sharpened. The base of

the cylindrical portion has rings or milled edges formed upon it, as shown at B, to make a convenient hold for the fingers in operating the device, and the interior surface is cut into shallow screw-threads d, the diameter of the interior being such that these screw-threads will cut slightly into the wood of the pencil, thus serving to hold the device permanently upon the end of the pencil and also to advance it when it is rotated, so that the cutting edge will act to shear away the wood and make a conical point upon the pencil. The small opening through the angular end portion c serves to cut the projecting lead of the pencil and give it a proper point corresponding with the taper of the wood. The advantage of this method of cutting is that very little strain is brought upon the lead and there is but little tendency to break the lead when the pencil is sharpened.

This device, being made, as described, of thin sheet-steel, is exceedingly light and is left upon the end of the pencil, the screw-threads holding it in place, so that when the pencil is sharpened nearly two-thirds of the projecting lead remains inclosed within the apex of the cone, thus preventing such side strains as usually tend to break the lead off close up to the wood and make it necessary to cut away a large portion of the pencil and again sharpen it.

As fast as the lead is worn down this device is advanced by turning it a little upon the pencil, thus exposing enough of the point to be operative, and the work and operation is thus continued until the pencil is used up.

A device constructed in this manner is always convenient and in readiness for use and in no danger of being mislaid, as it always remains with the pencil.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A pencil-sharpener consisting of a sheet-steel blank bent to form an elongated cone at one end and a cylindrical base at the opposite end, the apex of the cone being cut diagonally, and one side having an open slot formed therein, the base of said slot being intersected by a transverse cut made between

the base and cylindrical portion whereby the
edge of the slot may be slightly bent inward
to form a cutter, screw-threads formed in the
interior of the cylindrical portion of such di-
5 ameter as to engage the exterior surface of
the pencil to hold the device thereon and
cause it to advance longitudinally when
turned upon the pencil, and exterior annular
milled edges or rings struck up in the cylin-

drical portion to form a hold by which the de-
vice may be turned upon the pencil.

In witness whereof I have hereunto set my
hand.

JOSEPH KRAKER.

Witnesses:

S. H. NOURSE,

H. F. ASCHECK.