

W. H. Howland,
Knife Sharpener.
No. 97,090. *Patented Nov. 23, 1869.*

Fig. 1.

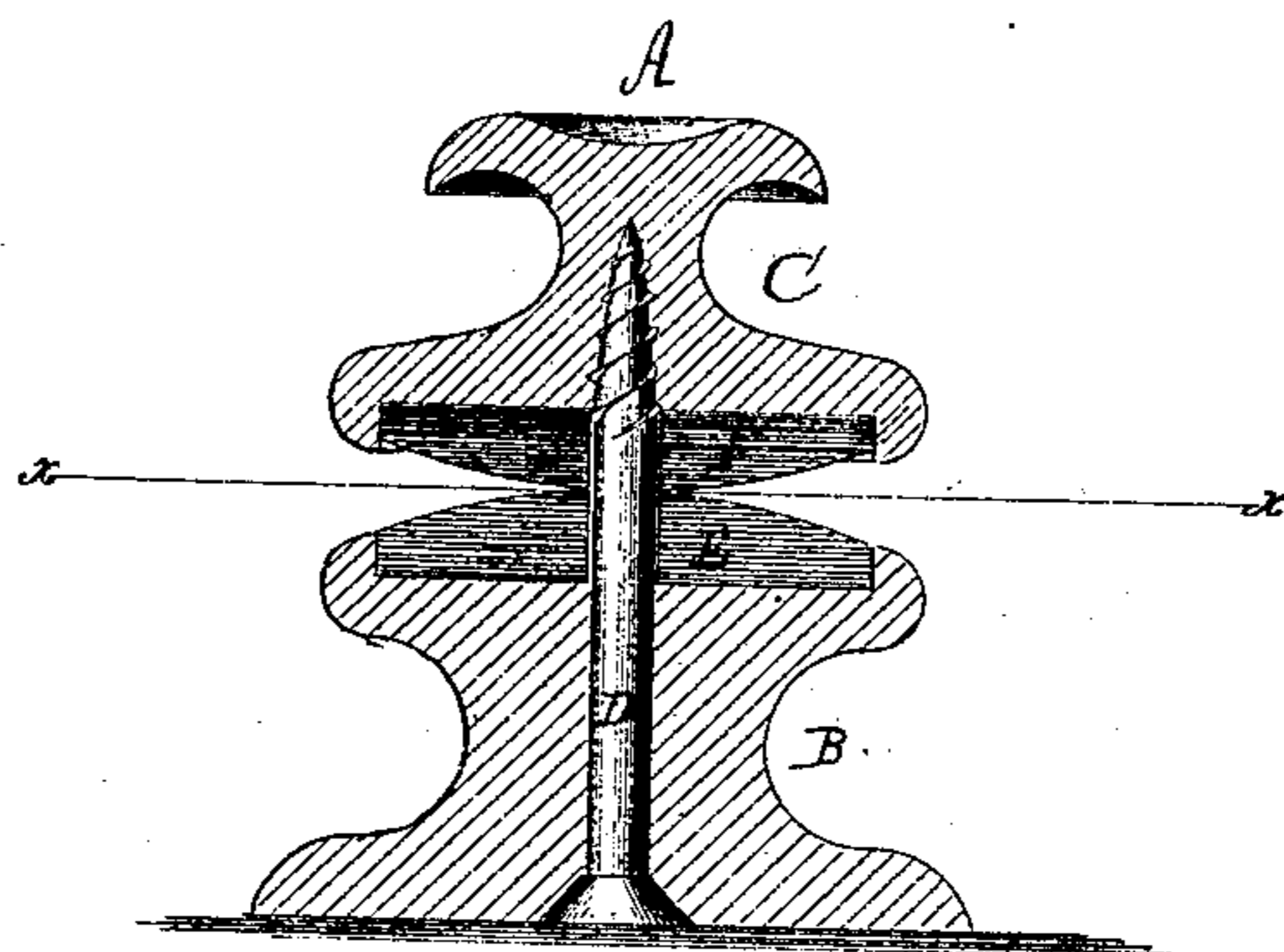
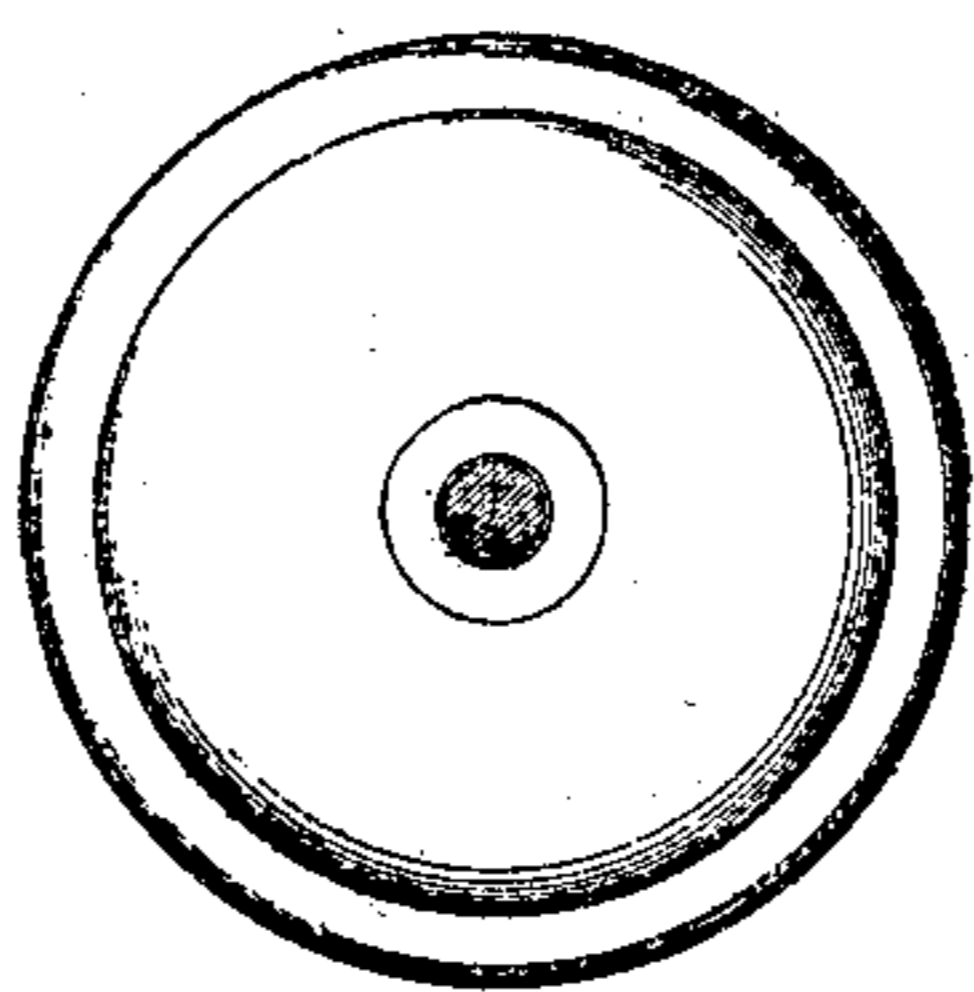


Fig. 2.



Witnesses:
Sustard Dutcher
Isabel Brook
J. B.

Inventor:
W. H. Howland
PER *Wmms*
Attorneys.

United States Patent Office.

W. H. HOWLAND, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 97,090, dated November 23, 1869.

IMPROVEMENT IN KNIFE-SHARPENER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, W. H. HOWLAND, of San Francisco, in the county of San Francisco, and State of California, have invented a new and useful Improvement in Knife-Sharpeners; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in an article for sharpening knives, whereby that necessary operation is greatly facilitated; and

It consists in the employment of two conical disks, composed of emery, or of some equivalent grinding-composition or material, secured together in a suitable stand or support, by means of a screw or bolt, as hereinafter more fully described.

In the accompanying drawing—

Figure 1 represents a vertical section of the sharpener.

Figure 2 is a horizontal section, through the line $x x$ of fig. 1.

Similar letters of reference indicate corresponding parts.

A represents a stand or support, formed of two parts, B and C, which are secured together by a central screw, D.

This stand may be made of wood, porcelain, or metal, or of any other suitable material.

Between these two parts, B and C, I secure two conical emery disks, E and F.

These disks or wheels are placed in recesses in the parts B C, or are secured to those parts in any other manner, so that they retain their places, and do not revolve or turn when in use.

I do not confine myself to the use of emery exclusively for this purpose; any equivalent material or substance may be used.

The faces of the disks, near their centres, or around their orifices, are left flat, so that they will fit closely

together, and form a sharp angle, as seen in the drawing.

The blade of the knife to be sharpened is drawn through this angle. If the edge is blunt, the emery will cut away the metal on each side, until it is made sharp.

As the blade is drawn through between the disks, force is exerted upon it by pressing it into the angle, so that the emery surfaces will take hold of the sides of the blade and form a perfect edge.

The face of the disks instead of being rounded, as seen in the drawing, may be flat, or present a straight line from the periphery to the flat parallel surfaces around the centre, but I prefer the rounded surface, as represented.

In case the part C is made of porcelain, (or should it be made of wood,) a metallic nut may be let into it with which the screw will engage.

This screw may extend entirely through the upper part, as well as through the lower, with a nut on either end.

The lower portion, B, may form a bell, so that the article may be used as a combined knife-sharpener and table-bell.

The disks E F may be removed as often as may be required.

The form of the sharpener may be round, as represented in fig. 2, or made in any other desired form.

I do not confine myself to any particular form or size, or style of finish.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The disks E F, holder B C, and screw D, constructed and arranged as described, and for the purpose specified.

W. H. HOWLAND.

Witnesses:

GEO. W. MABEE,

ALEX. F. ROBERTS.