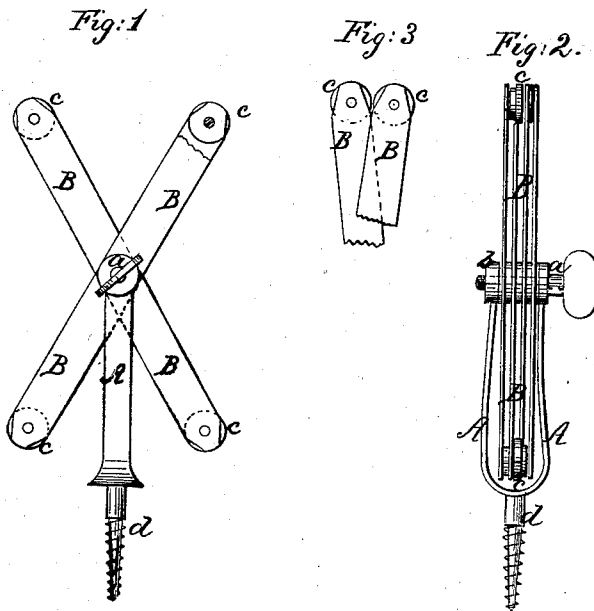


A. Herthal,
Knife and Scissors Sharpener.
N^o 66,837. Patented July 16, 1867.



Witnesses.
Thos Trusche
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AUGUST HERTHAL, OF BRIDGEPORT, CONNECTICUT.

Letters Patent No. 66,887, dated July 16, 1867.

IMPROVED KNIFE AND SCISSORS-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, AUGUST HERTHAL, of Bridgeport, Fairfield county, Connecticut, have invented a new and improved Knife and Scissors-Sharpener; 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, in which—

Figure 1 is a front elevation of my improved knife and scissors-sharpener.

Figure 2 is a side elevation of the same.

Figure 3 is a detail front view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a device by which knives of any size, as well scythes, sickles, and other large curved or straight cutting-tools and small knives and scissors can be sharpened with great facility.

The invention consists of two bars of equal length, made of hardened steel, and pivoted to a support by a pin which passes through their centres, and which connects them with a support, by which the whole device can be secured to a table or other suitable article. The pivoting pin is provided with a screw-thread at its end, and the arms of the support can thus be drawn together and the steel bars clamped, so that the latter can be held in any desired position. Each of these bars has four cutting-edges, so that eight cutting-edges are in one device, which number can be doubled by making double bars and holding the ends of each pair apart, as well as connecting the same by means of steel rollers, which can also be used for sharpening purposes.

A represents a U-shaped metal bar, through the ends of which a pin, *a*, passes. A nut, *b* is formed on the end of one of the arms, and the end of the pin *a* is provided with a screw-thread, so that the ends of the bar A can, by means of this screw, be drawn more or less together. B B are four straight steel plates with rounded ends or bevelled corners. Two and two of these plates are connected at their ends by means of intervening rollers C, as is clearly shown in fig. 1. These pairs of plates are pivoted by the pin *a* to the support A, as shown, the bars crossing each other so that at any one of the points where they cross, the grinding-edge will be formed. For scissors the arms B are more spread than for knives. They can be held in any position by drawing the arms of the support A together by means of the screw. For scythes and other curved cutters I prefer to use the rollers C. The ends of the plates B are then brought close together, so that the rollers on opposite arms B' touch each other, as shown in fig. 3. These rollers may be round or polygonal, as may be desired. The bars B' can be arranged single and not in pairs, *i. e.*, but two bars are made to cross each other in one support, A, and not four. From the joint of the arms of the support A projects a screw or other suitable apparatus *d*, by which the whole device can be stationary and fixed.

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

1. The plates B B, constructed as described, and adjusted by means of the set-screws *a* between the jaws of the spring-plate A, provided with screw *d*, as herein set forth for the purpose specified.

2. The double plates B B, in combination with the rollers C C, set-screw *a*, and support A, all made and operating substantially as and for the purposes herein specified and described.

AUGUST HERTHAL.

Witnesses:

WM. F. McNAMARA,
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