

(No Model.)

I. J. IDE, R. B. GILMOUR & E. RICHARD.  
KNIFE OR SHEARS SHARPENER.

No. 577,922.

Patented Mar. 2, 1897.

Fig. 1.

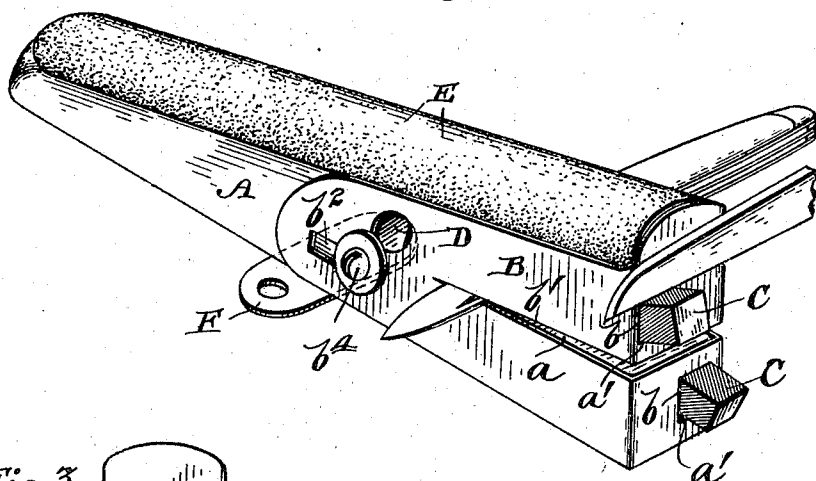


Fig. 3.

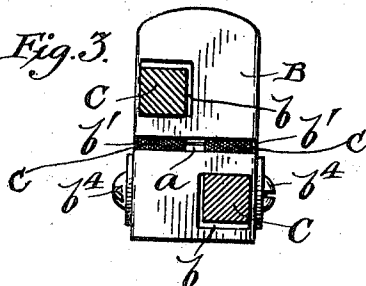
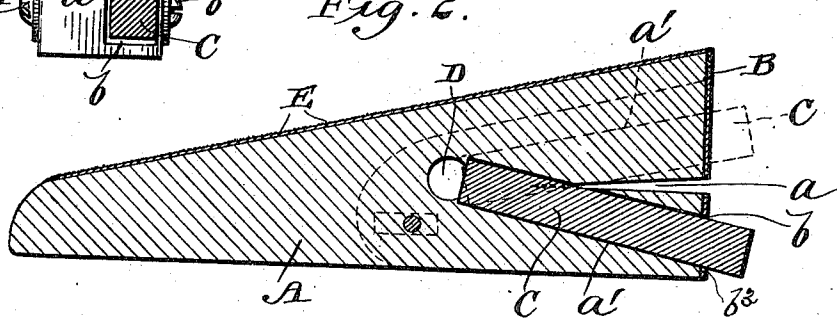


Fig. 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## KNIFE OR SHEARS SHARPENER.

SPECIFICATION forming part of Letters Patent No. 577,922, dated March 2, 1897.

Application filed June 23, 1896. Serial No. 596,642. (No model.)

*To all whom it may concern:*

Be it known that we, IRA J. IDE, ROBERT B. GILMOUR, and EMANUEL RICHARD, citizens of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Knife or Shears Sharpeners; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to knife and shears sharpeners; and it consists in such a sharpener which comprises a stock, two reversely-inclined files or hones, a confining adjustable cap, and certain other novel features of construction, as will be hereinafter described and specifically claimed.

In the drawings, Figure 1 represents a perspective view of our improved sharpener as used in a horizontal position, showing a knife-blade and one blade of a pair of shears as in the act of being sharpened. Fig. 2 is a vertical longitudinal section of the sharpener in the line of the rear file, showing the respective features of the invention in full lines and in dotted lines, the front file being shown with other parts by dotted lines and the rear file in full lines; and Fig. 3 is an end view of the sharpener, the exposed ends of the files being shown in cross-section.

A in the drawings designates the handle or stock; *a*, a guide-slot extending entirely across the stock and from one end a considerable distance and being of V form, as shown. This slot is for the passage of the knife-blade back and forth against the files C.

*a' a'* are the file-channels which are in cross-section of the same form as the files and of the same diameter. These channels extend from one end of the stock on reversely-inclined lines to a filings channel or receptacle or discharge D, as represented.

B is a metallic cap apertured at *b b*, slotted at *b'*, and apertured at *b<sup>2</sup>* for the passage of a screw-pin having a thumb-nut *b<sup>4</sup>*, by which said cap is secured to the stock and clamped with a wedging action upon the under side of one of the inclined files and upon the upper

side of the other inclined file, as illustrated in Figs. 2 and 3 of the drawings.

The files C C are arranged in different vertical planes and on reversely-inclined planes, and may have any desired number of faces, preferably four. The files may be cylindrical, if desired. The filings may accumulate in the channel or receptacle D and be emptied out of the same through a coinciding passage in the cap, as shown.

E is a file or hone upon one side of the handle or stock, suitably secured thereto by mortising, gluing, or otherwise.

F is a means by which said sharpener is secured to a wall or other foundation, in this instance it being a perforated screw-plate.

From an inspection of the drawings it will be seen that the files are not inserted their full length into the stock, but are allowed to protrude some distance beyond one end thereof. By this construction a means for sharpening the blades of shears is provided, while the files, by forming an angle with each other and crossing the slot *a*, afford a means for sharpening knife-blades. The files may be drawn out or forced inward or turned around so as to present new cutting-faces by loosening the thumb-nut *b<sup>4</sup>* and sliding the cap longitudinally, so as to relieve the files from the bind of the cap. It will be observed from Fig. 3 that the apertures *b* are of considerably greater diameter than the files, and that room is thus afforded for easily inserting and withdrawing the files when it becomes necessary, and while this is so the bind of the cap upon one of the inclined surfaces of each file will be secured when the cap is forced home and secured by the screw-pin and thumb-nut *b<sup>4</sup>*. The files being placed in the desired position, after being turned around the cap is readjusted to its binding position and fastened by the thumb-nut and screw-pin, and when fastened one of the edges of the apertured portion of the cap will bind against one side of one of the files and also against one of the sides of the other file, and thereby wedge them firmly in place.

In operating with the sharpener the knife-blade is inserted in the knife-slot *a* and *b'* and forced into the angle formed by the files

where they intersect said slot, the blade being drawn transversely through said slot. The blades of the shears are sharpened by being drawn across the protruding portions of the files with their cutting edge in contact with surface of the file where it enters through the cap and into the stock.

Having now described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a knife-sharpener of the type herein described, the combination with a handle or stock provided with a guide-slot for the passage of the knife-blade, and inclined file-channels intersecting said slot; files or hones removably and adjustably applied in said file-channels, an apertured channel in the stock at the ends of the said file-channels for the reception and discharge of filings, and an adjustable cap constructed with apertures coinciding with the guiding-slot in the stock, and an adjusting-slot, and fastening means working in conjunction with said adjusting-slot, substantially as described.

2. The combination of the reversely-inclined files, the stock provided with a guiding-slot, and a cap provided with coinciding apertures, said slot and apertures serving for the passage of the knife against the files, and said parts being constructed to permit the files to be set inclined and to extend out beyond the stock, and to be fastened in such position as to permit a knife to be sharpened on certain portions of the files, and scissors or shears to be sharpened on other portions thereof, substantially as described.

3. The combination with a handle provided with a guide-slot and reversely-inclined file-channels intersecting said slot in opposite directions, and an adjustable cap having apertures in its end of greater diameter than the files and also provided with a guiding-slot corresponding with the apertures in the handle, means for securing the cap to the handle and adjusting it longitudinally, files removably fixed in said channels, an apertured channel for receiving and discharging the filings, a file or hone of suitable material affixed to one side of the stock, and means for securing said sharpener to a wall or other foundation, substantially as described.

4. The combination of the stock or handle provided with a slot for the insertion of the article to be sharpened, the cap having similar coinciding apertures and made adjustable longitudinally on the stock, reversely-inclined files entering snugly into the apertures of the stock, and a means for fastening the cap in its adjusted binding position upon the files, the whole being such that the cap binds on the under inclined surface of one file and on the upper inclined surface of the other file when the cap is forced home and secured in its position by the fastening means.

In testimony whereof we affix our signatures in presence of two witnesses.

IRA J. IDE.

ROBERT B. GILMOUR.

EMANUEL RICHARD.

Witnesses:

JAMES T. WATSON,

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