No. 609,046.

Patented Aug. 16, 1898.

R. E. POINDEXTER.

KNIFE OR SCISSORS SHARPENER.

(Application filed Apr. 20, 1898.)

(No Model.)

Fig. 1.

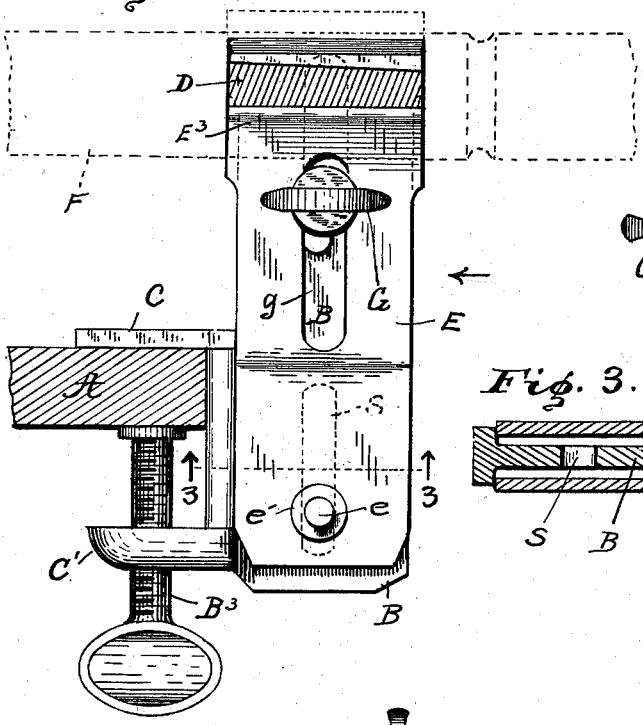


Fig. 2.

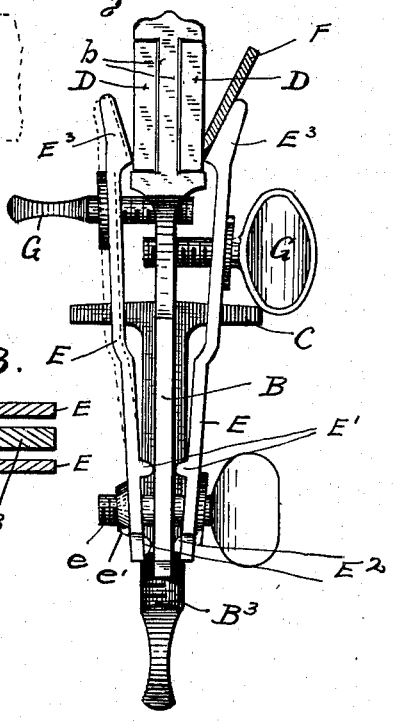


Fig. 3.

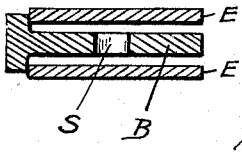


Fig. 4.

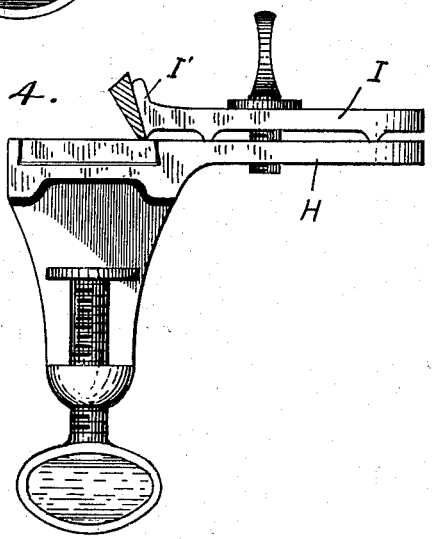
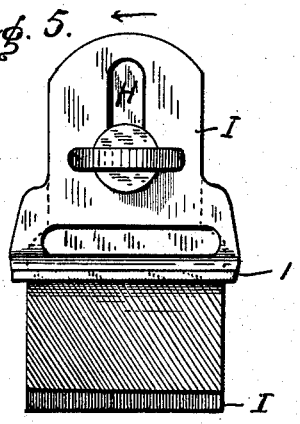


Fig. 5.



Witnesses;
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UNITED STATES PATENT OFFICE.

ROBERT E. POINDEXTER, OF INDIANAPOLIS, INDIANA.

KNIFE OR SCISSORS SHARPENER.

SPECIFICATION forming part of Letters Patent No. 609,046, dated August 16, 1898.

Application filed April 20, 1898. Serial No. 678,243. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. POINDEXTER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Knife or Scissors Sharpeners, of which the following is a specification.

This invention relates to improvements in tools for sharpening scissors, knives, and the cutting edges of like tools which can be sharpened by drawing the blades across a file; and the object of the invention is to provide a simple, cheap, and effective sharpening device in which the relative position of some of the parts can be changed to enable various portions and all portions of the cutting-surface of a flat file to be brought successively into use.

I accomplish the objects of the invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view in side elevation of my knife-sharpening device clamped to the top of a table, a knife being shown in dotted lines; Fig. 2, a front elevation looking in the direction of the arrow in Fig. 1; Fig. 3, a horizontal section on the dotted line 3 3 of Fig. 1; Fig. 4, a modified construction for sharpening scissors, the view being an elevation looking in the direction of the arrow in Fig. 5; and Fig. 5 is a plan view of the modified construction shown in Fig. 4.

Similar letters of reference indicate like parts throughout the several views of the drawings.

A is the top of a table to which the sharpener is fastened.

B is a vertical plate or standard which forms the body of the device.

C and C′ are parallel jaws integral with the body B, projecting from one edge of the latter and adapted to receive the table-top or other support to which the sharpener is to be fastened, which supporting-body will be inserted between the two jaws and held by the set-screw B^3, which passes through a threaded opening in the lower jaw C′ in the manner shown in the drawings. The upper end of the plate B is measurably thickened, and the thickened portion is provided with wide flat-bottomed grooves *b*, within which the flat files D are inserted. The grooves are slightly wider at the ends next to the table, whereby when the knife is drawn outwardly in sharpening the pull on the file will tend to tighten the latter in its seat, and the walls of the groove are sloped inwardly at the bottom the better to retain the files. The files are shaped to fit the peculiarities in the shape of the grooves in which they are seated. The teeth of the files will be inclined outwardly and upwardly with relation to the sharpener when in operative position, whereby the tendency will be to peel the metal from the edge of the knife-blade up in the process of sharpening.

E are plates removably secured to the flat sides of the body B. The body B has the longitudinal slot S, and the lower ends of the plates E are provided with openings through which a bolt or screw *e* is projected. A boss *e*′ is formed around the opening on one of the plates to make room for a substantial thread which is formed therein to engage the thread on the screw, whereby the two plates will be tightened onto the body B. Two transverse ribs E′ and E^2 on opposite sides of the openings for the screw are formed integrally with the plates E on the sides next to the body B. The top ends of the plates E are also provided with an enlargement E^3, with inwardly-sloping inner sides, which stand in front of the files in the manner clearly shown in Fig. 2. These are the rests and guides for the knife-blades F, which are held firmly against the inclined sides and are pressed down against the file. A longitudinally-reciprocating movement of the knife will cause shavings of the blade to be removed. The inclination of the guide to the file is such as to give the right bevel to the cutting edge.

One side of the blade is sharpened at a time, and the construction above described is duplicated in a reverse direction to permit both edges of the blade to be sharpened successively. The plates will be made to stand normally away from the files at the tops of the latter to an extent which will be determined by the relative height of the ribs E′ and E^2. In fitting up the tool one or the other of the ribs can be filed to give the desired normal position of the heads. The exact distances of the heads from the files will be obtained by the bolts G, which pass through

slotted openings *g* through the plates and enter threaded openings in the body B.

The slot S in the body B and the slots *g* in the plates E enable the plates to be raised and lowered to bring the edge of the knife under treatment into contact with unused portions of the file. This is an important feature of my invention, as it permits the use of the entire surface of the file and adds very materially to the life of the tool.

The modification shown in Figs. 4 and 5 embodies no essential differences of construction over that shown in Figs. 1 and 2, except that the part H, which corresponds to the body B, is placed in a horizontal position, and the clamp is correspondingly changed in its point of attachment to suit this changed position of the body. A horizontal body is preferable for convenience in a tool for sharpening scissors. The adjustable plate I is of course horizontal, and the angle of the head I′ is more abrupt to suit the bevel on the edge of the tool to be sharpened.

Having thus fully described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. In a knife or scissors sharpener, a body portion having means for affixing it to a support and having a flat file removably secured thereto and a guide against which the blade to be sharpened will be held, said guide being opposite the cutting-face of the file and being removably and adjustably secured to the body whereby it can be changed in its position to bring different portions of the file into use, substantially as described and for the purposes specified.

2. The combination, with the body having means for securing it to a support, and files removably secured to the body, of plates with expanded beveled ends, said ends being opposite the files and said plates being adjustably secured to the body to permit longitudinal adjustment of the plates, as and for the purposes specified.

3. In a sharpener for the purposes specified, a fixed body portion having one or more flat cutting-surfaces and as many guides as there are cutting-surfaces secured to the body portion by threaded bolts and said guides having ribs on each side of the bolt between the guide and the body, substantially as described and for the purposes specified.

4. In a sharpener the body portion having means for fastening it to a substantial support and having an upper thickened end, grooved substantially as described, to form file-seats and having screw-holes and a longitudinal slot, files mounted in the seats, a pair of plates bolted at their lower ends to the body and having ribs on each side of the bolt and having upper, sloping flat-surfaced ends opposite the files and longitudinal slots intermediate of the ends of the plates and bolts substantially as shown and described to fasten the plates to the body and to regulate the distance of the heads from the files.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 4th day of April, A. D. 1898.

ROBERT E. POINDEXTER. [L. S.]

Witnesses:

JOSEPH A. MINTURN,

E. J. HICKS.