L. SMITH.

KNIFE SHARPENER.

APPLICATION FILED OCT. 6, 1915.

1,202,113. Patented Oct. 24, 1916.

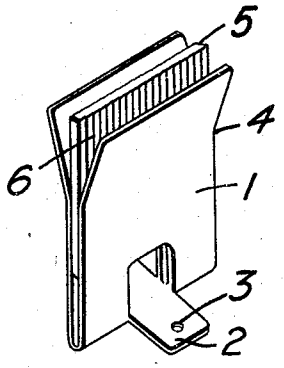


FIG. 1

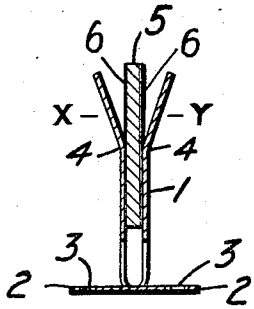


FIG. 2

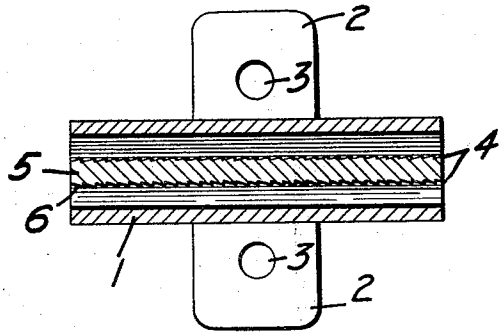


FIG. 3

WITNESSES

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UNITED STATES PATENT OFFICE.

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KNIFE-SHARPENER.

1,202,113. Specification of Letters Patent. Patented Oct. 24, 1916.

Application filed October 6, 1915. Serial No. 54,462.

To all whom it may concern:

Be it known that I, LEONARD SMITH, of the city of Stratford, in the county of Perth, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Knife-Sharpeners, of which the following is the specification.

My invention relates to improvements in knife sharpeners and the object of my invention is to devise more simple means whereby a knife may be quickly and correctly sharpened, and consists essentially of an abrasive plate member, a holder therefor, and means adapted to guide the knife at the proper angle while being drawn longitudinally in contact with the abrasive member.

Figure 1 is a perspective view of my sharpener. Fig. 2 is a vertical section through Fig. 1. Fig. 3 is an enlarged plan section through Fig. 1.

In the drawings like letters of reference indicate corresponding parts in each figure.

1 indicates a metallic spring holder of U-shaped form and provided with punched and bent out portions forming feet 2 having holes 3, the upper portion of each arm of the U being bent outwardly at 4 in an inclined direction.

5 indicates an abrasive member gripped by the spring sides or arms of the holder 1 and held thereby in a vertical position, the arms of the U being outwardly inclined so as to leave the upper portion of the abrasive member exposed.

6 indicate the cutting edges of the member 5.

Having described the principal parts involved in my invention I will briefly describe the operation of the same.

The metallic holder 1 acts as a gripping spring holding the abrasive member 5 in position. The flanges are bent out at 3 at such an angle from the perpendicular that when the knife to be sharpened is placed flat on the upper surface of the flange, the knife has the correct inclination to the abrasive member 5. The knife is then drawn along in this position a few times filing one side. Then placing the knife flat on the other flange the knife is drawn along in this position a few times filing the other side and giving a good cutting edge.

The cutting edges 6 on my abrasive member 5 are preferably vertical, although diagonal cutting edges as used on a file could be employed, but I have found that when the vertical cutting edges are used the abrasive member 5 is held more firmly by the holder 1. The cutting edges 6 are preferably ratchet shaped and therefore the knife can be drawn across in one direction only. If the cutting edges were V-shaped the knife could be drawn across in either direction but we do not get as good results as by the use of the ratchet shaped cutting edges.

The holes 3 in the punched and bent out portions 2 are for nailing or otherwise securing the sharpener in any convenient place.

As the cutting edges 6 become worn, the abrasive member 5 may be gradually tapped down until the upper edge is reached, and then it may be taken out and placed in upside down and again gradually tapped down until the whole surface of both sides of the abrasive member 5 has been utilized.

When dirt becomes lodged in the sharpener, the abrasive member 5 may be removed by simply pulling apart the flanges. If by continued use, the holder does not grip the abrasive member firmly, the flanges may be slightly pressed together and the abrasive member 5 will then be securely held.

Hence it will be seen that I have devised simple means whereby an edge may be quickly and accurately put on a knife.

What I claim as my invention—

In a sharpener having an abrasive member, a one piece holder therefor comprising a U-shape metallic spring holder provided on the base of the U with punched feet having holes, the upper arms of the U being bent outwardly in an inclined direction, said abrasive member being gripped by said holder between the punched out portions and the inclined portions.

LEONARD SMITH.

Witnesses:

CHARLES GAGEN,

WM. AMES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."