

No. 647,640.

Patented Apr. 17, 1900.

P. M. WITHINGTON.
KNIFE SHARPENER.

(Application filed Jan. 30, 1900.)

(No Model.)

Fig. 1.

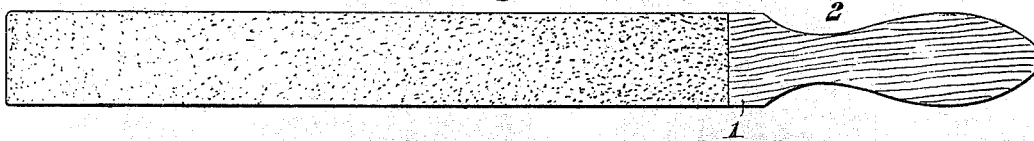


Fig. 2.

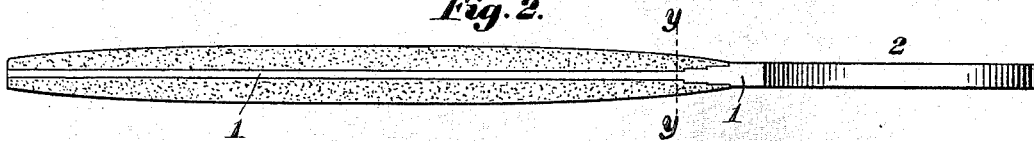


Fig. 3.

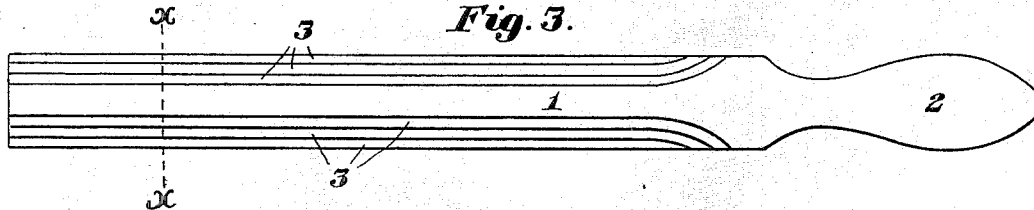


Fig. 5.

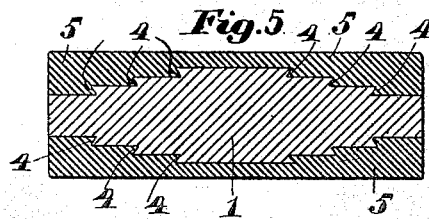
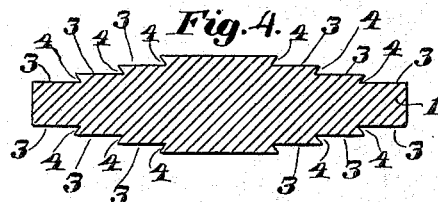


Fig. 4.



Witnesses:
Walter O. Lombard.
James A. Bacon

Inventor:
Phineas M. Withington,
by N. C. Lombard
Atty.

UNITED STATES PATENT OFFICE.

PHINEAS M. WITHINGTON, OF STOUGHTON, MASSACHUSETTS.

KNIFE-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 647,640, dated April 17, 1900.

Application filed January 30, 1900. Serial No. 3,356. (No model.)

To all whom it may concern:

Be it known that I, PHINEAS M. WITHINGTON, of Stoughton, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Knife-Sharpeners, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to knife-sharpener and is an improvement upon the invention described in Letters Patent No. 103,113, granted to me May 17, 1870; and it consists in certain novel features of construction which will be readily understood by reference to the description of the accompanying drawings and to the claims hereto appended and in which my invention is clearly pointed out.

Figure 1 of the drawings is a plan of my improved knife-sharpener. Fig. 2 is an edge view. Fig. 3 is a plan of the handle and core before the abrading material is applied thereto. Fig. 4 is a section of said core on line *x x* on Fig. 3, but drawn to a greatly-enlarged scale in order to more clearly illustrate its construction; and Fig. 5 is a transverse section of the completed implement on line *y y* on Fig. 2 looking toward the right of said figure and drawn to the same scale as Fig. 4.

In the drawings, 1 is the core of the sharpener, made, preferably, of wood and having a handle 2 formed upon one end thereof, as shown.

In my former invention the wooden core was of uniform thickness throughout, and the abrading material was of the same thickness at the two edges of said core as in the center of its width, though thicker at the center of its length than at its two ends.

I have found by practical use that the tendency is to wear faster at the edges than at the center of the width, and hence I now make the wooden core thinner at the edges than in the center of its width, as shown.

In order to aid in securing and retaining the abrading material upon the core, I reduce the thickness of the edges of the core by a

plurality of rabbets 3 on each side of each edge, each rabbet having an undercut shoulder 4, as shown in Figs. 4 and 5. The abrading material 5 is applied to said core 1 in the form of a plastic paste, of emery or corundum, a mixture of both, or any other suitable gritty substance, and is applied thicker at the edges of the core than in the center of its width or so that a cross-section of the finished implement will be rectangular, as shown in Fig. 5. The plastic paste is forced into the undercut shoulders or grooves 4, thereby materially assisting in firmly securing the abrading material to the core. By this construction the durability of the sharpener is greatly increased and the abrading material is more firmly secured to the core.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a knife-sharpener the combination of a core of non-abrading material having a plurality of rabbets on each side of each edge whereby said core is made thinner at its edges than in the center of its width; and a covering of abrading material applied to said rabbeted sides of the core thicker at the edges than at the center of the width of said core.

2. In a knife-sharpener the combination of a core of non-abrading material having a plurality of rabbets and a corresponding number of undercut shoulders or grooves formed in each side of each edge of said core; and a covering of abrading material applied to two opposite sides of said core and filling said undercut grooves, and of considerably-greater thickness at the edges of said core than at the center of its width.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 29th day of January, A. D. 1900.

PHINEAS M. WITHINGTON.

Witnesses:

N. C. LOMBARD,
J. HOUSTON STEVENSON.