I. lickery,

Knife Starftener.

NO. 100470.

Fatented Mar. 1. 1870.

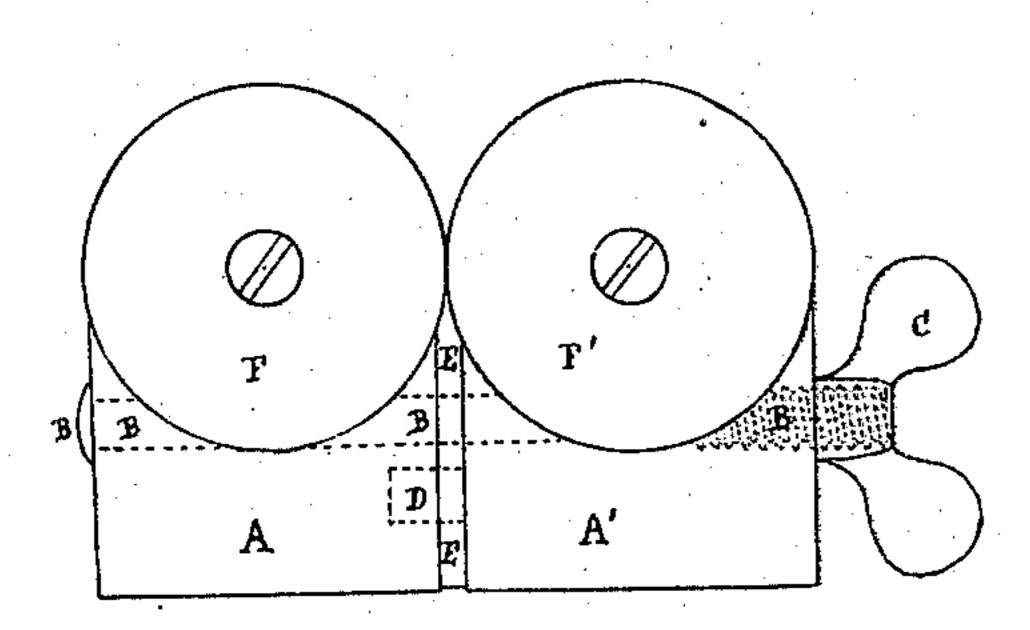


FIG. 1.

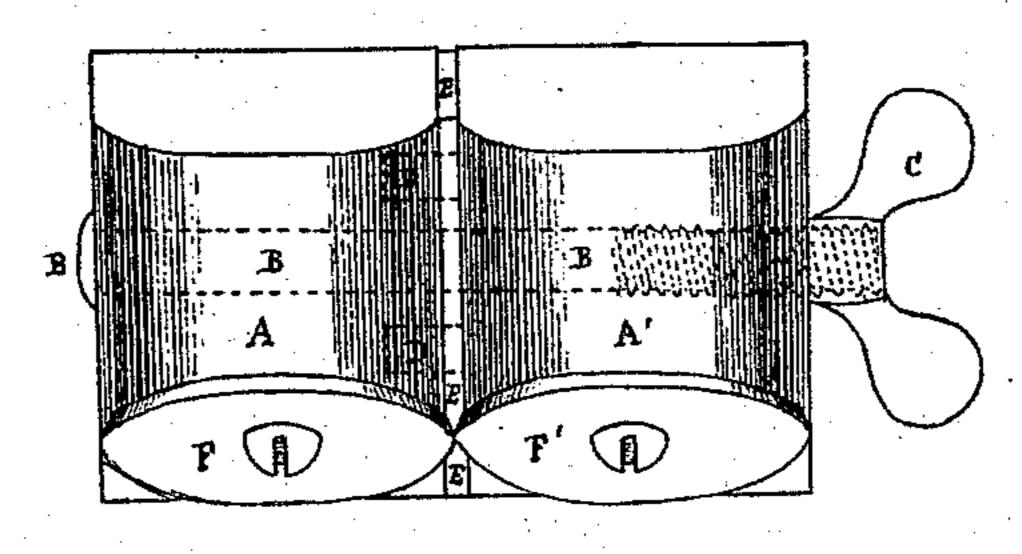


FIG. 2

WITNESSES.

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Warren R. Perce.

Thomas Vickery
INVENTOR.

Anited States Patent Office.

THOMAS VICKERY, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 100,470, dated March 1, 1870.

IMPROVEMENT IN KNIFE-SHARPENERS.

The Schedule referred to in these Letters Patent and making part of the same

I, THOMAS VICKERY, of the city of Providence, in the State of Rhode Island, have invented an Improved Knife-Sharpener, of which the following is a specification.

In the drawings, like letters indicate like parts.

Figure 1 is a front elevation

Figure 2 is a view of my invention from above the

same, showing the connection of the parts.

The difficulty which heretofore has been found in the use of the more common kinds of knife-sharpeners is in bringing the cutters into proper contact to seize upon the edge of the knife and reduce it to the required degree of thinness. The contact is generally secured by overlapping the cutting-plates. But it is found by using this method that the two faces of the knife-edge are not made simultaneously at the same points, but that one face is cut before the part immediately opposite reaches the cutter on its side. It is nearly impossible to form an evenly-cut edge in this manner, and it is a common occurrence that persons who use this sharpener draw the knife between the cutters in the usual manner, to cut one side, and then in the opposite direction to cut the other. Besides this, the point of the knife does not receive a keen edge, from the fact that while one side is properly cut in passing the cutting-surfaces, as soon as it passes the outer cutting-plate, there is no lateral pressure to bring the opposite side against the inner plate. This device has been nearly abandoned, and sharpeners of this description are now seldom used.

Another device, which, though invented by myself, has been anticipated by the claim secured to Thomas H. White by Letters Patent of the United States dated September 4, 1866, is to place the two cutters together, so as to bring the cutting-edges on the same plane or level, and so to form both sides of the knife-edge simultaneously at the same points. But a difficulty has been experienced in the use of this sharpener. The knife, when drawn between the cutters, exerts a lateral pressure upon them, and repeated using loosens the hold of the screws by which the cutters are secured to the block, and the cutters are spread apart, so that the contact necessary to the

forming of the knife-edge is wholly lost. This sharp-ener consequently lasts but a comparatively short time, and after a while becomes entirely useless.

My invention obviates the difficulties above mentioned, and renders White's sharpener a really practi-

cal implement.

The parts of my improved sharpener are as follows: A and A' are blocks, upon which are fixed respectively, the cutters F and F'.

B is a bolt-screw, passing through the blocks A and

A', and fastened by the nut C.

The blocks are also more firmly connected by the pins D D.

A layer of rubber, E, lies between the blocks, and

through it pass the bolt-screw and pins.

By means of the nut C, the cutters F and F being fixed to separate blocks, can always be brought into any desired degree of contact, so as to seize and properly reduce the edge of the knife.

The rubber strip E fills the entire space between the blocks A and A', and serves an important use. As the screw is drawn by the nut C, the two blocks are brought together, and the rubber, because of its elasticity, acts as a packing, fitting itself to all inequalities in the inner surfaces of the blocks, and forming a more perfect contact of the cutters.

The rubber strip E also serves to protect the newlyformed edge of the knife, if by any chance it does not
clear the instrument in passing. But for it the edge,
striking against the block whenever the knife in leaving the cutters might fall thereon, would be turned or
blunted, but falling upon the rubber, is received without injury upon the yielding and elastic surface.

What I claim as my invention, and desire to secure

by Letters Patent, is—

The combination of the blocks A and A', the bolt-screw B, operated by the nut C, the pins D D, and the rubber strip E, substantially as set forth, and for the purposes hereinbefore described.

THOMAS VICKERY.

Witnesses:

WM. P. NEWHALL, WARREN R. PERCE.