

B. D. WHITNEY.
Sharpening-Machines.

No. 147,536.

Patented Feb. 17, 1874.

Fig. 1.

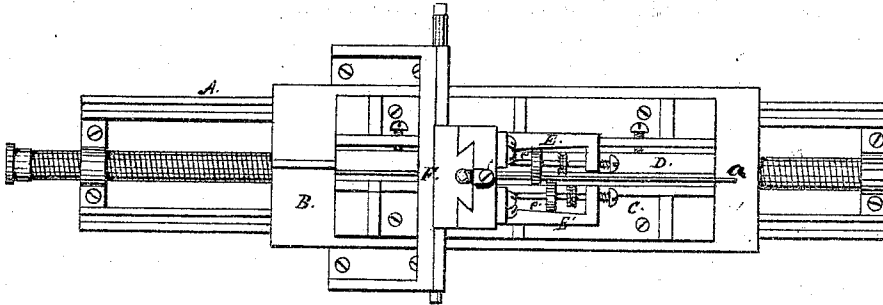


Fig. 2.

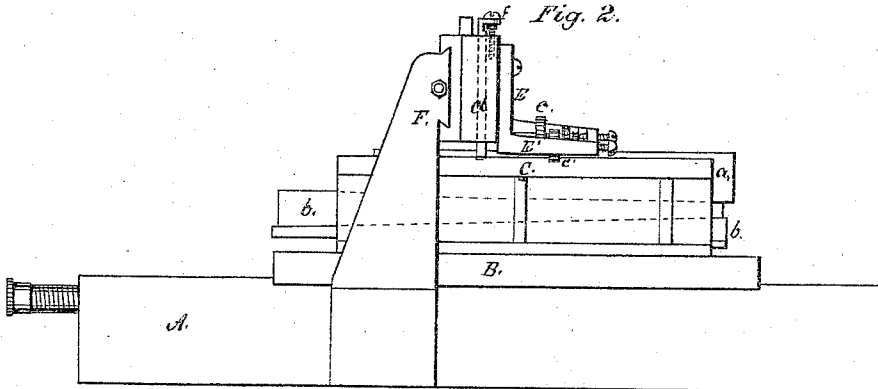
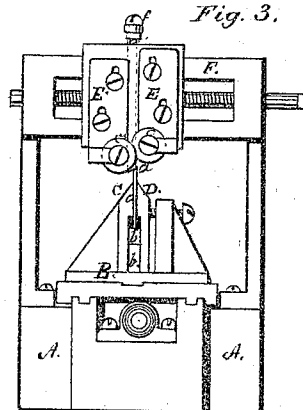


Fig. 3.



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BAXTER D. WHITNEY, OF WINCHENDON, MASSACHUSETTS.

IMPROVEMENT IN SHARPENING-MACHINES.

Specification forming part of Letters Patent No. **147,536**, dated February 17, 1874; application filed March 26, 1873.

To all whom it may concern:

Be it known that I, BAXTER D. WHITNEY, of Winchendon, in the county of Worcester and State of Massachusetts, have invented a certain new and useful Improvement in Machinery for Grinding and Turning a Scraper-Edge; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 represents a plan or top view of my machine for making a perfect wood-scraper. Fig. 2 shows a side elevation of the same. Fig. 3 is an end view of the machine.

My invention relates to mechanism for making a more perfect scraper-edge than can be produced by hand; and it consists in the construction and arrangement of the devices and parts hereinafter more fully described.

In the process of leveling off and making a fair surface on wood, it is well known to those skilled in the art that there is no tool for the purpose that will do the work equal to a scraper, or turned edge, produced by passing a burnisher or smooth hardened steel over a sharp edge, and, as it is desirable for many purposes, to get a perfectly level or plane on wood of considerable size, as a piano-forte top, it becomes necessary to have long straight scrapers; and there has been found a difficulty in grinding and turning the edge by hand, that but very few, if any, can overcome, for the reason that the plate or blade for such a tool requires to be tempered to a considerable degree of hardness, and should there be uneven places, or, in other words, different degrees of hardness, it is almost impossible to grind them truly, and should that be done, the passing of the burnisher over the edge by hand, or any process hitherto known or used, the softer places in the steel will be more depressed, and thus produce an irregular or wavy surface, which will be quite perceptible in highly-varnished and polished surfaces. Hence the necessity of suitable mechanism to make wood-scrapers expeditiously and truly, as hereinafter shown and described.

The ways or bed-piece A, and the sliding platen or table B, may be constructed like the ordinary metal planer, with a suitable mechanism to operate or slide the table B longitudinally on the ways. On the top of the table B a frame-work, C, is secured, in which is placed a clamp-jaw, D, into which the scraper-blade *a* is placed and held in a proper position for grinding, and also turning the scraper-edge. Longitudinally between the clamp-jaws C and D are placed two tapering bars, *b b*, reversely one above the other, on which the back of the scraper *a* rests, which is adjusted accurately to the height, by moving the bars *b b* longitudinally and parallel with the clamps, to be brought in contact with the two emery grinding-wheels *e e'* that are supported in the adjustable frames E E' above, so that the table B, clamp C and D, and scraper-blade *a* will pass freely from end to end on the ways of bed-piece A. The grinding-wheels *e e'* and frames E E' are supported on the elevated transverse frame F, so that the grinding-wheels can be adjusted laterally and vertically to give any form to the scraper-edge required, which will be perfectly straight and true from one end to the other. After the grinding is completed the vertical sliding bar *d*, the lower end of which forms the burnisher, is let down by the set-screw *f* on the top, and is brought in contact with the ground edge of the scraper *a*, when it is passed under the burnisher *d*, which turns the edge in the most uniform and perfect manner.

What I claim as my invention is—

A machine for sharpening and turning the edges of scraper-blades, consisting of the grinding-wheels *e e'*, and the burnishing-tool *d*, arranged and operating in the manner substantially as shown and described.

BAXTER D. WHITNEY.

Witnesses:

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