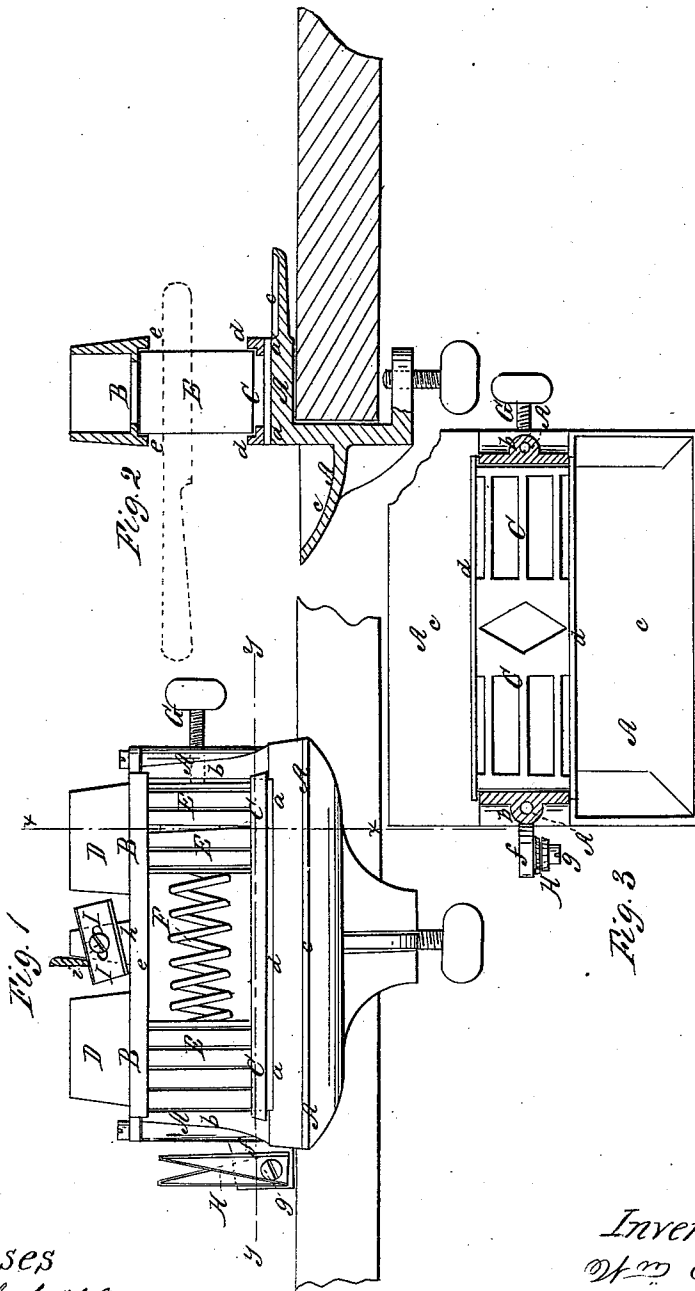


Knife Sharpeners.

N^o 84,960.

Patented Dec. 15, 1868.



Witnesses
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WILLIAM MILLER, OF CHICOPEE, MASSACHUSETTS.

Letters Patent No. 84,960, dated December 15, 1868.

IMPROVED KNIFE-CLEANER.

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

To all whom it may concern:

Be it known that I, WILLIAM MILLER, of Chicopee, in the county of Hampden, in the State of Massachusetts, have invented a new and improved Knife and Scissors-Sharpener and Cleaner; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying plate of drawings, forming part of this specification.

Figure 1 represents a side elevation of my improved knife and scissors-sharpener and cleaner.

Figure 2 is a vertical transverse section of the same, taken in the plane of the line *x x*, fig. 1.

Figure 3 is a horizontal sectional view of the same, taken on the plane of the line *y y*, fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to certain improvements in machines for cleaning cutlery, and it consists in the arrangement of devices, as will be hereinafter more fully described.

A, in the drawing, represents the frame of my apparatus, made of cast-iron or other suitable material, of about the shape indicated in figs. 1 and 2; that is, it consists of a horizontal plate, *a*, having two upright posts, *b b*, projecting from its ends, and cup-shaped extensions, *c c*, at the sides.

Upon the upper ends of the posts *b* is fastened a horizontal plate, B, and above the plate *a* is fastened, between the posts *b*, a horizontal perforated plate, C, as shown more particularly in fig. 3.

The plate C is elevated somewhat above *a*, as shown, and has ledges, *d d*, projecting from the sides.

The plate B has also ledges, *e e*, which are suspended from the sides.

Upon the plate B are formed one or more hoppers, D D, which have perforated or open bottoms, as shown.

E E are leather or other plates, inserted in upright

positions between the plates B and C, and held in position by means of the ledges *d* and *e*.

If two or more hoppers are used, two or more sets of plates E will be employed. In the latter case, the various sets should be separated by means of springs, F, as shown, while a screw, G, in one of the posts *b*, serves to regulate the degree of compression of the plates E.

Pumice-stone, sand, or other material, is placed in the hopper D, and falls upon and between the plates E, between which the knife-blade is being cleaned, as indicated in fig. 1. The material then falls upon the plate C, and through the holes in the same, upon the plate *a* of the frame, whence it can easily be transferred to the cup *c*.

To a lug, *f*, which projects from the frame A, are pivoted, by means of a screw, *g*, two steel plates, H H, of tapering form, with bevelled edges, as shown. The same serve as knife-sharpeners, and can be adjusted at pleasure, and their operating-edges reversed, as may be desired.

To a lug, *h*, which projects from the frame A, or from the plate B, is fastened, by means of a screw, *i*, a slotted steel plate, I, having two bevelled edges, as shown. The same serves, in connection with the lug *h*, as a scissors-sharpener, as indicated, and can be moved, reversed, and turned, *ad libitum*.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The cleaning-plates E E, when arranged in an upright position between the plate B, having the hopper or hoppers D, and between the perforated plate C, and when adjusted by means of a screw, G, as herein described, for the purpose specified.

WILLIAM MILLER.

Witnesses:

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