(No Model.)

T. A. MYERS.

KNIFE GRINDER.

No. 288,099. Patented Nov. 6, 1883.

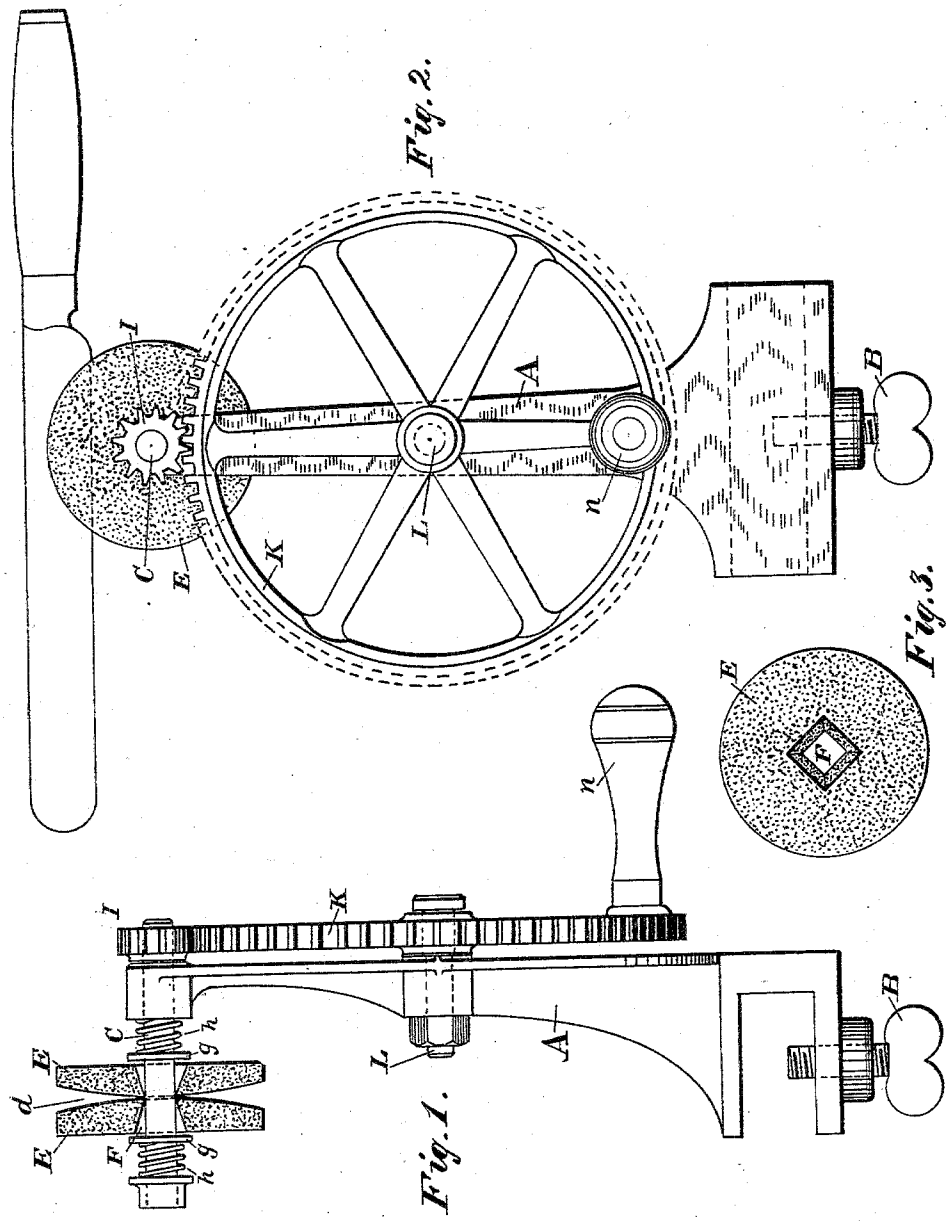


Fig. 2.

Fig. 3.

Fig. 1.

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UNITED STATES PATENT OFFICE.

THEODORE A. MYERS, OF WHEELING, WEST VIRGINIA.

KNIFE-GRINDER.

SPECIFICATION forming part of Letters Patent No. 288,099, dated November 6, 1883.

Application filed August 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, THEODORE A. MYERS, a citizen of the United States, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented certain new and useful Improvements in Knife-Grinders, of which the following is a specification.

The object of my invention is to provide an improved knife-grinder especially suited for household use, whereby an unskilled person may grind such knives as are employed for table, kitchen, and similar uses to a perfect edge.

The construction of the machine will first be described, and the invention then designated in the claims.

In the drawings which illustrate the invention, Figure 1 is an elevation, partly in section, of the machine. Fig. 2 is a side elevation. Fig. 3 is a view separately of the grinding-disk.

The letter A designates a standard provided with a clamp-screw, B, for attachment to a table. At the top of the standard is a box-bearing, in which a shaft, C, turns. Upon this shaft the two grinding-disks E are mounted. These disks may be composed of any suitable material. One side of each grinding-disk is slightly rounded off, so that instead of being flat on the side the central part is most prominent. These rounded sides confront each other and the prominent central parts are in contact. Thereby a space, *d*, is left between the two disks for the admission of the knife-blade.

Each grinding-disk has a square tapering central hole, F. The hole is smallest at the rounded or grinding side and largest at the outer side. This allows the disks to vibrate or wabble sidewise as they revolve, thereby adapting them for knives of varying thickness.

On the outer side of each disk is a washer, *g*, which covers the large part of the central hole, and a spiral spring, *h*, about the shaft bears against each washer, whereby the prominent parts of the two disks are pressed together and kept in proper position to permit of their vibrating, as above set forth.

On the end of the shaft C is a gear-wheel, I, and a large drive-wheel, K, is mounted on a projecting pin, L, secured in the standard, and said wheel gears with the wheel I. The drive-wheel has a crank-handle, *n*, by turning which a rapid motion may be given the grinding-disks.

To grind a knife the blade is held in the space *d* between the two revolving disks, and both sides of the blade are ground at once to a perfect edge.

Having described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A knife-grinder having two grinding-disks provided with a tapering central hole, mounted on a shaft adapted to revolve, each disk being slightly rounded on one side, and the two placed with their rounded sides confronting each other, springs to press the disks together, and means to impart motion to the disks, as set forth.

2. A knife-grinder having a shaft adapted to revolve, and two grinding-disks, each having a tapering central hole, through which the shaft passes, and means to keep the disks pressed together in proper position to permit them to vibrate sidewise, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THEODORE A. MYERS.

Witnesses:
D. Z. PHILLIPS,
J. R. COWDEN.