(No Model.)

A. FRITSCHI.

KNIFE AND SCISSORS SHARPENER.

No. 456,618. Patented July 28, 1891.

Fig. 1

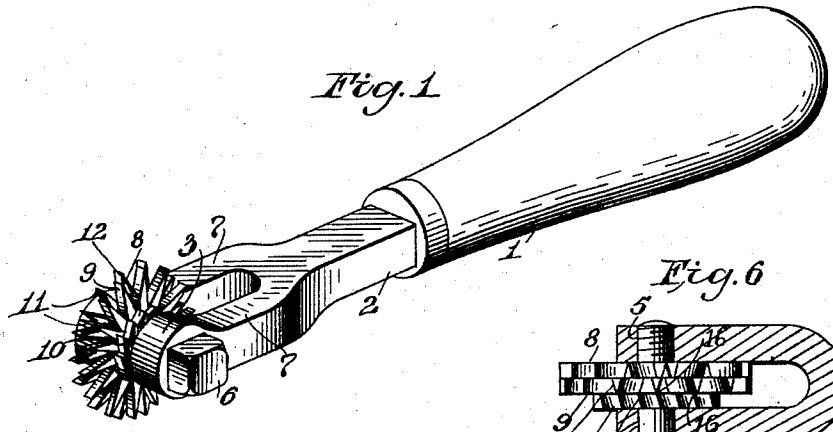


Fig. 6

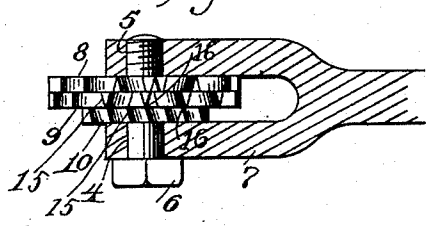


Fig. 2

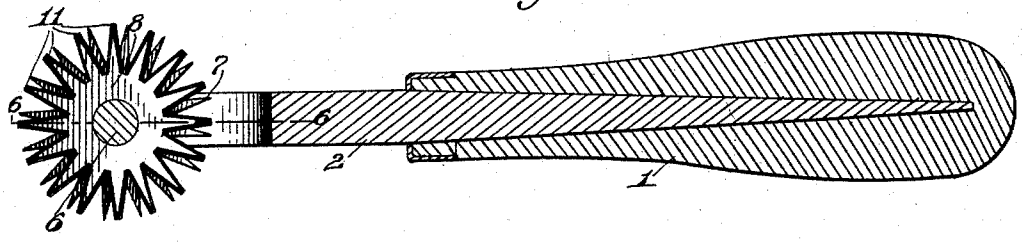


Fig. 3

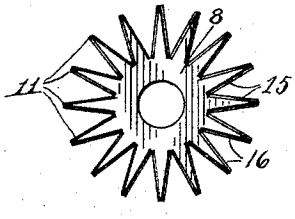


Fig. 4

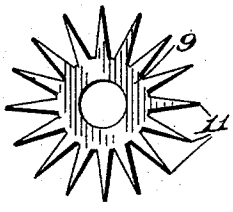
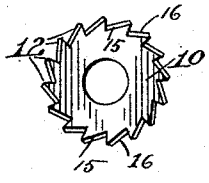


Fig. 5



Witnesses

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UNITED STATES PATENT OFFICE.

ADOLF FRITSCHI, OF SUISUN CITY, CALIFORNIA.

KNIFE AND SCISSORS SHARPENER.

SPECIFICATION forming part of Letters Patent No. 456,618, dated July 28, 1891.

Application filed March 11, 1891. Serial No. 384,572. (No model.)

To all whom it may concern:

Be it known that I, ADOLF FRITSCHI, a citizen of the United States, residing at Suisun City, in the county of Suisun and State of California, have invented a new and useful Knife and Scissors Sharpener, of which the following is a specification.

This invention relates to devices for sharpening knives and scissors of that class in which the edge of the blade to be sharpened is drawn between the edges of plates or disks of hardened steel; and it has for its object to provide a device of this character which shall be simple in construction and in which a large number of edges shall be provided, as will be hereinafter described, thus enabling the device to be used for a long time.

The invention consists in the construction and arrangement of parts which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a perspective view of a device constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view of the same. Figs. 3, 4, and 5 are detail views of the sharpening-disks. Fig. 6 is a detail sectional view taken on the line 6 6 in Fig. 2.

Like numerals of reference indicate like parts in all the figures.

1 designates a handle, in which is mounted a stem 2, the outer end of which is bifurcated to form a head 3, the arms of which are provided at their outer ends with transverse perforations 4 and 5, the latter of which is screw-threaded to receive the end of a stud-bolt or set-screw 6, which is inserted through the perforation 4 in the opposite arm. Upon the bolt 6, and between the arms 7 7 of the head 3, are mounted the disks 8, 9, and 10, which are made of hardened steel. The disks 8 and 9 are of like construction, each being star-shaped or provided with outwardly-extending spurs 11. The disk 10 is provided with ratchet-shaped teeth, as 12. The spurs of the disks 8 and 9 and the teeth of the disk 10 are beveled, as will be clearly seen in Figs. 3 and 5, at 15, so as to form sharp edges 16. The disks 8 and 9 are arranged with their beveled sides outward from each other, so that the edges 16 of the spurs shall be contiguous, thus forming sharp cutting-edges, which shall operate efficiently upon the blade to be sharpened.

In operation the several disks are suitably adjusted with relation to each other, according to the work which is to be done. A knife which is to be sharpened may be drawn between the meeting edges of any two of the spurs of the star-shaped disks 8 and 9. The blades of shears or scissors may in like manner be drawn between the meeting edges of one of the teeth or ratchets of the disks 10 and of one of the spurs of the adjacent disk 9. The several disks are clamped securely in position for operation between the arms 7 7 by tightening the bolt or set-screw 6.

It will be seen from the foregoing that the several sharpening-disks may be adjusted or arranged in a great variety of positions, thus enabling the device to be used for a long time without wearing out.

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

1. In a device of the class described, the combination of a stem or handle having a bifurcated head, a tightening-bolt or set-screw mounted in the arms of said head, and the sharpening-disks provided, respectively, with radially-extending spurs and with teeth or ratchets, substantially as and for the purpose herein set forth.

2. In a device of the class described, the combination of a stem or handle having a head, a tightening-bolt or set-screw mounted in said head, and sharpening-disks mounted upon said bolt and set-screw and having teeth or spurs provided with beveled edges, substantially as and for the purpose set forth.

3. In a device of the class described, the combination of a stem or handle having a head, a tightening-bolt or set-screw mounted in said head, and the sharpening-disks provided, respectively, with radially-extending spurs and with teeth or ratchets, said spurs and ratchets being provided with beveled edges, substantially as and for the purpose herein set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ADOLF FRITSCHI.

Witnesses:
W. W. REEVES,
WILLIAM WOLF.