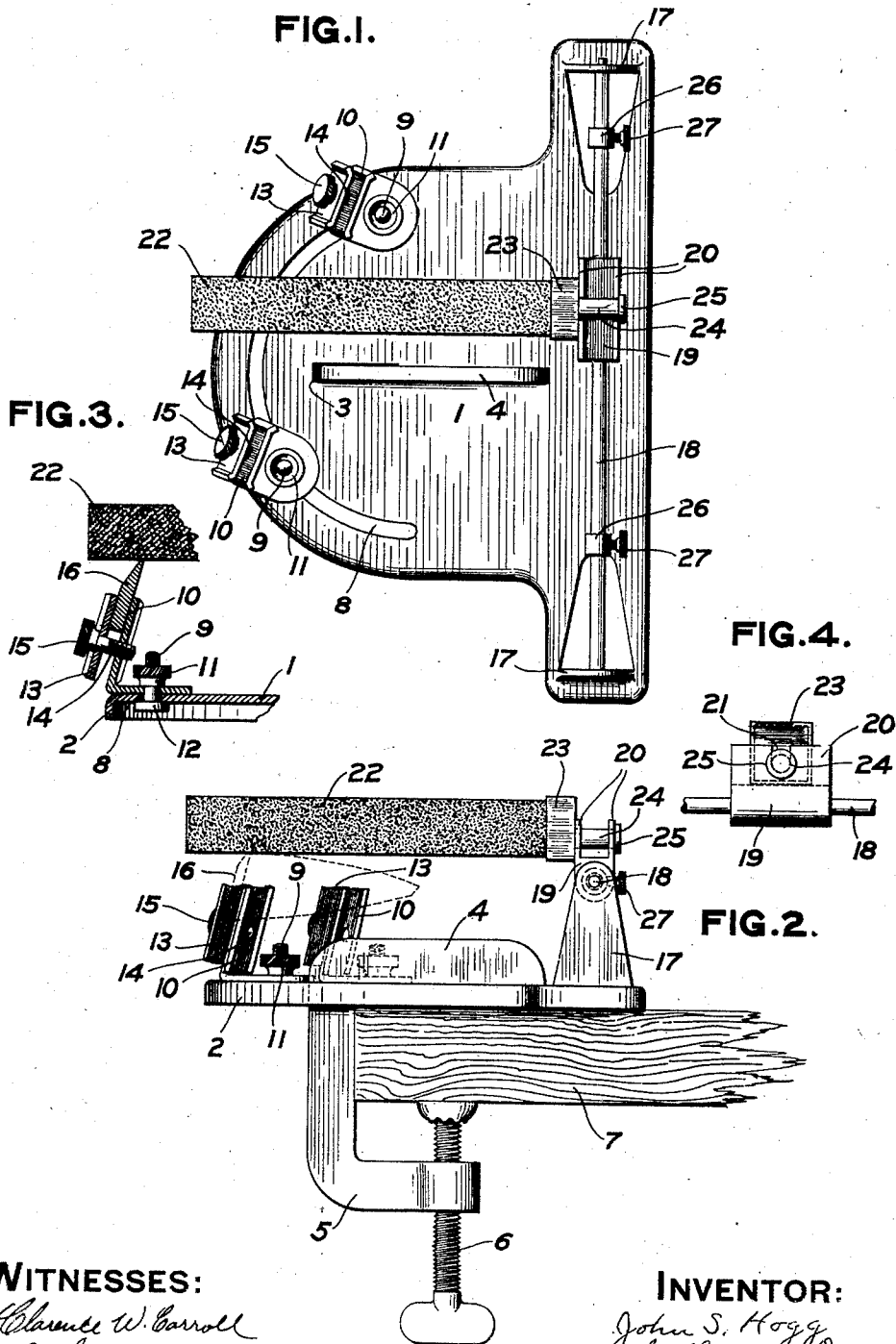


J. S. HOGG.
SHARPENING DEVICE.
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WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN S. HOGG, OF ROCHESTER, NEW YORK.

SHARPENING DEVICE.

No. 868,783.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN S. HOGG, a subject of the King of Great Britain, and a resident of Rochester, in the county of Monroe and State of New York, have
5 invented certain new and useful Improvements in Sharpening Devices, of which the following is a specification.

This invention relates to sharpening devices and has for its object to provide one that is adjustable and
10 particularly adapted for scissors.

The novel features of the device will be disclosed in the course of the description.

In the drawings:—Figure 1 is a top plan view; Fig. 2 is an end elevation; Fig. 3 is a cross-section through
15 a clamp and part of the stone and bed-plate, showing a scissors-blade in position; and Fig. 4 is a rear view of the sharpening stone and its support.

The bed-plate or base 1 is preferably made of sheet metal, with a downwardly turned flange 2 to stiffen it.

20 An opening 3 in the center of the base 1 admits a hook 4, through the lower end 5 of which a thumb screw 6 extends. By turning the thumb screw 6 the base 1 is clamped to the edge of a table-top or bench 7.

A semicircular slot 8 is cut in the base 1 near its
25 front edge, and bolts 9 pass through it, and also through one member 10 of a scissors clamp of which there are two shown. Each clamp is secured in place by means of a thumb-nut 11 and the heads 12 on a bolt 9. The
30 cooperating member 13 of each clamp is adjustably held in place by a bolt 14 that is tapped into the member 10, and has a knurled head 15.

The clamps 10, 10, if their respective thumb-nuts 11, 11, are loosened, may be moved to any points in the slot 8, and aligned with each other, as shown in
35 Fig. 1. By tightening said nuts 11, 11, the clamps are secured rigidly in place. One of the blades 16 of a pair of scissors is placed within both clamps, and firmly secured therein, edge uppermost, (see Fig. 3) by means of the bolts 15, 15, after the clamps have
40 been adjusted properly to receive it.

At each side of the base 1 a tongue of metal 17 is punched out and bent upwardly, so that said tongues form supports for a horizontal guide rod 18. Slidably
45 mounted upon the rod 18 is a block 19, that has two lugs 20, 20, with notches 21, 21, (Fig. 4) in their upper sides, respectively.

The sharpening stone 22, which is represented as rectangular in cross-section, is set in a metal socket 23, from the rear face of which projects a pin 24, with an
50 enlarged end 25. The pin 24 is adapted to rest within the notches 21, 21, whereby the stone 22 is revolvably supported upon the block 19. The block 19 is itself revolvably supported upon the rod 18. Thus the stone 22 is capable of three movements, viz: a hori-
55 zontal movement in a direction parallel to the axis of

the rod 18; a vertical movement about said axis and in a direction at right angles thereto; and a rotary movement about the axis of the pin 24.

Stops 26, 26 are mounted on the rod 18 to limit the movement of the block 19, and are each held in position by a set screw 27. The sharpening stone is readily
60 removable from the notches 21 for the purpose of cleaning it. Moreover, said stone may be turned backward out of the way while the blade is being set within the clamps.

The scissors blade should be so adjusted that the stone when replaced will rest upon it and lie approximately horizontal (Fig. 2).

When the blade is in place the operator grasps the stone, and slides it back and forth along the edge of
70 the scissors blade. The stops 26, 26 prevent the stone from striking the free blade (not shown) which will hang vertically away from the clamps 10, and will also prevent the stone from slipping off the end of the blade that is being operated upon. Said clamps slant
75 inwardly so as to hold the average scissors blade at the proper angle to the stone, when the latter is horizontal. (Fig. 3).

If the cutting edge of the blade is curved, as indicated by broken lines in Fig. 2, the stone will turn on
80 the pin 24, and follow the curve, though keeping approximately the same angle with reference to it at all points. The pin 24 is placed near the bottom of the socket 23 so that the stone 22 may remain approximately horizontal as it nears the end of the scissors
85 blade. Furthermore, the stone becomes adjustable as to height by the position of the pin 24 at one side of the axis of the stone.

To obtain the best results the scissors should be placed as shown in the drawings, at an oblique angle
90 to the axis of the stone 22. However, the scissors may be placed in any desired position with reference to said stone, by adjusting the clamps.

What I claim is:—

1. In a sharpening device, the combination of a suitable
95 base; a horizontal guide rod supported upon said base; clamping means at one side of said guide rod, for supporting the blade that is to be operated upon; a block adapted both to slide and to rotate upon said guide rod; a grinding
100 stick adapted for attachment at one end to said block and to overhang the blade in its support.

2. In a sharpening device, the combination of a suitable base, having an arc shaped slot; a horizontal guide rod supported upon said base and subtending said slot; clamping
105 means movable in said slot and thereby adjustable with reference to said guide rod; and a grinder slidably supported by said guide rod and adapted to overhang said clamping means.

3. In a sharpening device, the combination of a suitable base; a horizontal guide rod supported upon said base; 110
clamping means at one side of said guide rod, for supporting the blade that is to be operated upon; a block adapted both to slide and to rotate upon said guide rod, and hav-

ing a transverse slot therein; and a grinding stick adapted to overhang said clamping means and having a pin that protrudes from one end, parallel to and at one side of its axis, adapted to lie rotatively within said slot in said
5 block.
4. In a sharpening device, the combination of a suitable base; a horizontal guide rod supported upon said base; clamping means at one side of said guide rod, for supporting the blade that is to be operated upon; a block adapted
10 both to slide and to rotate upon said guide rod, and hav-

ing a transverse slot therein; and a grinding stick adapted to overhang said clamping means, rectangular in cross section, having a pin that protrudes from one end, parallel to and at one side of the axis, adapted to lie rotatively within said slot in said block.

JOHN S. HOGG.

Witnesses:

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