(No Model.)

A. DEY.

RAZOR SHARPENING MACHINE.

No. 411,587. Patented Sept. 24, 1889.

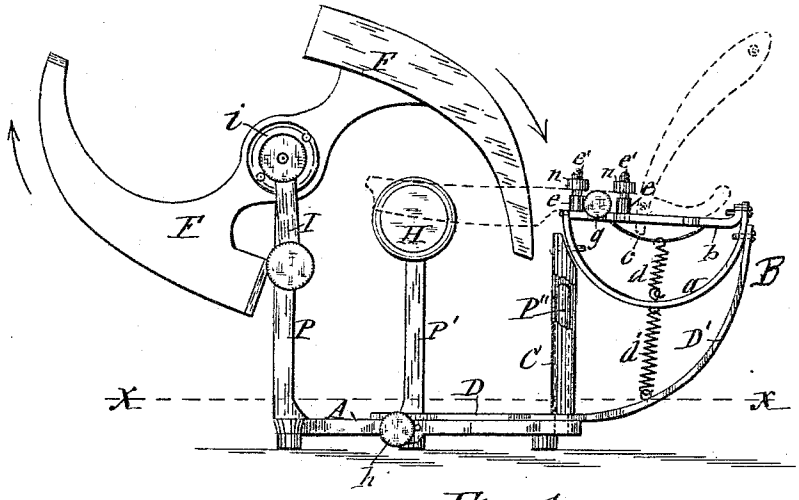


Fig. 1

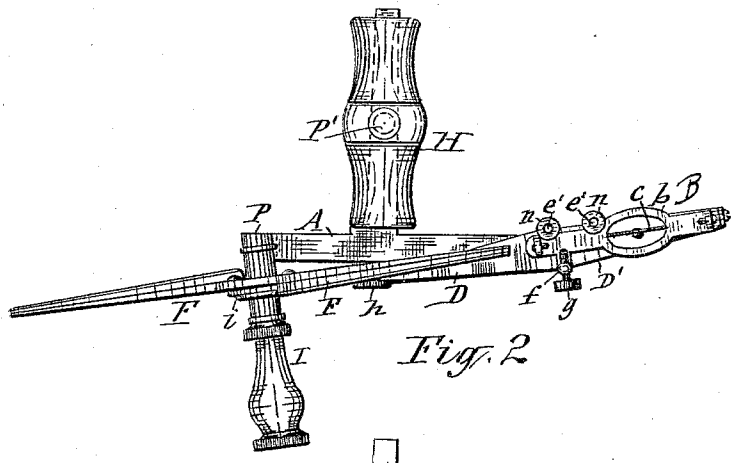
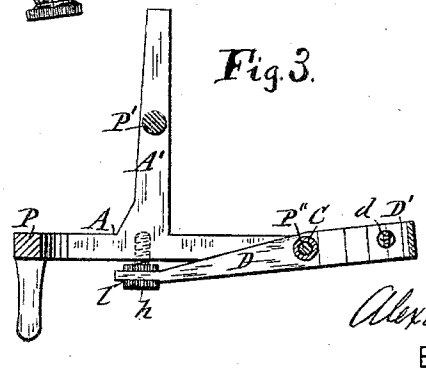


Fig. 2

Fig. 3.



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UNITED STATES PATENT OFFICE.

ALEXANDER DEY, OF GLASGOW, COUNTY OF LANARK, SCOTLAND.

RAZOR-SHARPENING MACHINE.

SPECIFICATION forming part of Letters Patent No. 411,587, dated September 24, 1889.

Application filed May 3, 1889. Serial No. 309,422. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER DEY, a subject of the Queen of Great Britain, and a resident of Glasgow, in the county of Lanark, Scotland, have invented new and useful Improvements in Razor-Sharpening Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention is a specific improvement of the razor-sharpening machine for which I have obtained Letters Patent of the United States, No. 389,291, dated September 11, 1888.

My present invention consists in novel, simple, convenient, and effective devices for rendering the machine adjustable, so as to present either side of the razor with any desired pressure to the sharpening-strops.

My invention also consists in a simplified and improved construction and combination of various parts of the machine, all as hereinafter fully described, and specifically set forth in the claims.

In the annexed drawings, Figure 1 is a side elevation of my improved razor-sharpening machine, a portion of the sleeve of the razor-supporting bracket being broken away to show the post on which said sleeve is pivoted. Fig. 2 is a top plan view of said machine; and Fig. 3 is a horizontal transverse section on line $x\ x$, Fig. 1.

Similar letters of reference indicate corresponding parts.

A represents the main supporting-frame of the machine, said frame being formed with a lateral base-extension A′, posts P P″ rising from opposite ends of the base, and the post P′ rising from the lateral extension A′. To the top of the latter post is attached a handle H, and to the opposite side of the post P are pivoted the strop-carriers F F, which are rotatable in a vertical plane. Said strop-carriers are similar to those shown in my prior patent hereinbefore referred to—*i. e.*, they are of the form of wings radiating from a hub *i*, by which they are pivoted to the aforesaid post. These strops are attached to the opposite sides of the peripheral portions of said wings, which are formed eccentric in relation to the axis of the carriers, so that in presenting the razor in one position to the rotating strop-carriers the strops are drawn along the sides of the razor from the heel to the point thereof. The described strop-carriers are rotated in the direction indicated by arrows in Fig. 1 of the drawings by means of a crank I, attached thereto and turned by one hand of the operator while the machine is held in position by the other hand of the operator pressing down upon the handle H. The advancing ends of the strop-carriers F F are deflected from the general plane of said carriers to insure their passage along opposite sides of the razor presented to them, as hereinafter described.

B denotes the razor-supporting bracket. This bracket is formed with a vertical sleeve C, by which it is pivoted to the post P″, and with a horizontal base-extension D and upwardly-curved post or arm D′. To the upper ends of the post D′ and sleeve C is pivoted a pendent yoke *a*, and to the ends of this yoke is pivoted by its two ends the razor-holding bar *b*, which is thus axially parallel with the yoke. Said bar and yoke are sustained in their normal positions by a spring *d*′, attached at one end to a downwardly-projecting brace *c* on the bar *b* and at the opposite end to the lower portion of the yoke, and by a spring *d*, connecting said portion of the yoke to the base of the bracket B. The top of the bar *b* has rigidly attached to one of its longitudinal edges two abutments *e e*, which are formed with screw-threaded posts *e*′ *e*′, provided with nuts *n n*. From the opposite edge of said bar rises a post *f*, through which passes horizontally a set-screw *g*.

The razor is secured to the described holder by placing the shank of the razor lengthwise upon the bar *b*, as illustrated by dotted lines in Fig. 1 of the drawings, and holding said shank down onto the bar by turning down the nuts *n n* onto the shank and binding the shank against the abutments *e e* by means of the set-screw *g*.

In order to allow the razor-holder to be adjusted so as to present either side of the razor with greater or less pressure against the strops on the carriers F F, I hold the bracket B in its position by means of a suitable stay connected to the main frame A, adjustable laterally in relation to the razor-holder *b*. Said

stay I preferably form of a set-screw *h*, working horizontally in the frame A at right angles to the base-extension D of the bracket B, and provided with a circumferential groove *l* in its head, in which groove the extremity of the base-extension D lies. By turning the said set-screw the said base-extension is moved laterally, and the bracket B is thereby turned so as to cause the holder *b* to present the razor at different angles to the strop-carriers F F.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the main frame and rotary strop-carriers, a razor-holder-supporting bracket pivoted to the main frame axially parallel with the plane of the strop-carriers, and a stay holding said bracket and connected to the main frame adjustable laterally in relation to the razor-holder, as set forth.

2. In combination with the main frame and strop-carriers pivoted to said frame rotatably in a vertical plane, a post rising from the said frame, a bracket pivoted to said post and oscillatory in a horizontal plane, a screw working in the frame horizontally and at right angles to the plane of oscillation of the bracket and holding the said bracket in its position, and a razor-holder mounted on said bracket, as set forth.

3. In combination with the main frame and strop-carriers pivoted to said frame rotatably in a vertical plane and a razor-holder arranged on the frame in a line parallel with the plane of the strop-carrier, a crank attached to the strop-carriers at one side thereof, a post rising from the frame at the opposite side of the strop-carriers, and a handle attached to said post, substantially as described and shown.

4. In combination with the main frame and rotatable strop-carriers, a bracket on said frame provided with two posts standing in line with the plane of the strop-carriers, a yoke pivoted to said posts, a razor-supporting bar pivoted to the yoke axially parallel therewith, springs sustaining said yoke and bar in their normal position, abutments on one side of said bar formed with screw-posts, clamping-nuts on the latter posts bearing on top of the razor-shank, a post rising from the opposite side of said bar, and a set-screw passing horizontally through the post and binding the razor-shank between the said screw and aforesaid abutments, substantially as described and shown.

5. The improved razor-sharpening machine, consisting of the frame A, formed with the lateral base-extension A′ and posts P, P′, and P″, the strop-carriers F F, pivoted to the side of the post P and provided with the crank I, the handle H, attached to the post P′, the bracket B, formed with the vertical sleeve C, pivoted to the post P′, the bracket B, formed with the vertical sleeve pivoted to the post P″ and with the horizontal base-extension D and upwardly-curved post or arm D′, the yoke *a*, pivoted to the post D′ and sleeve C, the bar *b*, pivoted at opposite ends to the ends of said yoke and provided with the downwardly-projecting brace *c*, the spring *d*, connecting the lower portion of the yoke to the base of the bracket B, the spring *d*′, connecting the brace *c* with the said portion of the yoke, abutments *e e* on one side of the bar *b*, formed with screw-threaded posts *e*′ *e*′, nuts *n n* on said posts, the post *f* on the opposite side of the bar, the set-screw *g*, passing horizontally through said post, and the set-screw *h*, working horizontally in the frame A and at right angles to the base-extension D of the bracket and provided with a circumferential groove in its head and engaging thereby the extremity of the aforesaid base-extension, substantially as described and shown, for the purpose set forth.

In testimony whereof I have hereunto signed my name this 27th day of March, 1889.

ALEXANDER DEY. [L. S.]

Witnesses:
EDMUND HUNT,
DAVID FERGUSON.