July 1, 1930. J. S. CRAIB 1,768,573

ROTARY RAZOR BLADE STROP

Filed Dec. 16, 1927

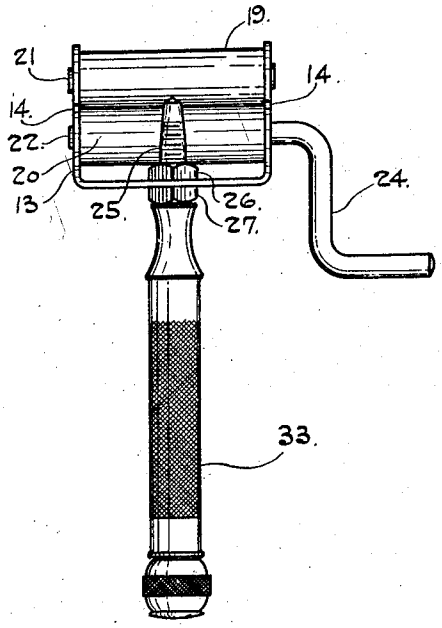


FIG. 1.

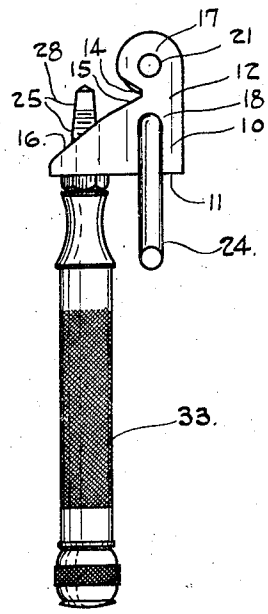


FIG. 3.

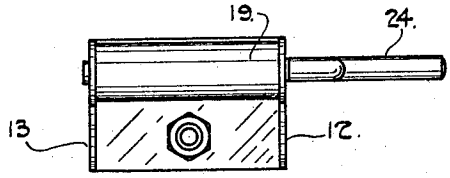


FIG. 2

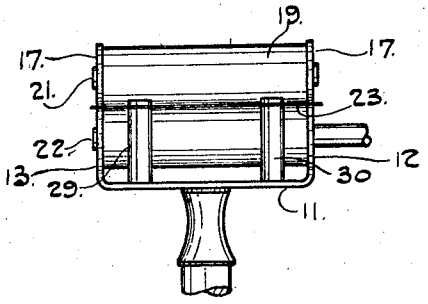


FIG. 5.

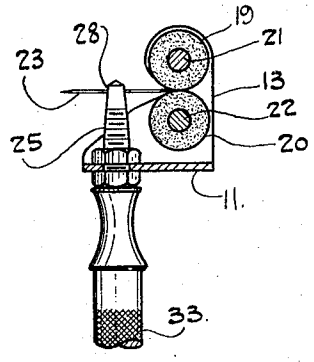


FIG. 4.

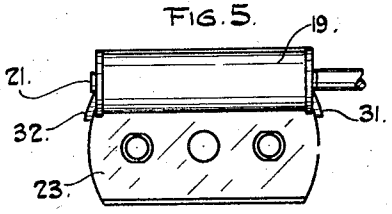


FIG. 6.

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UNITED STATES PATENT OFFICE

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ROTARY RAZOR-BLADE STROP

Application filed December 16, 1927, Serial No. 240,576, and in Great Britain August 2, 1927.

The invention relates to a rotary razor blade strop, as described in the present specification and illustrated in the accompanying drawings that form part of the same.

The invention consists essentially of the novel features of construction pointed out broadly and specifically in the claim for novelty following a description containing an explanation in detail of an acceptable form of the invention.

The objects of the invention are to economize in the consumption of blades in safety razors by avoiding waste through discarding blades which have become dull; to discriminate through the choice of a blade, as frequently one blade out of a number will prove of better metal and superior temper to another in the same lot, and consequently be more susceptible to keeping a keener cutting edge; to facilitate the operation in shaving those particularly with stiffer beards, for by stropping the blade previous to the operation, a cleaner shave is assured; to simplify the means often employed for resharpening blades of the safety razor type; and generally to provide an efficient and durable device, not costly to produce and therefore saleable to the consumer at a reasonable price.

In the drawings, Figure 1 is a plan view of the rotary strop complete.

Figure 2 is a front elevational view of the device.

Figure 3 is a side elevational view of the device.

Figure 4 is a cross sectional view on the line 4—4 in Figure 1.

Figure 5 is a plan view showing a modification of the blade support.

Figure 6 is a plan view showing another modification of the blade support.

Like numerals of reference indicate corresponding parts in the various figures.

Referring to the drawings, the numeral 10 indicates the frame, which is here shown as formed of a back plate 11, from which the lugs 12 and 13 extend forwardly at each end, each of said lugs having a recess 14 at the end of an inclined wall 15 from the back and a short inclined wall 16 from the front end of the lug.

The front ends of the lug form the pivot bearings 17, while the rear ends of the lug form the pivot bearings 18.

The roller strop members 19 and 20 are formed of a composition of rubber and carborundum or other abrasive material suitable for sharpening purposes and are mounted on the shafts 21 and 22 respectively, said shafts in turn being mounted on the pivot bearings 17 and 18 respectively, said roller strop members meeting directly in alignment with the recesses 14 and being always in frictional engagement.

The beds of the recesses form supports for the razor blade 23 which is thus guided between the roller strops 19 and 20.

The shaft 22 terminates at one end in the crank handle 24 by means of which the rollers are driven in opposite directions to sharpen the cutting edge of the blade.

The threaded pin 25 is inserted through the central orifice in the back plate 11, above the roller strops 19 and 20 and is locked in the desired position by the nuts 26 and 27, the tapered end 28 of said pin extending slightly beyond the beds of the recesses 14, so that it extends over the line of meeting of the strops 19 and 20, consequently this pin serves as a centering member through the centrol hole in the blade.

It will be thus seen that when the crank handle is turned, the tendency is to draw the edge of the blade inwardly, but this is avoided by the blade supports in the recesses 14, and this tendency of the blades to leave those supports is prevented by the centre pin. The result of this is that when the rollers are driven they engage the cutting edge and sharpen the blade.

In Figure 5 a slight modification is shown in which the two pins 29 and 30 extend from the back plate and engage the blade within the holes in the razor blade on either side of the centre hole, and in this form of the invention the lugs are wider apart so as to let the whole length of the blade come into engagement with the roller strops.

In Figure 6 another modification shows the two claws 31 and 32 engaging the rounded edges of the razor blade and allowing the complete length of the razor blade to be engaged by the roller strops.

These claws are struck out from the walls of the frame and replace the blade supports described in the form of the invention illustrated in Figures 1 to 4.

The handle 33 is shown as screwed on to the threaded pin 25 beyond the back plate 11, but it is obvious that this handle may be permanently associated with the frame 10, or secured thereon in any other suitable manner.

The operation of the invention may be well understood from the description of the details, as no matter what the form of support may be, the blade of the razor is inserted between the roller strops, and the handle turned. The matter of the support is merely incidental to the proper stropping of the razor and therefore three different forms of support have been illustrated and described.

The rotation of the roller strops quickly for a very few turns will produce a keen edge on the razor blade, consequently it is little or no trouble to prepare the particular blade chosen for a comfortable shave.

What I claim as my invention is:—

In a razor blade stropper, a support comprising a base, upstanding members thereon, said members being provided with journals, opposed friction driven stropping rolls mounted therein and a driving handle therefor, a blade holder comprising an upstanding lug mounted on said base, said lug extending through said base and having a threaded end adapted to receive a threaded handle member.

Signed at Montreal, Canada, this 10th day of December, 1927.

JAMES STEWART CRAIB.