May 15, 1934. J. J. SCHERMACK 1,958,718

LADY'S SAFETY RAZOR

Filed Dec. 21, 1931

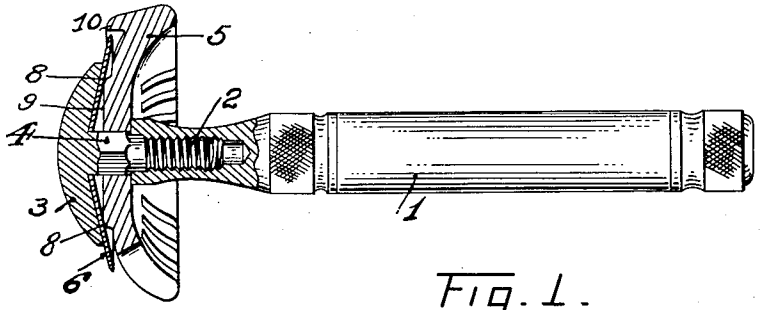

Fig. 1.

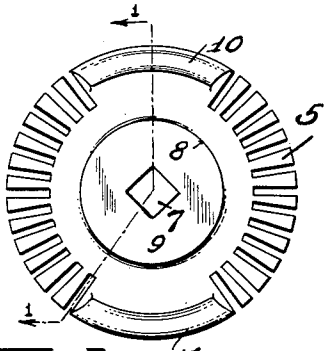

Fig. 2.

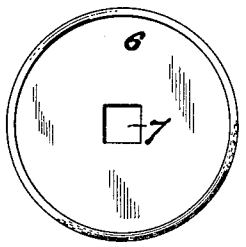

Fig. 3.

Fig. 4.

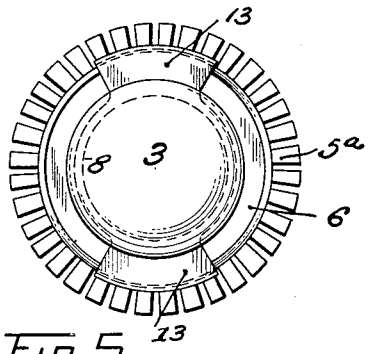

Fig. 5.

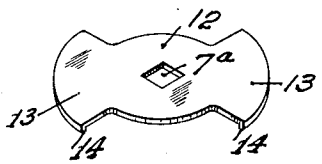

Fig. 6.

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LADY'S SAFETY RAZOR

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Application December 21, 1931, Serial No. 582,288

1 Claim. (Cl. 30—12)

This invention relates to safety razors for ladies' use in shaving the arm pit.

The ordinary safety razor has a straight cutting edge and therefore is not adapted for shaving a concave contour, as it would be apt to cut or scratch the flesh.

The primary object therefore of the invention is to provide a circular cutting blade adapted to be mounted between a clamping member fitted with a handle, and an overlapping cap having a central post of polygonal form in cross-section, extending through a corresponding opening in the blade that the latter may be held against accidental rotation upon the post.

A further object of the invention is to provide a pair of diametrically opposed guards, which may be integral with the clamping member and overlapping segments of the cutting edge of the blade on opposite sides of the latter,—the purpose being to insure against injury to the person through a shearing cut of the blade adjacent the ends of the cutting segment of the razor blade.

Another feature of the construction consists in forming the cap with an inclined or cone-shaped inner face, whereby upon adjusting the tapped end of the handle upon the post of the cap, the blade is held under tension between the inclined or cone-shaped walls of the cap and the edge of a shoulder formed by a raised circular table on the guard. The blade being thus slightly flexed under tension is securely held against vibration while the off-set formed by the circular table raises the cutting edge slightly above the teeth of the guard that a close shave may be effected.

With the foregoing and other objects in view which will appear as the description proceeds, the invention further resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes may be made in the precise embodiment of the invention herein disclosed without departing from the spirit of the same.

In the drawing accompanying this specification:

Figure 1 is an elevation of the razor, partly in section, showing the razor blade clamped between the cap and guard elements,—the section through the guard,—being on or about line 1—1 of Figure 2.

Figure 2 is a plan view of the circular crenelated guard, with upstanding diametrically opposed segmental portions overlapping the cutting edge of the blade on opposite sides of the latter.

Figure 3 is an elevation of a circular blade formed with a polygonal opening to receive the polygonal-shaped post of the cap.

Figure 4 is a cross-sectional view through the blade shown in Figure 3.

Figure 5 is an elevation of a modification showing a separate segmental guard having a downwardly turned flange overlapping a portion of the circular blade, employed in conjunction with the circular base of the crenelated guard on which the blade is mounted.

Figure 6 is a perspective view of the segmental guard as shown in Figure 5.

Referring now to the reference characters shown upon the drawing:

The numeral 1 indicates a handle tapped to receive a screw-threaded post 2, extending inwardly from a circular cap plate 3.

The post 2 adjacent the under face of the cap is polygonal in cross-section as indicated at 4, and projects through a like-shaped opening in a circular crenelated guard member 5, sleeved upon the post, against which the tapped end of the handle bears.

The numeral 6 denotes a circular razor blade provided with a central polygonal-shaped aperture 7,—see Figures 3 and 4, to receive the post.

The inner face of cap 3 is inclined outwardly from the central post 2, and upon adjusting the handle on the threaded end of the post, serves to deflect the razor blade from its initial flat condition into contact with an annular shoulder 8, forming the edge of a raised annular flat table 9, surrounding the central aperture of the guard.

Numerals 10 and 11 denote outstanding segmental guards overlapping the cutting edge of the razor to protect the person using the razor against accidental injury through a side or shearing cut when drawing the exposed edge of the razor blade across the flesh in the act of shaving.

In the embodiment shown the circular cap plate 3 on its inner face is given a slight cone-shaped formation which upon adjustment of the handle on the screw-threaded end of the post of the cap, causes the razor to be deflected that it may bear against the circular shoulder of the raised table surrounding the central opening of the guard member.

By thus deflecting the blade from its initial flat condition, the blade is rigidly held between the clamping members in such manner that its

cutting edge is not apt to be distorted through vibration in use. The polygonal-shaped post and corresponding opening in the guard blade and razor blade assist in securing the rigidity of the several parts when assembled and properly adjusted,—the construction avoiding any tendency to accidental rotation of the parts in relation to each other when in use.

In the modification shown in Figures 5 and 6, the guard member 5^a is crenelated throughout its entire perimeter.

Cooperating with the guard member shown in Figure 5 is an independent auxiliary guard plate 12, provided with a central aperture 7^a, that it may be sleeved upon post 2 of the overlapping cap.

The auxiliary guard member 12 is constructed with two radially extending segments 13—13, having downwardly bent flanges 14—14, overlapping segmental portions of the cutting edge of the circular razor blade 6,—see Figure 5.

It will be understood that upon adjusting handle 1 on the screw-threaded end of the post 2 projecting from the cap 3, the cap will engage the auxiliary plate 11 and also the circular blade, deflecting the latter from its initial flat condition into a slightly cone-shaped formation in contact with the shoulder 7 of the annular raised table 8, see Figure 5.

Having thus described my invention, what I claim is:

In a safety razor, a circular crenelated guard member having a central aperture, a raised flat circular table surrounding the aperture and flanges adapted to overlap opposite segments of the cutting edge of a circular razor blade; a circular cap of relatively larger diameter than the table, its under face being cone-shaped, surrounding an integral projecting central screw-threaded post, adapted to extend through the central aperture of the guard member; an undivided circular razor blade, located between the guard and cap members, of relatively larger diameter than the cap member, with a central aperture to receive the post of said cap member, but otherwise imperforate; and a handle tapped to receive the end of the screw-threaded post of the cap member, adapted also to bear against the underside of the guard member, whereby upon screwing said handle on the post of the cap member, the inclined marginal edge of the cap is forced onto the margin of the blade extending beyond the edge of the circular table, thereby deflecting the blade into impinging contact with the raised circular edge of the table to secure its cutting edge against vibration, and to provide a micrometer adjustment of said cutting edge in relation to the crenelated guard member.

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