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COLLAPSIBLE SAFETY RAZOR

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3 Claims. (Cl. 30—47)

This invention relates to safety razors. More particularly, it relates to a safety razor adapted to be collapsed into compact form and which has a removable blade mounted thereon, to be used in a manner similar to the conventional straight razor.

The present invention has for its objects, the provision of a safety razor of relatively simple construction and assemblage, one which can be easily compacted and which will effectively retain a blade and permit its replacement without impairing the shaving effectiveness of the razor.

With the foregoing and other objects in view, the invention generally comprises a blade holder in pivotal connection with a handle and adapted to be folded over said handle, means for interlocking the blade holder and handle, a clamping member for a razor blade, and means adapted to retain the clamping member in assembled relation with the blade holder.

Referring to the drawing embodying preferred forms of my invention, and in which similar reference characters relate to like parts, throughout:

Fig. 1 is a top plan fragmental view of an embodiment of the invention hereinafter described in detail.

Fig. 2 is a part sectional view of Fig. 1.

Fig. 3 is a bottom plan view of Fig. 1.

Fig. 4 is a front view of the razor in collapsed or compact form.

Fig. 5 is an end view of Fig. 4.

Fig. 6 is a top plan view of a modified form of blade.

Fig. 7 is a forward end view of the blade shown in Fig. 6.

Fig. 8 is a longitudinal sectional view of a modified form of the embodiment shown in Fig. 1.

Fig. 9 is a bottom fragmental view of the form shown in Fig. 8, and

Fig. 10 is an end view of the razor looking in the direction of the arrows on line 10—10 of Fig. 8.

Referring now to Figs. 1 to 5 inclusive, a handle 11 is provided, having at one end a reduced portion 12 terminating in a thin, strip-like end 13 of substantially circular outline as shown. Said end is provided with a radial projection 14 on its periphery adapted to act as a catch as will be hereinafter described. Pivotaly connected with said end 13 is a base member 15 having one end 16 formed with an angularly extending bifurcated portion providing spaced parts 17 between which the handle end 13 is easily rotated around a pivot 18. Fixed to said base member 15

is a blade carrier 19 of tapering outline as shown. Said base and carrier are joined together by means of spaced rivets or pin members 20 and 21 respectively. Adjacent to the parts 17, at 22, the base 15 is formed with the upstanding lugs 23, 24 at its opposite side edges. Intermediate the joined portions of blade carrier 19 and base member 15 is mounted a spring leaf member 25 adapted to follow the contour of end 16. Said member is provided at its exposed end with a perforation or opening 26 adapted to receive the radial projection 14 of the handle end 13 and lock the handle and blade carrier against relative pivotal movement.

Blade carrier 19 is provided at its marginal edges 27 and 28 with closed serrations 29 which are slightly bent downwardly and extend away from the plane of the carrier to form protective guards for the cutting edges of the razor blade. Said blade carrier is further provided at its front end portion with a perforation 30, for accommodating a bent lug 31 depending there-through from a blade clamping member 32. Said member has an outline corresponding with that of the blade carrier 19 so that when it fits over said carrier 19 a uniform compact appearance is presented. The member 32 at its rear end terminates in a reduced portion 33 fitting between lugs 23 and 24. The member 32 is retained in position over the blade carrier by means of a pivot pin 34 extending through lugs 23 and 24 and reduced portion 33, and a movable spring plate 35 fixed to the under surface of carrier 19 by means of pin 36. Said spring plate 35 locks hooked lug 31 thus keeping the guard in flush position down toward blade carrier 19. It is to be noted that razor blade 37 to be used with the device has an outline adapted for fixing onto the carrier 19. One of its ends 38 is reduced to fit between lugs 23 and 24, when member 32 is raised on its pivot 34. Furthermore, it has an opening 39 corresponding with opening 30 of carrier 19 to permit passage of hooked lug 31, and locking of said lug by plate 35.

In Figs. 8 to 10 inclusive, is shown a modification of the embodiment described above. Member 32', as shown, can be easily removed from its position over blade 37'. The reduced end portion 33' of the clamping member is engaged and held in position by means of a rotatably movable catch member 40 mounted on pivot 18. It is to be noted that said movable catch member is substantially U-shaped and adapted to fit over the reduced end 33' of the blade clamping member 32'. It is also provided with an upwardly extending

part 41 for permitting easy movement of the catch member on its pivot into and out of engagement with reduced end 33' of member 32' which is normally depressed thereby to retain blade 37' in flat position against carrier 44. Furthermore, clamping member 32' in the modification shown is recessed at its front end portion 42 to permit sliding of the same against the hooked lug member 43 extending upwardly and over from the blade carrier 44. Member 32' is further provided with a hooked lug 45 adapted to slide into opening 46 of carrier 44. It is to be noted that there is provided a razor blade 37' whose outline corresponds with that of the member 32'. Said blade is mounted onto the carrier 44 by initially inserting its forward end under lug 43. The member 32' is fixed in position by lug 45 passing through opening 48 of the blade and 46 of the carrier and forwardly thereof to form the assembly of parts as shown in Fig. 8.

In Figs. 6 and 7 there is shown a blade 49 which is adapted to be mounted on carrier 44. Said blade is of the heavy type and tapers in thickness from the rear to the forward end thereof. Its under surface is flat, while the upper portion has a tapering contour as shown in Fig. 7 with a ridge 50 along its longitudinal axis. The forward end 51 of the blade is adapted to fit against lugs 43 whereby ridge 50 at said end fits between said lugs. The other end of said blade 49 has a reduced end portion 52 adapted to fit between lugs 23 and 24. In this manner the blade is kept rigidly on the blade carrier 44, when catch member 40 is in locked position as shown in Figs. 8 and 9.

It is to be noted from the foregoing description taken in connection with the accompanying drawing that I have provided a razor of novel construction having cooperative parts adapted to permit easy assembly of the parts and compacting of the same.

In straightening the device as herein above described, handle member 11 as shown in Fig. 4 of the drawings is moved about its pivot 10 whereupon outwardly extending portion 14 on end 13 forms an engagement with spring leaf member 25 as shown in Figs. 2 and 8 of the drawing. If the handle is to be moved back into collapsed position as shown in Fig. 4, the free end of member 25 is slightly raised so as to release its hold upon extending portion 14 and permit continued rotation of the handle around its pivot.

While preferred embodiments of my invention have been described in connection with the accompanying drawings, it is to be noted that various changes as to form, use of materials and arrangement of parts may be made without departing from the spirit and scope of the invention as claimed.

I claim:

1. A safety razor comprising a blade carrier

and a handle member, means for releasably clamping a blade upon the blade carrier, means pivotally connecting said carrier and handle member with each other at one of their ends for relative movement into folded collapsed relation and into longitudinally extended relation with each other, said end of the handle member having a radially projecting lug, and a resiliently yieldable latch element fixed to the blade carrier and projecting longitudinally beyond said end thereof, said latch element having an opening therein adapted to receive said lug of the handle member and releasably latch the blade carrier and handle member in extended relation to each other.

2. A safety razor comprising a blade carrier having an angularly projecting bifurcated part at one end and a handle member provided with a disk-like end portion fitting within said bifurcated part, a pivot connecting said handle end with the bifurcated part of the blade carrier whereby the handle and carrier may be relatively moved into folded collapsed relation or into longitudinally extended relation to each other, said disk-like portion of the handle having a radially projecting lug on its periphery, a resiliently yieldable latching element fixed to and projecting longitudinally beyond said bifurcated part of the blade carrier and provided with an opening adapted to receive said lug to releasably lock the handle and blade carrier in extended relation, a blade clamping member, and means for releasably interlocking said member to the carrier in superimposed clamping engagement with a razor blade.

3. A safety razor comprising a blade carrier having an angularly projecting bifurcated part at one end and a handle member provided with a disk-like end portion fitting within said bifurcated part, a pivot connecting said handle end with the bifurcated part of the blade carrier whereby the handle and carrier may be relatively moved into folded collapsed relation or into longitudinally extended relation to each other, said disk-like portion of the handle having a radially projecting lug on its periphery, a resiliently yieldable latching element fixed to and projecting longitudinally beyond said bifurcated part of the blade carrier and provided with an opening adapted to receive said lug to releasably lock the handle and blade carrier in extended relation, a blade clamping member, and means for releasably interlocking said member to the carrier in superimposed clamping engagement with a razor blade, said last named means including a yoke-shaped member pivotally mounted for relative movement upon the pivot connection between the handle and blade carrier and adapted to engage one end of the clamping member in embracing relation therewith.

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