

March 14, 1939.

W. J. MILLER

2,150,337

RAZOR

Filed June 1, 1936

FIG. 1

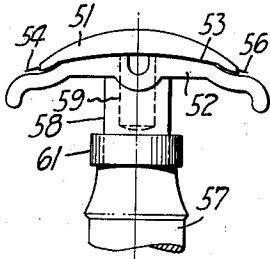


FIG. 2

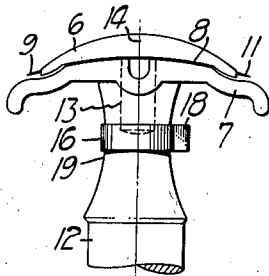


FIG. 3

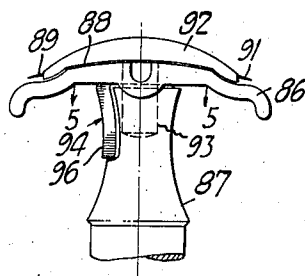


FIG. 1a. FIG. 1b.

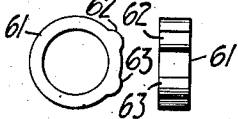


FIG. 2a. FIG. 2b. FIG. 2c.

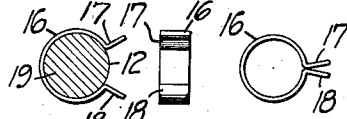


FIG. 4

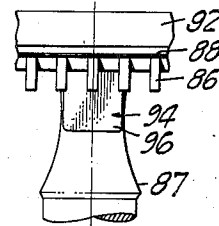


FIG. 1c. FIG. 1d.

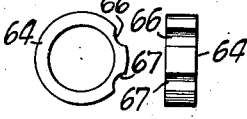


FIG. 2d. FIG. 2e. FIG. 2f.

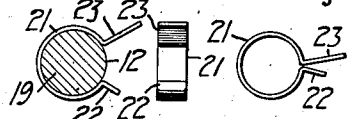


FIG. 1e. FIG. 1f.

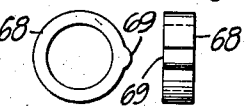


FIG. 2g. FIG. 2h. FIG. 2i.

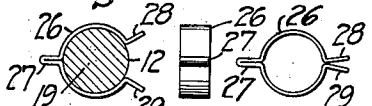


FIG. 5

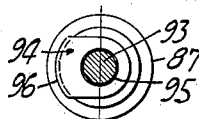


FIG. 1g. FIG. 1h.

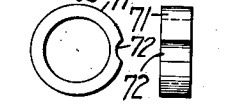


FIG. 2j. FIG. 2k. FIG. 2l.



FIG. 6

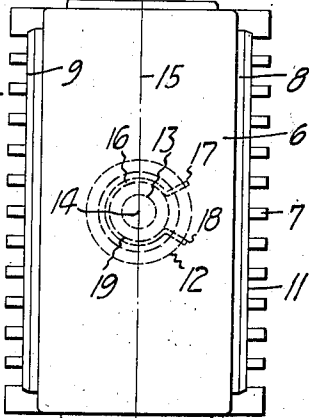


FIG. 1i. FIG. 1j.

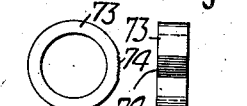


FIG. 2m. FIG. 2n. FIG. 2o.



FIG. 1k. FIG. 1l.

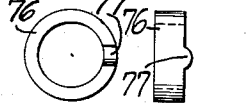


FIG. 2p. FIG. 2q. FIG. 2r.



FIG. 1m. FIG. 1n.

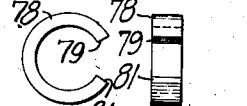
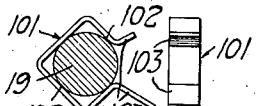


FIG. 7. FIG. 7a.



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2,150,337

RAZOR

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Application June 1, 1936, Serial No. 82,774

1 Claim. (Cl. 30—34)

My invention relates to shaving devices and is especially concerned with safety razors of the type in which a symmetrical holder is utilized for supporting a symmetrical, plural-edged cutting or shaving blade.

In razors of this character the two customary shaving edges are identical in effect, and in order to obtain maximum use from the blade both edges should be used an equal amount. Since the blades and their holders are symmetrical in appearance it is impossible, once the blade has been assembled in the holder, to distinguish between the two edges. In this way the likelihood is that one edge will be utilized more than the other and the maximum value available will not be obtained.

It is therefore an object of my invention to provide means for identifying the plural edges of a razor blade when in usable position in the blade holder.

Another object of my invention is to provide identifying means which can be applied to razors already in existence.

A further object of my invention is to provide identifying means which can be selectively positioned.

An additional object of my invention is to provide an identifying means which will be very simple and inexpensive.

The foregoing and other objects are attained in the embodiments of the invention illustrated in the drawing, in which—

Fig. 1 is a side elevation of a razor constructed in accordance with my invention, a portion of the handle being broken away to reduce the size of the figure.

Figs. 1a to 1g, inclusive, are on the left half plans and on the right half elevations of identifying clips adapted to be utilized in conjunction with the razor of Fig. 1.

Fig. 2 is a side elevation of a standard form of razor with a clip applied thereto.

Figs. 2a to 2f, inclusive, on the right hand show plans of various clips in accordance with my invention, in the center show side elevations of such clips, and on the left hand show the clips applied to the handle of the razor of Fig. 2.

Fig. 3 is a side elevation of another type of clip in accordance with my invention, applied to a standard razor.

Fig. 4 is a partial front elevation of the razor of Fig. 3.

Fig. 5 is a cross-section the plane of which is indicated by the line 5—5 of Fig. 3.

Fig. 6 is a plan view of the razor shown in Fig. 2.

Fig. 7 is a plan of another type of clip in ac-

cordance with my invention, shown applied to a standard razor.

In its preferred form, the razor of my invention includes a shaving means having duplicate or plural cutting or shaving edges, the assembly presenting a symmetrical appearance, and being provided with a detachable clip which indicates or identifies one of the shaving edges.

The razor of my invention can be made in a large number of variant forms, and I have illustrated herein several different forms to exemplify the invention. Preferably the device is utilized in conjunction with a razor of the "Gillette" type which, as disclosed particularly in Figs. 2 and 6, includes a generally rectangular cap 6 which is curved in cross-section and overlies a serrated guard 7. A shaving blade 8 of thin metal, having two parallel and identical shaving edges 9 and 11, is interposed between the cap 6 and the guard 7 and is held in such location by the engagement of a handle 12 with a threaded projection 13 extending from the cap 6. The cap 6, the guard 7, the blade 8, and the handle 12 are all symmetrical about a central axis 14 or plane 15, and either edge 9 or edge 11 of the blade is equally useful for shaving. From an external inspection it is impossible to differentiate between the edge 9 and the edge 11.

In accordance with my invention, therefore, I provide means to be applied to a standard razor, as shown in Fig. 2, for distinguishing or identifying either one or the other of the edges 9 and 11. As shown especially in Fig. 2a, this means preferably includes a clip 16 which is fabricated of a strip of any suitable material, such as metal, which is bent into a generally circular, band-like form and has its two ends turned outwardly, as at 17 and 18, to provide projections which make the clip asymmetrical about the plane 15, for instance. The band 16 is preferably resilient or springy and for use is forced transversely over the reduced portion 19 of the handle 12. When so positioned it assumes the shape shown in Fig. 2a or, depending upon its proportions, may completely encircle the portion 19. The positioned band 16 frictionally retains any set position, although it is readily rotatable about the circular portion 19. The projections 17 and 18 not only assist in guiding the clip onto the reduced portion 19 but also afford a discontinuity in the contour of the clip so that they can preferably be positioned adjacent to one of the cutting edges, for instance 11, in order to distinguish or identify that particular edge. With such an identification available, the user can readily distinguish

between the edge 9 and the edge 11 and derive an equal usage from both.

As disclosed especially in Fig. 2b, the clip 21 includes a circular band having a projection 22 and a projection 23 arranged to assist in guiding the clip onto the reduced portion 19, but the projection 23 is relatively long and projects sufficiently far as to provide a body which is easily discernible by the sense of sight and/or touch. In the event the frictional engagement is relatively tight, pressure upon the elongated ear 23 in a direction to rotate the clip 21 in a counter-clockwise direction, as shown in Fig. 2b, will loosen the clip sufficiently to permit its being turned readily from one side of the handle 12 to the other, to designate either the edge 11 or the edge 9.

In Fig. 2c there is shown a modification in which a band 26 is provided with a crimped projection 27 to serve as an identifying means. Opposite to this is a pair of projecting ears 28 and 29, in order to afford easy engagement with the handle of the razor.

In Fig. 2d the clip includes a band 31 having projections 32 and 33 thereon and likewise between its ends is provided with a partially closed ear 34 which differs in contour with the projections 32 and 33 and can readily be distinguished therefrom. Furthermore, the aperture 36, defined by the ear 34 and the reduced portion 19, provides means for the reception of a hook or other fastening or hanging device.

In Fig. 2e a comparable arrangement is provided, in that the band 37, having projections 38 and 39 thereon, is provided with a partial loop 41 to act as a distinguishing feature and to allow for substantial yielding of the band 37 itself.

In Fig. 2f a band 42 is provided with projections 43 and 44 which spread apart to permit the clip frictionally to engage the reduced portion 19 of the handle 12, and is also provided with a projecting portion 46 which can either be displaced from the material of the clip or can be material added thereto. The portion 46 can be a projection, as shown, or can be a recess or even an aperture. In any event, there is an effective discontinuity in the surface of the band to aid in acting as an identifying means.

All of the various clips described are intended primarily to be adapted to the standard form of razor now available. In the event a special construction of a handle is advisable, I preferably provide the arrangement shown in Fig. 1, in which the cap 51, the guard 52, and the intermediate blade 53 are the same as previously described. The blade has duplicate shaving edges 54 and 56 and is held in place by means of a handle 57 engaging a threaded projection on the cap, but in the present instance the handle is reduced to provide a circular-cylindrical portion 58. Instead of laterally attaching a clip by spreading projections apart, in this instance I preferably provide means to be applied to the cylindrical portion 58 when the razor is disassembled. When the handle 57 is detached from the threaded projection 59, a clip such as shown in Fig. 1a, for instance, can be slipped over the end of the cylindrical portion 58 and the handle can then be restored to its engaged position.

As especially shown in Fig. 1a, a suitable clip incorporates a continuous band 61 of metal or the like, which is uniform except for a pair of projections 62 and 63 which are either formed of the material of the band itself or applied thereto in order that the clip will be non-symmetrical about

the plane 15. When mounted on the cylindrical portion 58 the clip 61 has a relatively tight frictional fit therewith, so that when the projections 62 and 63 are positioned adjacent either of the edges 54 and 56 the clip will remain in adjusted position and will then render the razor assembly asymmetrical in order that the designated shaving edge can be identified.

In Fig. 1b there is disclosed a band 64 which is continuous but which, instead of having projections, is formed with depressions 66 and 67 in its surface. These depressions serve to identify one particular portion of the surface of the clip.

The clip 68 in Fig. 1c is a continuous band having a single projection 69 thereon, which can be positioned adjacent to either of the shaving edges and will thereafter serve to identify such edge.

The clip 71 in Fig. 1d, instead of being provided with a projection, is provided with a single depression 72 serving as a discontinuity in the otherwise regular contour of the clip, so that one portion of the surface of the clip is readily distinguishable from the other.

The clip 73 of Fig. 1e is not provided, generally speaking, with either projections or depressions, but is simply treated to provide a roughened surface 74 or surface irregularity of relatively minor dimensions, which is readily visible and is likewise obvious to the sense of touch which in itself can serve as a suitable indicator.

Instead of providing any discontinuity on the circular periphery of the clip, as shown in the preceding figures, the clip 76 of Fig. 1f is provided with a hump or projection 77 on one or both of its annular faces. The hump is either additional material applied to the clip or formed of the same material during the manufacture of the clip. In either instance it serves readily as a discontinuity which will indicate one or the other of the available shaving edges.

A further departure is provided in the clip 78 of Fig. 1g, in which a band is provided which is not continuous but is interrupted to provide ends 79 and 81, primarily for identification purposes. While the clips of Figs. 1a to 1g are not made with a major amount of resiliency, nevertheless some springiness is available to afford an appropriate frictional retaining engagement with the cylindrical portion 58. If preferred, the clips can be made to fit tightly, so that they can be permanently installed at the factory when properly oriented to indicate a shaving edge of a blade in the razor assembly.

Instead of partially or entirely encompassing the circular portion of the razor assembly handle, I can alternatively utilize means interposed between the guard 86 and the circular handle 87 of the razor, as shown in Fig. 3. This razor clamps a blade 88 having edges 89 and 91 by means of the handle 87 engaging a threaded projection 93 extending from a cap 92. In this instance a strip 94 of suitable material, such as metal, is preferably perforated at one end to provide an aperture 95 which fits around the projection 93. The material extends between the guard 86 and the handle 87, and when the handle is screwed tightly into position the clip is likewise retained. The clip is sufficiently thin that no deleterious effect is produced in the adjustment of the razor assembly. The material of the clip is bent upon itself substantially at a right angle and is preferably curved to depend upon and overlie the handle 87 in the shape of an arcuate shield 96 which is obvious to the sight and touch of the user. The shield 96 can

be positioned as desired on the handle but preferably is so oriented as to rest adjacent a selected one of the cutting edges in order to distinguish or identify the shaving edge 89 from the shaving edge 91, for instance.

As shown in Fig. 7, there can be provided a clip 101 which in plan is polygonal and is formed of a flat metal band to have a plurality of points of contact 102 with the handle portion 19 and a pair of projecting ends 103 preferably of unequal length. This form of clip can readily be fabricated by machine from standard material and, partially due to its contour, retains a high degree of resiliency so as not to be permanently deformed by application to and release from the portion 19.

It is not necessary that the clips shown in Figs. 2a to 2f, or in Fig. 7, be formed of metal of a flat band section. If desired, they may be formed of round, half-round or ovate shaped wire.

I claim:

A safety razor comprising in combination a blade assembly comprising a guard, a clamp and a blade having a plurality of shaving edges, a handle therefor, and means for identifying a predetermined blade edge comprising a spring clip having a collar, a plurality of spaced contact portions on the collar engaging the handle, said collar being rotatably mounted upon the handle and in frictional engagement with the handle, and a projection for each end of said collar extending laterally of the handle, one of said projections being elongated with respect to the other projection, said clip adapted to be rotated on the handle so that said projections may be frictionally set in the direction of a predetermined blade shaving edge.

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