Dec. 9, 1958 A. J. RYPYSC 2,863,213

MULTI-EDGE RAZOR BLADE HAVING VARIOUS SHAPES AND SIZES OF CUTTING EDGES

Filed Jan. 31, 1957

Fig. 1.

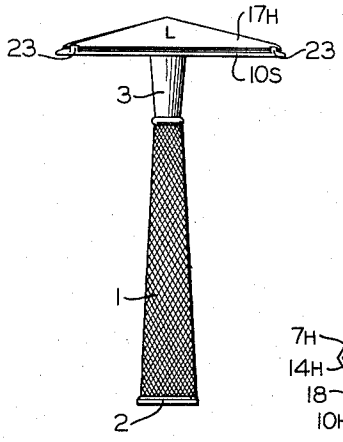


Fig. 2.

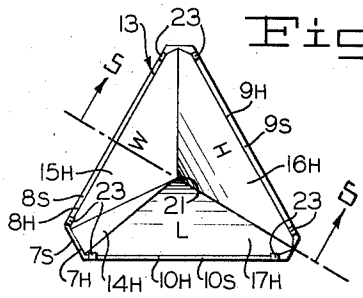


Fig. 3.

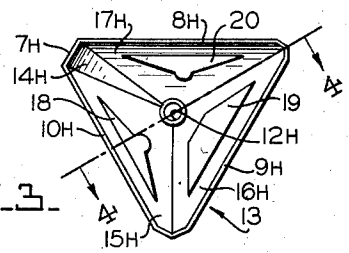


Fig. 8.

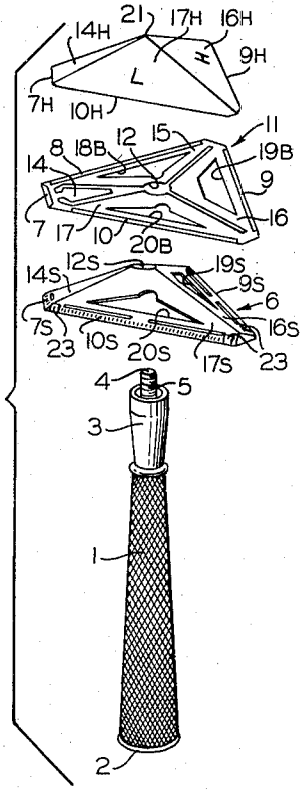


Fig. 4.

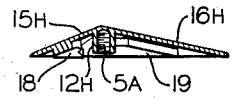


Fig. 5.

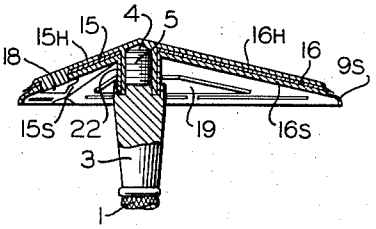


Fig. 6.

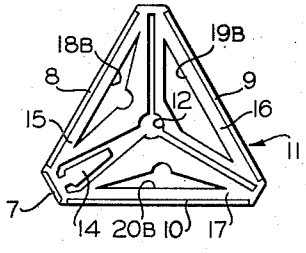
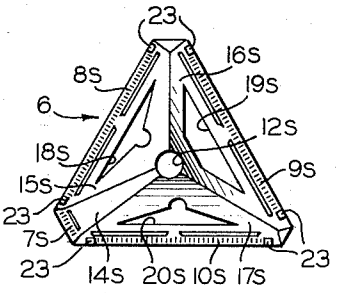


Fig. 7.



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MULTI-EDGE RAZOR BLADE HAVING VARIOUS SHAPES AND SIZES OF CUTTING EDGES

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Application January 31, 1957, Serial No. 637,453

1 Claim. (Cl. 30—74.1)

This invention is concerned with safety razors for shaving of the type in which a flexible, replaceable blade is supported in position between two separate members that are affixed to a holder.

The razor herein to be described has a unique feature in that there are three (3) separate cutting edges for shaving and one (1) short cutting edge for removing a beard beneath the nose of the person using the device.

Heretofore, razors have appeared on the market with two (2) cutting edges which are for the purpose of giving extra time and use of the blade.

It is a principal object of the within invention to provide a safety razor which has facilities for providing a medium, heavy, and a light cutting edge on the same blade which are separate from each other.

It is another object of the within invention to provide a safety razor that has the feature of a small cutting edge to cut away whiskers and hairs beneath the nose.

It is yet another object of the within invention to provide a razor blade holder that has a novel geometrical shape that lends itself for speedy cutting of whiskers from the face and the body.

It is still another object of the within invention to provide a safety razor assembly that is inexpensive in the cost of manufacture and yet is of excellent and high efficiency.

The above and other objects are attained by the use of a three sided razor blade mounted in a razor assembly in which the head itself appears to be triangular, except for a short, flat cutting surface between two of the three larger sides.

Reference is made to the following specification and the accompanying drawing in which:

Figure 1 is a side elevational view of the razor blade assembly.

Figure 2 is a top plan view of the razor blade assembly looking down on Figure 1.

Figure 3 is a view of the inside portion of the cap, looking up into the head of Figure 1.

Figure 4 is a sectional view taken along line 4—4 of Figure 3.

Figure 5 is a view of an enlarged section along the line 5—5 of Figure 2.

Figure 6 is a top plan view of the razor blade itself looking down upon it.

Figure 7 is a top plan view of the razor blade support member.

Figure 8 is an exploded perspective view of the entire razor and blade assembly.

In Figure 1 the entire razor and blade as assembled is shown. The razor blade assembly has a handle portion **1** and a bottom of the handle **2**. Above the handle portion **1** is a top tapered portion **3** which lies beneath the blade support **6**. The blade support **6** is shown in detail in Figure 7. Above the blade support **6** is the razor blade itself **11**, which is shown in detail in Figure 6 and which can be seen clearly in the exploded view of

Figure 8. Above the razor blade **11** is the head **13**. The head **13** has a pyramid top point **21**.

In Figure 8 there are screw threads **5** on the screw portion **4** of the handle **1**. In the support **6** there is an opening **12S** into which the screw portion **4** passes. It is also to be noted that in the blade **11** there is an opening **12** also through which the screw portion **4** passes. Beneath the head **13** there is a cylindrical opening **12H** having threads **5A** for receiving the threads **5** of the screw portion **4**. It is by rotating the handle portion **1** so that the screw portion **4** threads into the opening **12H** which is affixed to the head **13** that the three parts, the cap **13**, the razor **11**, and the support **6** are held securely together. The razor blade **11** has besides the central opening **12**, other openings which align the razor blade **11** in the proper position on the support member **6**. The opening, for example, **18B**, fits around the protrusion **18** in the cap **13**. The opening **19B** similarly fits around the protrusion **19** of the cap **13**. Similarly does the opening **20B** fit around the protrusion **20** in the cap **13**. The protrusions **20, 19,** and **18** pass through the openings in the razor blade **11** as just mentioned and also pass through the complementary openings in the support shown in Figure 7. That is to say, that the opening **18S** lies proximate to opening **18B** in the blade **11** and both fit around the protrusion **18** in the cap **13**. Similarly do the openings **19S** and **20S** fit around the protrusions **19** and **20** in the cap **13** and lie beneath, of course, the openings **19B** and **20B** in the razor blade **11**.

It is to be noted in the view of Figure 2 that the letters, L, H and M appear on the surfaces of the cap **13**. It is to be pointed out that the razor cutting edges opposite these letters are for heavy (H), light (L), and medium (M) cutting. The surface on the head **13** opposite H is indicated on the cap **13** as **9H** and on the support as **9S** and on the razor blade itself as **9**. The surface on the light edge indicated at L has an edge **10H** on the cap, an edge **10S** on the support, and a cutting edge **10** on the razor blade. Opposite the medium cutting edge are the edges H on the cap, **8S** on the support, and **15** on the razor blade **11**. There is a short edge indicated on cap **13** in Figure 2 as **7S**. This surface has beneath it a cutting edge **7** on the razor blade **11** and beneath that, an edge **7S** on the support **6**. This particular cutting edge **7** is small and is designed to fit beneath the nose of the person being shaved. It is, of course, small and may be utilized to cut hair in areas which are difficult to get to with the larger length of blade.

The cap **13** is not flat but has inclined planes reaching down from the top pyramid point **21**. The surfaces which are inclined from point **21** are all triangular. Upon inspection of Figure 2 it can be seen that the surfaces marked M, H, and L are separate triangles and that the surface marked **14H** is also a triangular surface. The cap **13** and the support **6** pressing together cause the razor blade **11** to have tension at its central areas of the various inclined surfaces. These surfaces are indicated on the razor as **14** for the surface opposite the cutting edge **7**; **15** for the area opposite the cutting edge **8**; **16** for the area opposite the cutting edge **9**; and **17** for the area opposite the cutting edge **10**. The numbers in the drawings on the cap are similar and proximate to the areas indicated in the razor blade. However, these numbers have an H thereafter. They are, **15H** on the area opposite the cutting edge **8H**; **16H** on the area opposite the cutting edge **9H**; **17H** on the area opposite the cutting edge **10H**; and **14H** on the area opposite the cutting edge **7H**. Similarly, on the support **6**, the numbers are similar and proximate those of the blade that have the letter S thereafter. The cutting edge **9S** has

the triangular surface **16S**; the cutting edge **8S** is opposite the triangular area **15S**; the cutting edge **7S** is opposite the triangular area **14S**, and the cutting edge **10S** is opposite the triangular area **17S**. There is in the support **6** a sleeve **22** which can be seen in a cross-section in the view of Figure 5. This sleeve **22** is complementary to the receptacle **12H** and assists in the alignment of the support **6**, the razor blade **11**, and the cap **13**.

In operation, it is necessary to assemble the support **6**, the razor blade **11**, and the cap **13** as indicated in the exploded view of Figure 8. Because of the openings **12S**, **12H** through the center of the support **6**, and the razor blade **11**, with the screw **4** passing therethrough into the cylindrical opening **12H**, and because of the protrusions **18**, **19**, and **20** already mentioned, in the cap which pass through the openings complementary thereto in the razor blade **11** and the support **6**; and because of the sleeve **22**, the parts align themselves automatically upon being placed one over the other as shown in Figure 8 and it is only necessary for the user of the razor to turn the handle **1** so that the threads **5** on the screw portion **4** will engage the threads **5H** within the receptacle **12H** and tie in its threads **5** therein.

Once the razor has been assembled, it is then at the discretion of the user to select whichever cutting edge he so desires. The difference between the heavy and the light cutting edges is, of course, extreme. The differences, however, may depend upon how long it has been between the time the person has shaved and the growth of his beard, and the nature of his beard.

In order to use the small cutting edge indicated as **7** in the razor blade **11** it is only necessary that edge **7** be used at right angles against the skin. As pointed out, the edge **7** lends and adapts itself to getting into places which are small and difficult to reach with the longer cutting edge.

A pressure is exerted by the cap **13** on the blade **11** against the support **6** causing the blade **11** to conform to the pyramid shape of the cap **13**.

Dimensions in the drawing have been exaggerated to teach more clearly the within invention. Changes in certain of the detailed structure are contemplated without

departing from spirit and scope of the within invention. Having thus described my invention, I claim:

In a razor assembly, a handle having a reduced screw portion formed on the outermost end thereof, a blade support defined by three relatively large inclined surfaces and a relatively small inclined surface, the small inclined surface positioned between two of said large inclined surfaces, and adapted to enter shaving areas that are inaccessible to the large inclined surfaces, each of said inclined surfaces having a triangular configuration, the bases of the triangles defining edges for receiving and supporting the cutting edges of a razor blade, the apices of said triangles terminating at an opening, said screw portion extending through said opening for mounting said blade support on said handle, a cap having a configuration similar to said blade support and including three relatively large triangularly shaped inclined surfaces, and a relatively small triangularly shaped inclined surface, the bases of said cap inclined surfaces terminating adjacent said blade support edges and the apices of said cap inclined surfaces terminating at an apex that defines the outermost end of said razor assembly, an internally threaded projection formed on the underside of said cap for receiving said reduced screw portion therein, said blade support secured between said cap and handle and cooperating with said cap to secure a flat blade therebetween, said blade adapted to be bent from its flat position to correspond to the inclined surfaces of said blade support as said screw portion is tightened in said projection.

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