

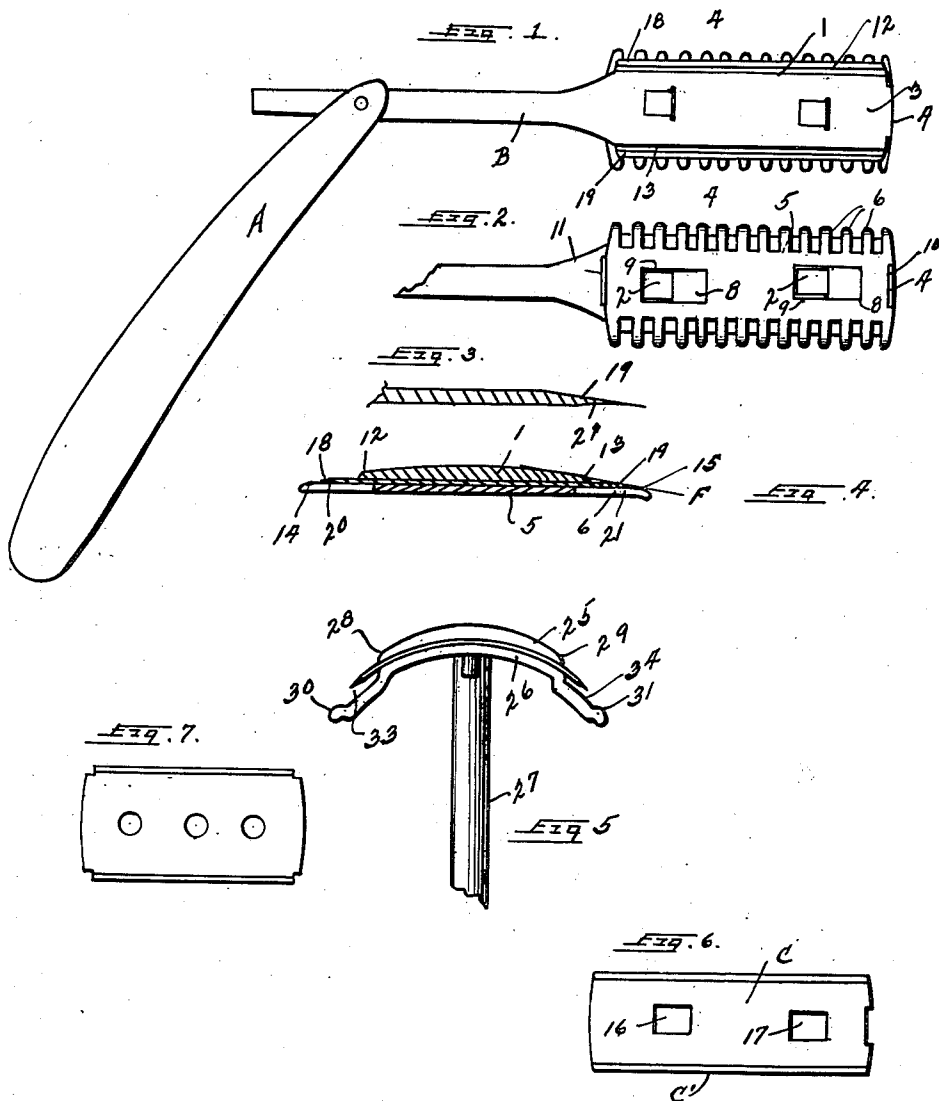
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SAFETY RAZOR

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SAFETY RAZOR

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3 Claims. (Cl. 30-73)

My invention relates to razors and has for its object to provide two new features in safety razors, namely, the means to remove the beard by actually cutting it off instead of largely scraping it off as with other types of razors, and combined with this the absolute prevention of cutting the face in place of the inherent tendency of other safety razors to cut under the skin and nick the face.

My invention provides these two things, new to safety razors, through the application of two entirely new principles of construction, namely; an entirely new principle in sharpening of the safety razor blades and an entirely new principle in the relationship between the shaving plane of the razor and the cutting plane of the blade when in place. The new method of sharpening the blades is that of sharpening one side of each cutting edge of the blade on a bevel and sharpening the opposite or reverse side of the blade in a concave arc, so that the beveled side is tangential to the arc. The new relationship between the shaving and cutting planes is that of so constructing the razor and the blades so that when the blade is in place it is held in such a position that the beveled cutting plane of each cutting edge of the blade and the shaving plane of the razor coincide.

In all safety razors these planes do not come even close to coinciding, but are by comparison with this construction at relatively large angles.

Through the application of these principles of construction the beveled side of the cutting edge of the blade in use is secured on the same plane as the plane of those parts of the head and guard of the razor which touch the face and this places the beveled side of the cutting edge of the blade parallel to the surface of the skin over which it passes and the surface of the skin over which the razor passes is tangential to the reverse or arc side of the blade, therefore the cutting edge of the blade or that juncture of the beveled edge to the arc edge actually cuts off the beard without danger of cutting the face.

These objects I accomplish with the device illustrated in the accompanying drawing in which similar numerals and letters of reference indicate like parts throughout the several views and as described in the specification forming a part of this application and pointed out in the appended claims.

In the drawing in which I have shown the best and most preferred manner of building my invention

Figure 1 is a side elevation of the safety razor of the preferred model used and mounted similar to the old straight edge type of razor.

Figure 2 is an inverted view of the razor head to that shown in Figure 1.

Figure 3 is an enlarged view of the edge of the blade showing the method of sharpening the blade.

Figure 4 is a section on line 4-4 of Figure 1, enlarged to show the angle of sharpening the blade to the angle of the razor head and guard.

Figure 5 is a sectional view of another type of razor commonly called the hoe type in which the head and guard are formed so that a line drawn across and tangential with the edge curve of the head and the edge curve of the guard will be parallel and aligned with the cutting edge of the blade.

Figure 6 is a plan view of the blade used in the type of razor shown in Figure 1.

Figure 7 is a plan view of the blade used in the hoe type razor.

In the drawing I have shown the handle of the razor as A, to which the blade holding body B, is pivotally mounted, similar to a straight edge razor. The handle B is made very thin into a head 1, and has two spaced apart lugs 2, struck therefrom extending up and bent back parallel to the body thereof. The end 3 of the handle 1 is turned down at 4 to provide a lug against which the blade and guard engage. The guard 5 of the razor is made with the serrated edges 6 on each side thereof, between which the whiskers pass to the blade and the guard is made of a flat piece of metal having openings 8 formed there-through with one end of the openings 9 depressed down and over which the lugs 2 engage when the razor is assembled with the blade between the guard and head. The end of the guard has a notch 10 cut therein to engage the lug 4 of the end of the head. The other end of the guard is provided with a turned up portion 11 by which the guard is operated when being placed on or taken off from the head.

The head 1 is made thin and the extreme edges 12 and 13 are cut so that a line F drawn across the edges engaging the upper extreme edges 14 and 15 of the guard will be in alignment with the beveled cutting edge of the razor blade C. The blade C is formed to fit into the guard and onto the head with spaced apart openings 16 and 17 therethrough to fit over the lugs 2 of the head 1. The lugs 2 of the head 1 and the openings 16 and 17 of the blade may be staggered or offset from a medial line as shown so that the blade may only

be placed on the razor from one side. The blade is then sharpened so that the upper side has the two edges beveled at 18 and 19 and with the under sides 20 and 21 sharpened in an arc with the 5 bevels 18 and 19 cut tangential to the arcs 20 and 21. This construction makes the bevels of the blade tangential to the arcuate under sharpening and makes the cutting edge C1 of the blade cut the beard instead of scraping it as the edge en- 10 gages directly with the beard parallel to the face and not at an angle thereto.

In the type of razor shown in Figure 5, the blade is held in a curved head 25 by a curved guard 26 and a handle 27. The head 25 has the 15 edges 28 and 29 formed to meet a line drawn from the edges 30 and 31 of the guard 26 parallel with and in alignment with or on the same plane as the beveled edge of the blade C. The guard 26 is formed with a curved medial section and 20 with longitudinal grooves 33 and 34 parallel to each other and spaced equidistant from the medial line of the head and in this groove the edge of the blade terminates and the extreme edges of the guard are turned up to the line above men- 25 tioned. The edges of the guard are serrated or castellated as in all types of safety razors.

In Figure 7 the blade shown is that used in Figure 5 type of razor and is provided with 30 notched corners to fit the head, said head being provided with depending lugs on each corner to hold the blade in rigid relation to the razor. If desired only opposite corners of the blade will be notched so that it will be impossible to get the blade in the razor with the wrong surface out- 35 ward.

The razor shown in Figure 5 is so constructed that it holds the razor blade in such a position that the cutting planes of the two cutting edges are at substantially right angles to each other.

Having thus described my invention I desire to 5 secure by Letters Patent and claim:

1. In a razor the combination of a head, a guard, and a blade, said blade being sharpened with a beveled edge to engage the face and a curved inner edge with the bevel tangential to 10 the curve and on a plane with the shaving surface of the head and guard.

2. In a razor the combination of a curved head; a curved guard to fit thereto having longitudinal grooves therein spaced from the medial line of 15 the guard; and a blade to fit between the head and guard, the blade being sharpened with one side of each edge beveled on a plane with the shaving plane of the head and guard and with the inner side of the edges of the blade sharp- 20 ened in an arc with the beveled edge tangential to the arc.

3. In a razor of the class described, the combination of a head, and guard with the head 25 formed with the outer face engaging portions curved and the edge of the head and guard on the same plane; a double edged blade for said head and guard having the outer edge of each cutting edge sharpened in a bevel which when 30 placed in the head and guard will be parallel to the surface being shaved and having the inner edge away from the face on each side sharpened in a longitudinal arc with the beveled edge tan- 35 gential to the arc substantially as described.

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