Aug. 17, 1943. B. H. FREEDMAN 2,326,774

SAFETY RAZOR

Filed July 11, 1939

Fig. 1.

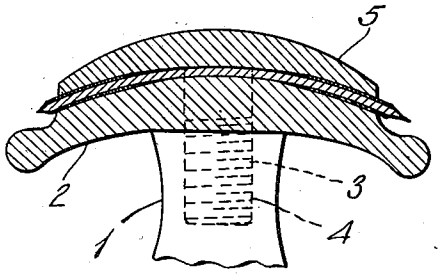


Fig. 3.

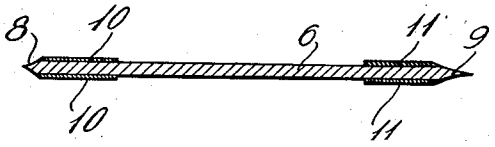


Fig. 5.

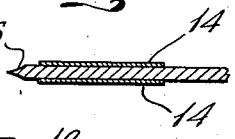


Fig. 7.

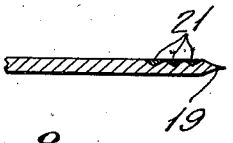


Fig. 2.

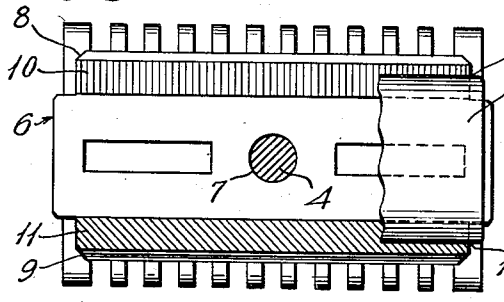


Fig. 8.

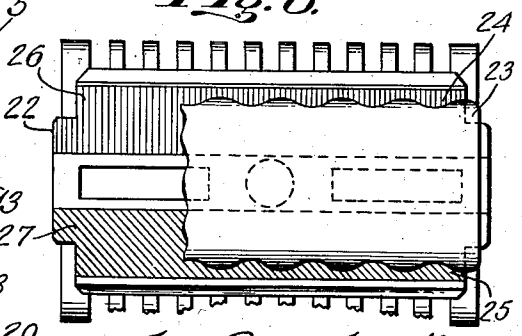


Fig. 4.

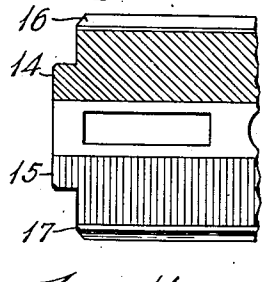


Fig. 6.

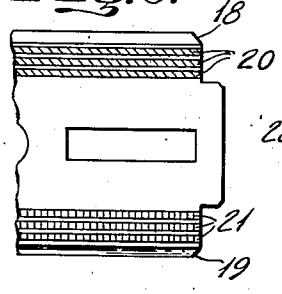


Fig. 9.

Fig. 10.

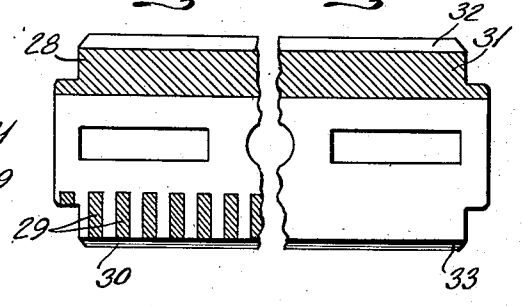


Fig. 11.

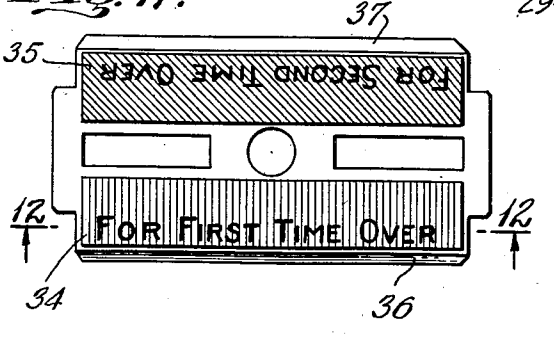


Fig. 12.



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SAFETY RAZOR

Benjamin H. Freedman, Asbury Park, N. J.

Application July 11, 1939, Serial No. 283,777

5 Claims. (Cl. 30—70)

This invention relates to safety razors in general, and more especially to safety razors characterized by a multi-edged razor blade sandwiched between a guard and a cap.

Among the objects of the present invention, it is aimed to provide an improved safety razor characterized by a multi-edged razor blade sandwiched between a guard and a cap, in which the razor blade has formed thereon a distinguishing mark so positioned that it will be discerned when sandwiched as aforesaid, to facilitate the user in selecting one or another of the cutting edges.

It is still another object of the present invention to provide a double edged razor blade having formed thereon a marking which will cooperate with the holder in facilitating the user in selecting the cutting edge desired.

More specifically, it is an object of the present invention to provide a double edged razor blade having formed thereon a marking contrasting in color with the material of the holder adjacent one cutting edge that in turn is readily distinguishable from the other cutting edge either by no marking at all, or by a marking that contrasts in color with the marking on the other cutting edge, so that the cutting edges are readily distinguishable from one another when the blade is in the conventional holder ready for shaving use.

These and other features, capabilities and advantages of the present invention will appear from the subjoined detail description of specific embodiments thereof, illustrated in the accompanying drawing in which

Figure 1 is a cross section of a safety razor with a double edged razor blade having markings coated thereon, sandwiched between a cap and guard on an enlarged scale to facilitate illustrating the features of the invention;

Fig. 2 is a plan of the embodiment illustrated in Fig. 1, with a part of the cap broken away, the surface of the blade having the conventional designations thereon to represent contrasting colored coatings;

Fig. 3 is a cross section of a blade similar to that used in the embodiment of Fig. 1 on a larger scale than that illustrated in Fig. 1;

Fig. 4 is a fragmental plan of a razor blade with the coatings in contrasting colors slightly wider than illustrated in Fig. 2, and slightly spaced from the cutting edges as compared to the embodiments of Fig. 2;

Fig. 5 is a fragmental cross section of the embodiment illustrated in Fig. 4;

Fig. 6 is a fragmental plan of a razor blade with coatings in contrasting colors formed in depressed parallel rows;

Fig. 7 is a fragmental cross section of the embodiment illustrated in Fig. 6;

Fig. 8 is a plan showing a blade sandwiched between a guard and a cap in which the cap is partly broken away and provided with waved edges to increase exposed faces of the markings in contrasting colors;

Fig. 9 is a fragmental plan of a razor blade with a colored marking adjacent each edge of the same, and contrasting with the appearance of the cap to be used, and in which the markings distinguish from one another in that one marking is continuous and the other is interrupted;

Fig. 10 is a fragmental plan of a razor blade with the colored marking adjacent one edge alone contrasting with the appearance of the cap to be used and the area adjacent the other edge is distinguishable from the first colored marking in that it is free from any marking;

Fig. 11 is a plan of a razor blade having markings adjacent the cutting edges, contrasting in color with one another and in addition, provided with inscriptions to indicate the respective purposes for which the adjacent cutting edges are to be used;

Fig. 12 is a fragmental section on the line 12—12 of Fig. 11, but on an enlarged scale.

In practice it has been found that safety razors having multi-edged blades and particularly double edged blades, can be used to advantage in one of several ways. As an instance, with the person who requires a second time over, that person obviously would get the most use out of a two edged razor blade, if he would use one edge for the first time over and the second edge for the second time over. With persons who find it necessary to perform a second treatment or a second time over, it has been found in practice, that a different cutting edge is preferable for the first time over than that used for the second time over. As an instance, some barbers find a better job can be performed when a razor having a cutting edge that is shallow ground is used for the first time over and a razor having a cutting edge that is deep ground is used for the second time over.

On the other hand, it has also been found to advantage that these safety razors having multi-edged blades such as the double edge blades extensively used today, can be used to advantage by those who wish to use one and the same razor blade several times and it is of course obvious that each shaving operation will tend slightly to dull the blade. Consequently, if the user wishes to use one and the same double edged safety razor blade two successive times, and wishes to use only one cutting edge the first day and the second cutting edge the second day, he, just as well as the user who wishes to use one cutting edge for the first time over and the other cutting edge for the second time over, would find it to advantage to have a razor which would readily

distinguish to him one cutting edge from the other.

Heretofore attempts have been made to distinguish to the user one cutting edge from the other by etched inscriptions, as an instance. Such blades, however, were not practical and were not extensively adopted due to the conditions that accompanied the use of the blade. As an instance, whether the user used shaving cream or soap suds, the etched inscription would quickly be covered at least in part so that it would be difficult to read the etched inscription without thoroughly washing the razor. Still furthermore, the home shaver generally attends to this part of his toilet in the bathroom. It is well known that if the bathroom is not provided with daylight, and even though provided with daylight and the shaving operation is performed during the evening when artificial light is necessary, that the average bathroom is not provided with as good illumination as that in the living room, as an instance. This custom of poor illumination in bathrooms resulted in another reason why razors merely provided with etched inscriptions to distinguish the different cutting edges were not practical.

In view of the foregoing, and as set forth in the introduction to the specification, the present invention has for an object to provide a razor blade equipped with a marking so that the different cutting edges can be readily distinguished when the blade is in the conventional holder ready for use or during use, and whether or not the illumination is good.

In the embodiment illustrated in Figs. 1, 2 and 3, there is provided a safety razor having a holder or handle 1, to which a guard 2 is rigidly attached and which is generally provided with an internally threaded chamber 3 to receive the stem 4 of the cap 5 with the razor blade 6 sandwiched between the cap 5 and the guard 2 as shown in Fig. 1. The blade 6 as a rule is provided with a central opening 7 to receive the stem 4 of the cap 5. The razor illustrated in Fig. 1 is typical of the conventional razors suitable for use with a two edged razor blade manufactured as plane wafers which are curved over into the position shown in Fig. 1 when sandwiched between the cap 5 and guard 2. The thickness of the blade 6 here is exaggerated for the purpose of illustration. The cutting edge 8 in the present instance, is shallow on both sides and intended for shaving the first time over, and the cutting edge 9 is deep ground on both sides and intended for use for close shaving or for the second time over. In the embodiment illustrated in Figs. 1, 2 and 3, adjacent the cutting edge 8, there is formed a colored band or marking 10, indicated in the present instance as red, and adjacent the cutting edge 9, there is formed a second band or colored marking 11, indicated in the present instance as green. These bands 10 and 11 are preferably formed on both surfaces of the metal strip before the strip is stamped out if the plane wafer type of razors are to be formed and at any rate the colored bands are preferably formed on the opposite faces of the blade before the cutting edges 8 and 9 are formed in which case, as indicated, the colored markings at the cutting edges will be partially removed when the cutting edges are being ground.

The safety razor holder including the handle 1, guard 2 and cap 5, are preferably composed of metal in the conventional way and finished in a metal sheen, either the typical silver or gilt sheen. The color selected for the bands 10 and 11 are then selected not only to distinguish from one another so that the cutting edge desired may with facility be selected, but in addition the colors selected are those which distinguish from the finish of the cap and guard. These bands 10 and 11 extend to the start of the ground bevel edge, see Fig. 2, and expose that portion of the colored band that extends beyond the edges 12 and 13 of the cap 5.

The embodiment illustrated in Figs. 4 and 5 shows the bands 14 and 15 considerably wider than the bands 10 and 11, respectively, of Fig. 2, but slightly spaced from the cutting edges 16 and 17. The colored band 14 is indicated as green and the colored band 15 is indicated as red.

The embodiment illustrated in Figs. 6 and 7 shows a number of parallel grooves formed adjacent the cutting edges 18 and 19 which are filled with a coloring medium 20 and 21, the colored medium 20 in the present instance being indicated as green and the colored medium 21 being indicated as red.

In Fig. 8 the blade 22 there illustrated is substantially identical to the blade shown in the embodiments of Figs. 4 and 5 but the cap 23 is shown as having waved edges 24 and 25, as distinguished from the plane edges 12 and 13 of the cap 5 whereby the exposed portion of the colored bands 26 and 27, respectively, may be increased and therefore accentuated.

In Fig. 9 the colored band 28 distinguishes from the colored markings 29 primarily in that the colored marking 28 is continuous whereas the markings 29 are interrupted and consist of a plurality of parallel markings vertical to the cutting edge 30.

In Fig. 10, the colored band 31 is formed adjacent to the cutting edge 32 whereas the portion of the blade adjacent the cutting edge 33 is not marked, whereby the cutting edges 32 and 33 can readily be distinguished from one another.

In the embodiment illustrated in Figs. 11 and 12, the colored bands 34 and 35 distinguish from one another in color, the band 34 as an instance being indicated as red and the band 35 as green. These bands 34 and 35 also distinguish from the embodiment illustrated in Fig. 4 in that they consist of individual panels. Still furthermore, the band 34 has formed an inscription thereon to designate its use, as an instance "For first time over" and the band 35 has an inscription marked thereon to indicate its use as an instance, "For second time over." It will also be noted that the cutting edge 36 in Fig. 11 is narrower and therefore indicative of a shallow ground, the type preferred for the first time over in shaving and the cutting edge 37 is wider than the cutting edge 36 to indicate that it is deep ground, the type preferred for a close shave or for the second time over.

It is of course obvious that the colors used are immaterial so long as they definitely distinguish from one another and from the appearance and marking of the cap and holder.

The present invention also contemplates a new method of manufacture consisting in producing colored bands on a sheet or strip of metal, thereupon stamping out or cutting the blades from the strip or sheet of metal, whether or not at the same time cutting through the colored bands, and thereupon grinding the cutting edges on the strips or blades while at the same time removing part of the colored matter originally formed on the strip or sheet of metal.

It is obvious that the colored marking or markings may be formed on the blades in many different ways such, for instance, as by enamel, lacquer, plating, sand blasting, etching or tempering.

As will appear from Fig. 3, if the blade 6 is of the wafer blade type today extensively used, the thickness averages about .004 of an inch but does not exceed .008 of an inch. By means of the coatings 10 or 11, which can vary according to desire from at least .001 of an inch up to at least .004 of an inch, the distance of the cutting edge to the guard and cap may with facility be regulated without changing the conventional width of a blade with respect to the conventional widths respectively of their cap and guard. While this regulation of the position of the cutting edges of a wafer blade relative to its guard and cap thus would naturally flow from the marking of a blade with a coating adjacent to its cutting edge, it is, of course, obvious that the function thereof will result independent of the fact that the coating be colored.

By these coatings the same shaving results may be obtained with a thin steel wafer type of blade as have heretofore been obtained with the identical or similar type of blade but made from steel of greater thickness. The effect of the coloring material on the under side of the blade when same is seated in the holder ready for use and in use is to elevate the cutting edge of the blade further from the guard edge by the equal additional distance corresponding to the thickness of the coloring material employed. The effect is to relocate the cutting edge of the blade with respect to the guard edge by an increased distance in the manner heretofore obtained by using a steel of considerably greater thickness which latter however has been satisfactory from the standpoint of obtaining the desired cutting edge.

It is obvious that various changes and modifications may be made to the details of construction and to the steps of the method of producing a razor blade without departing from the general spirit of the invention as set forth in the appended claims.

I claim:

1. In a razor, the combination of a guard having two guard edges, a cap having two cap edges, and a wafer blade of less than .008 of an inch in thickness having two cutting edges sandwiched between said guard and cap, the blade having colored coated areas in part exposed beyond and adjacent the cap edges, the coated areas being engaged by areas of the guard and cap adjacent the edges of the guard and cap, the thickness of the coated areas controlling the additional distances that the cutting edges are to be spaced from the cap edges and guard edges and the color thereof being optically different from the color of the other exposed strip, cap and guard.

2. In a razor, the combination of a guard having two guard edges, a cap having two edges, and a wafer blade of a predetermined thickness having two cutting edges, the wafer blade being sandwiched between said guard and cap with the cutting edges, guard edges and cap edges parallel to one another, the cutting edges extending beyond the cap edges and the guard edges in turn extending beyond the cutting edges, the thickness of the cap edges cooperating with the guard edges and cutting edges to determine the position of the cutting edges with regard to the surface to be shaved, leaving a strip exposed throughout its length between each cutting edge and its adjacent cap edge, and a color coating formed on the blade parallel and adjacent to their cutting edges and on its exposed strip with the cap edges resting on said coatings, the thickness of the coatings supplementing the thickness of the wafer blade to determine the distances that the cutting edges are to be spaced from the cap edges and the color thereof being optically different from the color of the other exposed strip, cap and guard.

3. In a razor, the combination of a guard having two guard edges, a cap having two cap edges, and a wafer blade having two cutting edges sandwiched between said guard and cap, the blade having colored coated areas in part exposed beyond and adjacent the cap edges, the coated areas being engaged by areas of the guard and cap adjacent the edges of the guard and cap, the thickness of the coated areas controlling the additional distances that the cutting edges are to be spaced from the cap edges and guard edges, and the color thereof being optically different from the color of the other exposed strip, cap and guard.

4. In a razor, the combination of a guard having two guard edges, a cap having two edges, and a wafer blade of a predetermined thickness having two cutting edges, the wafer blade being sandwiched between said guard and cap with the cutting edges, guard edges and cap edges parallel to one another, the cutting edges extending beyond the cap edges and the guard edges in turn extending beyond the cutting edges, the thickness of the cap edges cooperating with the guard edges and cutting edges to determine the position of the cutting edges with regard to the surface to be shaved, leaving a strip exposed throughout its length between each cutting edge and its adjacent cap edge, and a coating formed on each blade parallel and adjacent to its cutting edges and on its exposed strips, with the cap edges resting on said coatings, the thickness of the coatings supplementing the thickness of the wafer blade to determine the distances that the cutting edges are to be spaced from the cap edges, the color of the coating on one of the exposed strips being optically different from the color of the coating on the other exposed strip.

5. In a razor, the combination of a guard having two guard edges, a cap having two edges, and a wafer blade of a predetermined thickness having two cutting edges, the wafer blade being sandwiched between said guard and cap with the cutting edges, guard edges and cap edges parallel to one another, the cutting edges extending beyond the cap edges and the guard edges in turn extending beyond the cutting edges, the thickness of the cap edges cooperating with the guard edges and cutting edges to determine the position of the cutting edges with regard to the surface to be shaved, leaving a strip exposed throughout its length between each cutting edge and its adjacent cap edge, and a coating formed on each blade parallel and adjacent to its cutting edges and on its exposed strips, with the cap edges resting on said coatings, the thickness of the coatings supplementing the thickness of the wafer blade to determine the distances that the cutting edges are to be spaced from the cap edges.

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