ABSTRACT

A light, plastic razor except for the metal blade therein comprising a plastic cover, a guard plate, a metal blade between said guard plate and said cover, a guard edge juxtaposed below the blade edge and joined to said guard plate, a handle attached to the bottom surface of the guard plate and rectilinearly extending therefrom along a plane which is essentially perpendicular to the bottom surface, which handle is fragmented into three sequential sections, the first section is a non-flexible, rigid plastic member, the second section, which is directly joined to said first section and the third section, is a non-stretchable flexible, elongated plastic member having a cross-sectional area, determined perpendicular to its length, which is substantially less than the corresponding cross-sectional area of the first and third sections, and the third section is a non-flexible, rigid plastic member extending from the second section.

4 Claims, 2 Drawing Figures
PLASTIC SAFETY RAZOR

This invention is directed to a novel safety razor constructed particularly for use on legs and areas of the body containing low hair density, such as arms, underarms, chest, and the like, as well as those areas as desired, such as the beard of the face.

In my U.S. Pat. No. 3,571,927, patented Mar. 23, 1971, there is described a safety razor containing a non-stretchable, flexible elongated member connected to one end to the bottom of the guard plate and on the other end to the handle. The handle is laterally extended from the plane of the member. This unique structure has a shaving action which one might call a "floating action," responding immediately to skin projections to give a gentle shave without tilting the head onto the guard edge. However, if the handle were in the same plane as the elongated flexible member, then the head would be deflected upon the guard edge when the head is suddenly deflected by a skin projection.

I have now found a novel shaver construction which possesses a non-stretchable and flexible component associated with the handle and possesses the floating action of my aforementioned patented razor, yet the handle and the flexible member are in the same plane and along a single line extending from the bottom surface of the guard plate. The structure of this novel razor is significantly less susceptible to deflection of the razor head upon the guard edge when the head is suddenly deflected by a skin projection.

The safety razor of this invention is distinctive in that it possesses a plastic handle attached to the bottom surface of the guard plate which rectilinearly extends therefrom along a single plane aligned perpendicular to the bottom surface. The handle is fragmented into three sequentially interconnected sections, a first section which is non-flexible and rigid, a second section which is flexible and non-stretchable, and a third section which is non-flexible and rigid. The sequential order of each section of the handle extending from the bottom surface of the guard plate is the first, second and third sections in that order. The cross-sectional area of the second section is substantially less than the corresponding cross-sectional areas of each of the first and third sections.

The handle with its various sections can be constructed of the same or different plastic material and as a single piece or from a plurality of pieces. In the preferred embodiment, the razor handle is made in a single mold from one thermoplastic or thermosetting plastic. The length of the handle is not critical to this invention except that if the handle is made of a single plastic, the second section should be either long enough or thin enough or a combination of both to provide the desired flexibility.

In this invention, the term "non-stretchable" means the inability to stretch at room temperature (about 25°C) as does an elastic and a U-shaped spring, e.g., as shown in U.S. Pat. Nos. 1,423,414; 1,015,575; 2,053,250 and 2,083,172.

In order to further illustrate the novel safety razor of this invention, reference is made to the drawings.

FIG. 1 is a perspective view of a razor encompassed by this invention.

FIG. 2 is a side view of a razor encompassed by this invention.
3,823,471

3. connected to the bottom of the guard plate, the second section, which is directly joined to said first section and the third section, is a non-stretchable flexible, elongated plastic member having a cross-sectional area, determined perpendicular to its length, which is substantially less than the corresponding cross-sectional area of the first and third sections, and the third section is a non-flexible, rigid plastic member extending from the second section.

4. 2. The razor of claim 1 wherein the second section is cylindrical.
3. The razor of claim 1 wherein the second section is a thin flat piece.
4. The razor of claim 1 wherein the first section has a length not greater than about 1 inch and not less than one-fourth inch.

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