This invention relates to a stationary blade for the cutting head of a dry-shave razor which comprises a foil having a plurality of apertures therein and adapted for fitting to the cutting head over a moveable cutter.

In the known constructions of dry-shave razors the moveable cutter has cutting edges which co-operate with the cutting edges of the apertures in the foil to cut off the beard stubble extending through the apertures as the moveable cutter moves thereacross. Usually the apertures in the upper or outer surface of the foil which is in contact with the skin during shaving, are funnel-shaped and are often rounded as well in order to make the top of the blade slice easily along the skin. The apertures themselves have been made in a great variety of shapes e.g., round, oval, rectangular, T-shaped, orthorhombic or hexagonal.

However, experience shows that the quality of the shave obtainable with the known dry-shave razors is to be inferior to that obtainable if soap and a normal razor blade are used and when dry-shave razors are used it is generally necessary to shave more frequently than with a conventional razor.

An object of the invention is a stationary blade for the cutting head of a dry-shave razor which comprises a foil having a plurality of apertures therein and adapted for fitting to the cutting head over a moveable cutter, said apertures having sharp edges both at the underside of the foil adjacent the moveable cutter and at the upper or outer surface of the foil which is in contact with the skin during shaving. A still further object of the invention is a stationary blade of the kind outlined wherein said apertures are in the form of elongated hexagons having their two shortest parallel sides parallel to the smallest internal width of the hexagon and parallel to the direction in which the moveable cutter is moved relative to the foil. In this way the quality of the shave is much improved.

An example of a foil according to the invention is illustrated diagrammatically in the drawing in which:

FIG. 1 is a plan view of the top side of the foil showing the preferred shape of the apertures, and
FIG. 2 is a cross-section taken through the foil at one of the apertures, on a much larger scale than in FIG. 1.

In this fragmentary view, the upper or outer surface of the foil which is in contact with the skin during shaving, is shown at the top, and the under or inner surface, along which the moveable cutter (not shown) of the cutting head is rapidly reciprocated, is at the bottom. The apertures accordingly have sharp edges at the underside, which edges act as cutting edges for the beard stubble extending downwardly into the apertures from the upper surface. In contrast to the conventional construction of the apertures, these also have sharp edges at the upper surface. These edges do not act as additional cutting edges as one might expect but, as cutting head passes over the skin, the sharp edges cause the stubble, which normally always extends more or less obliquely from the skin first to stand perpendicularly to the skin and then to be cut off virtually at right angles to the hair axis at the lower cutting edge. Tests have shown the improvement in quality of the shave obtained in this way to be chiefly due to the preliminary erection of the stubble by means of the sharp edges at the upper surface of the foil. This is plausible, for when a normal razor blade is moved across the skin, it obviously has the same effect of erecting the stubble before the latter is cut off, but one cannot be sure of obtaining this effect if the apertures at the top of the foil are conical or have rounded edges as hitherto.

The aforementioned erecting effect produced by the sharp upper edges of the apertures, can be obtained to the full only if the internal width of the apertures remains sufficiently large in the direction of the normal shaving movement of the cutting head and sufficiently small in the direction of movement of the moveable cutter reciprocated at the underside of the stationary blade, as illustrated in FIG. 1. It is assumed in FIG. 1 that the moveable cutter reciprocates from left to right, as indicated by the arrow, and that the normal shaving movement, with which the cutting head is moved over the skin, is approximately from top to bottom or vice versa. The most suitable apertures have been found to be those illustrated in FIG. 1, which are all in the form of an elongated hexagon with its two shorter parallel sides parallel to the smaller internal width of the hexagon and at least approximately parallel to the direction in which the moveable cutter of the cutting head is reciprocated.

The invention is not limited to the particular embodiment here shown and described. Various modifications may be made without departing from the spirit and scope of the invention as set forth in the following claim:

I claim:
A stationary blade for the cutting head of a dry-shave razor which comprises a foil having a plurality of apertures therein and adapted for fitting to the cutting head over a moveable cutter, said apertures being in the form of elongated hexagons having their two shortest parallel sides parallel to the smallest internal width of the hexagon and parallel to the direction in which the moveable cutter is moved relative to said foil and said apertures having sharp edges both at the underside of the foil adjacent the moveable cutter and at the upper surface of the foil which is in contact with the skin during shaving.

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