April 9, 1957 E. SIEGEL 2,787,831

RAZOR HAVING A TABLE WITH A CENTRAL LONGITUDINAL AREA CURVED CYLINDRICALLY AND TRIANGULATED MARGINAL EDGES

Filed Feb. 24, 1954

Fig. 1.

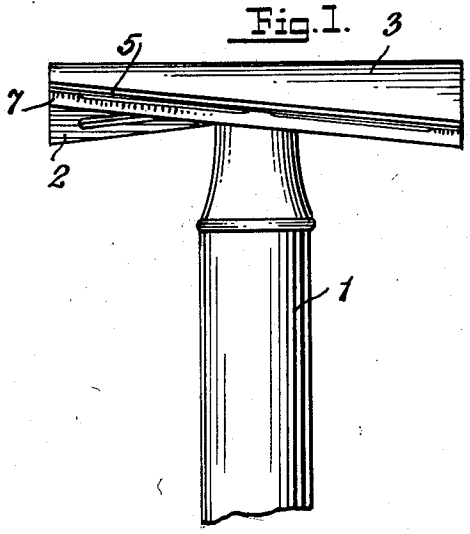


Fig. 2.

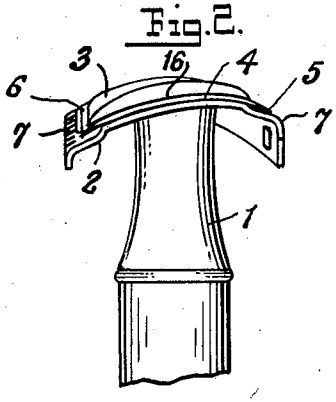


Fig. 3.

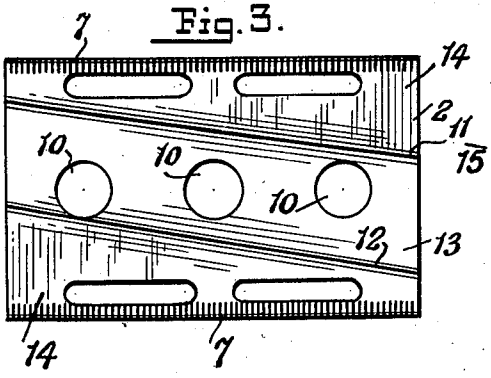


Fig. 4.

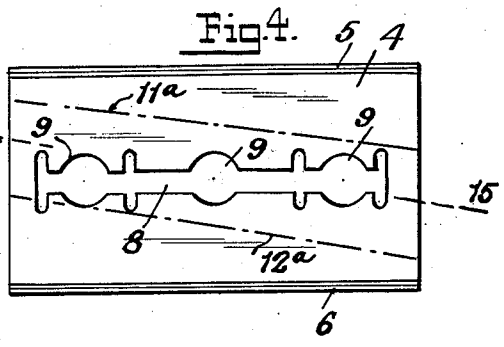


Fig. 5.

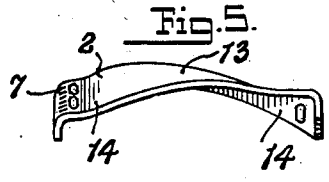


Fig. 6.

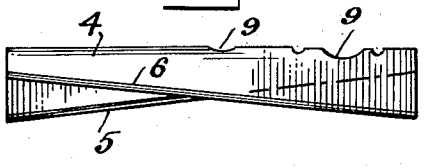


Fig. 7.



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RAZOR HAVING A TABLE WITH A CENTRAL LONGITUDINAL AREA CURVED CYLINDRICALLY AND TRIANGULATED MARGINAL EDGES

Edward Siegel, New York, N. Y.

Application February 24, 1954, Serial No. 412,169

2 Claims. (Cl. 30—48)

This invention relates to an improvement in razors, and more particularly to a razor of the character shown and described in my patents Nos. 2,094,827; 2,073,713 and 2,073,714. In said patents are shown razors, and blades therefor, in which the blade is so flexed that one of its cutting edges ascends and the other cutting edge descends at the same end of the razor, and by this particular inclination of the cutting edges a desirable angular cutting effect is obtained.

In my Patent No. 2,073,714 is shown a razor of the above-mentioned type in which a blade is used provided with a central elongated slot having an axis at an angle to the cutting edges of the blade. This razor therefore requires a special blade of the above construction, necessitating special machinery for its production. Also in the above patent, the razor, in order to accommodate blades of the construction above described, has its lugs or pins arranged at an angle to the longitudinal axis of the razor head.

While razors of the character herein mentioned have been made and sold, efforts to so flex or bend the blade between the cap and head of the razor in a manner to provide inclined cutting edges have invariably resulted in an arched or curved cutting edge, or an edge which is not in continuous, even and straight-line contact with the teeth of the guard or so-called "comb" on the razor head. While this is not true of the razor and blade shown in my Patent No. 2,073,714, it is noted that the structure of that patent requires a specially-constructed blade. The user of razors of the wafer-type blade are accustomed to being able to secure replacement blades almost everywhere, and therefore any razor which attempts to utilize special blades usually does not meet with marked success. On the other hand, a razor having the advantage of providing the desirable diagonal cutting edges has important advantages and results in improved shaving. Hence it is an important object of the present invention to provide a razor having all of the advantages of that shown in my Patent No. 2,073,714 coupled with the ability to employ wafer-type blades of standard construction and procurable throughout the world.

With this and other objects to be hereinafter set forth in view, I have devised the arrangement of parts to be described and more particularly pointed out in the claims appended hereto.

In the accompanying drawing, wherein an illustrative embodiment of the invention is disclosed,

Fig. 1 is a front elevation of a razor constructed in accordance with the invention;

Fig. 2 is an end view of the same;

Fig. 3 is a top plan view of the blade table or guard, sometimes referred to as the "head" of the razor;

Fig. 4 is a plan view of a standard type of wafer blade adapted for use in my improved razor;

Fig. 5 is an end view of the guard or head of the razor;

Fig. 6 shows how the blade is flexed when it is in place in the razor, and

Fig. 7 is an end view of the flexed blade.

The razor shown in the drawing is of the so-called "hoe" type, which, in its original form is credited to Gillette, and includes a handle 1 and a holder for a double-edged wafer type blade, said holder consisting of a blade table or guard 2 and the blade clamping element or cap 3. A double-edged wafer-type blade 4 of standard construction, is adapted to be clamped between the guard 2 and cap 3 in such position that the two parallel cutting edges 5 and 6 of the blade 4 are brought over the serrated edge portions or comb parts 7 of the table or guard 2. The blade 4 may be any one of standard form and one of the many similar types now marketed. The blade includes a central elongated slot 8 having its longitudinal axis extending parallel to the cutting edges 5 and 6 of the blade. This slot varies in shape in different types of blades, but in all standard blades it includes the enlarged holes or openings 9 through which the usual studs or projections provided on the under side of the cap 3 extend. These studs or projections pass through the openings 9 in the blade and through complementary holes 10 provided in the blade table or guard 2 and shown in Fig. 3. The central opening 10 in the table 2 as well as the center opening 9 of the blade 4, usually permits of the passage of a threaded stud formed on the underside of the cap, and which threads into a threaded bore in the top of the handle 1 to thus hold the handle, guard or table, blade and cap in clamping relationship. The elements and features all above described are of known construction and are set forth herein primarily for the purpose of indicating their relationship to the novel features of the present invention, which features will now be described.

The upper surface of the blade table or guard 2 has a central area 13 located between the imaginary parallel lines 11 and 12, which area is transversely curved to conform to conform to the surface shape of a cylinder. Disposed on either side of this cylindrically-curved surface 13 are two substantially flat, inclined surfaces lying on either side of the cylindrically-curved area 13 and extending from the edges of the cylindrically-curved surfaces to the serrated edges of the table or guard. These two flat surfaces 14 may be substantially triangular in outline. The transition of curvature from the central cylindrical portion 13 into the flattened triangular surfaces 14 is gradual so that the blade is easily curved to conform to these surfaces 13 and 14 when it is clampingly positioned between the guard or table 2 and the cap 3. It will be understood that the under surface 16 of the cap 3 relatively closely conforms to the upper surface of the table or guard. That is to say, the under surface of the cap is formed with the central cylindrical surface corresponding to that at 13 on the guard bordered by the flattened triangular surfaces corresponding to those at 14 in the guard.

When the blade 4 is placed in the razor between the table and cap, the blade will be flexed about a line indicated substantially at 15—15 in Fig. 4 and thus will be flexed centrally or axially of the cylindrical area 13. It will be observed that this line of flexure is at an angle to the cutting edges 5 and 6 of the blade as well as being at an angle to the longitudinal axis of the slot 8. The cutting edges 4 and 5 will assume the angular positions shown in Fig. 6 with one cutting edge raised and the opposite cutting edge lowered at the same end of the razor. Because of the fact that the portions of the blade located adjacent to the cutting edges are flattened, or they can be curved as though shaped over the surface of a cone, the cutting edges 5 and 6 will be straight and thus will be equally spaced from the serrated edges or so-called "comb" portions of the guard or table 2 for the entire length of the comb.

As a result of the above arrangement of the blade and facially-opposed surfaces on the cap and table, the cutting edges of the blade are diagonal and an effective, angular shaving stroke is attained. An important factor also resides in the disposition of these cutting edges in straight-line contact with the comb portions and this despite the distortion of the blade from its normal flat formation to that shown in Fig. 6.

Having described one embodiment of the invention, it is obvious that the same is not to be restricted thereto, but is broad enough to cover all structures coming within the scope of the annexed claims.

What I claim is:

1. A razor having a blade-supporting table, a cap fitted thereover, a wafer-type blade clamped between the table and the cap, the table having an upper surface provided with a central longitudinal area curved cylindrically, the table having triangulated marginal edge surfaces bordering the cylindrical surface and each of said marginal edge surfaces being flat, the under face of the cap being shaped to substantially conform to the described upper surface of the table, the blade fitted between the table and cap being flexed to conform to the facially-opposed surfaces of the cap and table, the blade having a central elongated slot, the axis of the central cylindrical curved portion of the table and cap being at an angle to the longitudinal edges of the table and cap and also being at an angle to the longitudinal axis of the slot in the blade.

2. A razor having a blade-supporting table, a cap fitted thereover, a wafer-type blade clamped between the table and the cap, the table having an upper surface provided with a central longitudinal area curved cylindrically, the table having marginal edge surfaces bordering the cylindrical surface and each being flattened, the under face of the cap being shaped to substantially conform to the described upper surface of the table, the blade fitted between the table and cap being flexed to conform to the facially-opposed surfaces of the cap and table, the blade having a central elongated slot, the axis of the central cylindrical curved portion of the table and cap being at an angle to the longitudinal edges of the table and cap and also being at an angle to the longitudinal axis of the slot in the blade, the cutting edges of the blade being arranged diagonally and being uniformly spaced from the table.

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