W. F. HAGGARTY.

SAFETY RAZOR.

APPLICATION FILED SEPT. 15, 1919.

1,357,863. **Patented Nov. 2, 1920.**

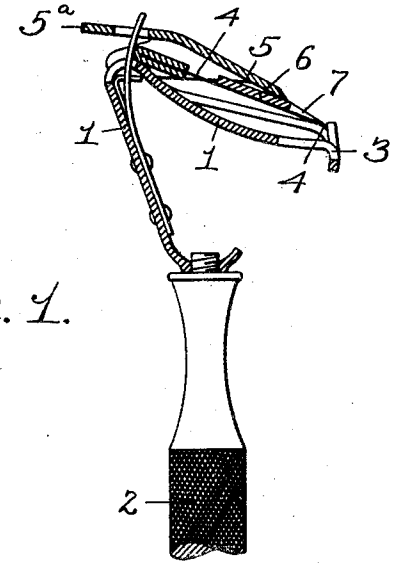


Fig. 1.

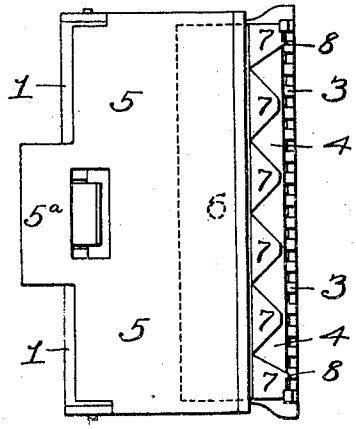


Fig. 2.

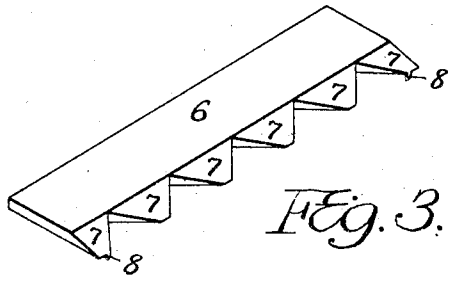


Fig. 3.

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SAFETY-RAZOR.

1,357,863. Specification of Letters Patent. Patented Nov. 2, 1920.

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To all whom it may concern:

Be it known that I, WILLIAM FRANCIS HAGGARTY, a citizen of the United States, residing at 3518 Kensington avenue, in the city and county of Philadelphia, State of Pennsylvania, have invented new and useful Safety-Razors of All Standard Makes for the Protection of the Users of the Same, of which the following is a specification.

My invention relates to safety razors, the purpose of my invention being to construct a razor of this type in such a way as to reduce to a minimum the possibility of an unskilled user of the razor inflicting an injury upon himself.

Razors of the so-called "safety" type as at present manufactured are so constructed that it is practically impossible for the user to cut himself when the razor is drawn across the face in a direction at a right angle to the cutting edge of the blade. Should the razor, however, be drawn across the face in a direction at an angle to the cutting edge of the blade, or parallel therewith, it is not only quite possible but frequently happens that the user inflicts an injury upon himself, and the object of my invention is to so construct a safety razor as to afford the user maximum insurance against accidental injury no matter how the razor is held, nor at what angle it is manipulated. This object I accomplish in the manner hereinafter set forth, reference being had to the accompanying drawing, in which—

Figure 1 is a vertical sectional view through a safety razor of standard type, the same being equipped with a safety device constructed in accordance with my invention;

Fig. 2 is a top or plan view of the same, and

Fig. 3 is a perspective view of the safety device constituting the subject of my invention.

In the drawing the razor is represented as having a head 1 mounted upon a stem or handle 2 and being provided at its forward edge with a safety grid 3. To the head 1 is applied a blade 4 with its cutting edge in proximity to the grid 3, the blade being held in rigid relation to the head 1 by means of a spring-actuated cap plate 5 pivotally mounted upon the head 1 and provided with a finger piece 5^a by means of which it may be readily manipulated. As thus far described the razor is of the standard type, and my invention consists in inserting between the blade 4 and the cap plate 5 a bar 6 which traverses the entire width of the blade and which is provided with a plurality of beveled teeth 7, the points of which terminate at or immediately adjacent to the cutting edge of the blade 4.

When the razor is being used for shaving reliance for protection is not only had upon the grid 3 but also upon the beveled teeth 7 which are interposed between the blade 4 and the face of the user. Should the razor be manipulated with a diagonal or longitudinal stroke the points 7 serve to break the continuity of the cutting edge of the blade, inasmuch as they, at relatively close points, prevent actual contact of the blade with the face. As a result of this the blade is at no time in contact with the face over a sufficient length of its cutting edge to permit it to penetrate the skin.

In order to insure proper registry of the points of the teeth 7 with the cutting edge of the blade, the two teeth at the ends of the series are each provided with spurs 8 which overlap the edge of the blade, thereby preventing the plate 6 slipping back and exposing too great an amount of the blade.

Although I have shown my invention in the form of a removable toothed plate adapted to be inserted between the blade and cap plate I do not limit myself to this construction. While this form is to be preferred for the reason that it is applicable to safety razors as now manufactured and as now in use it is, of course, readily understandable that the plate 6 could be permanently mounted upon the under face of the cap plate 5, or the beveled points 7 might be formed as a continuation of the cap plate 5. Such modifications being obvious require no special illustration.

I claim:

1. The combination, in a safety razor, of a head having a protective grid at its forward edge, a blade mounted on said head, and a toothed protective plate overlying said blade, the points of the teeth of said protective

plate terminating substantially in line with the cutting edge of the blade.

2. An attachment for a safety razor comprising a head having a protective grid at its forward edge, a blade applied to said head, and a retaining plate for said blade, said attachment consisting of a toothed plate interposed between the blade and its retaining plate, the points of the teeth of said plate terminating substantially in line with the cutting edge of the blade.

WILLIAM FRANCIS HAGGARTY.

Witness:
RALPH A. DUNGAN.