H. G. LUTZ.

SAFETY RAZOR.

APPLICATION FILED MAR. 29, 1916.

1,221,065. Patented Apr. 3, 1917.

FIG. 1.

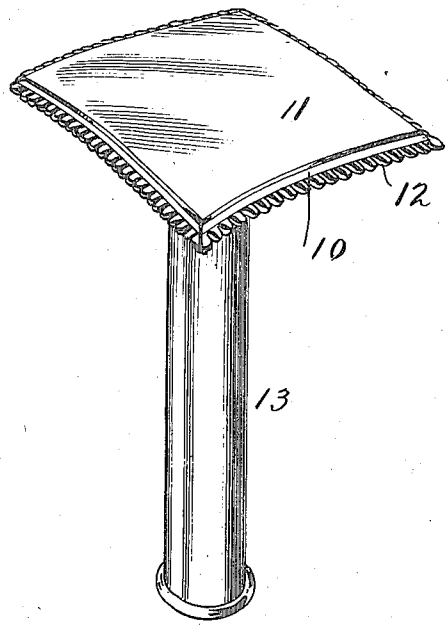
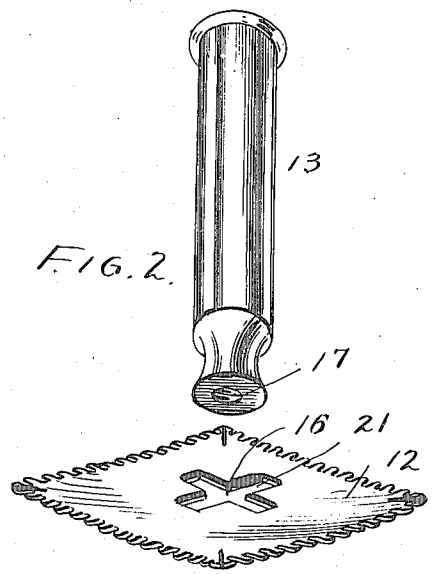


FIG. 2.



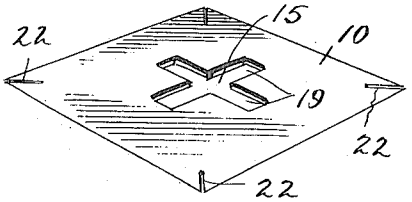
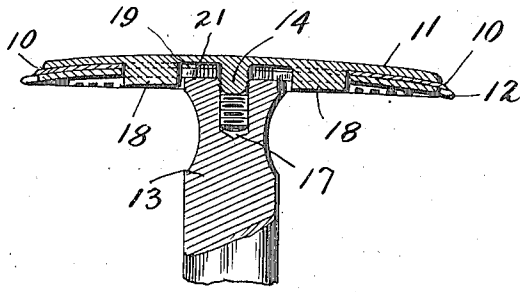
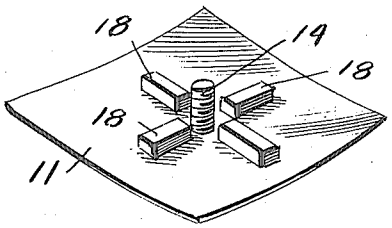


FIG. 3.





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SAFETY-RAZOR.

1,221,065. Specification of Letters Patent. Patented Apr. 3, 1917.

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To all whom it may concern:

Be it known that I, HARRY G. LUTZ, a citizen of the United States, and resident of Geneva, in the county of Ontario, and in the State of New York, have invented a certain new and useful Improvement in Safety-Razors, and do hereby declare that the following is a full, clear, and exact description thereof.

The object of my invention is to provide a safety razor of extremely simple construction, to the end that the cost of manufacture may be low and the separation and assemblage of the parts by the user can be most easily and quickly done, and which will have other advantages that will be appreciated when the construction is understood from the description hereinafter given and the illustration shown in the accompanying drawings in which—

Figure 1 is a perspective view of a safety razor embodying my invention;

Fig. 2 is a similar view showing the parts separated;

Fig. 3 is a vertical, longitudinal section.

My razor is composed of a thin, flexible blade 10, clamping plates 11 and 12, respectively, which engage it on opposite sides, the plate 12 being the guard plate and preferably having its edge adjacent the razor edge toothed, or comb shape, as is common, and a handle 13. In what I regard as a desirable form of my invention, the blade 10 is polygonal in shape, as shown in the drawings square, so as to present four cutting edges and the clamping plates are correspondingly shaped, the upper, or outer clamping plate 11 being preferably slightly smaller in area than the blade. At the center of the upper or outer clamping plate 11, is the threaded stud 14, which passes through a central hole 15 in the blade, and a central hole 16 in the guard plate and projects below the latter to receive an internally threaded hole 17 in the end of the handle, and as the handle end overlaps the surface of the guard plate adjacent its hole 17, the two plates are thus caused to clamp the blade between them. The surfaces of the two plates in contact with the interposed blade are, respectively, concavo-convex, the blade-engaging surface of the guard plate being convex so that the blade is thereby placed under tension and its cutting edge given the necessary stiffness for shaving. It will be seen that by rotating the handle to vary the pressure of the two plates upon the blade, the closeness of the shave may be adjusted by adjusting the blade edge with reference to the guard plate.

On the blade-engaging side of the outer plate 11, there are several lugs, or projections 18 that extend in directions radial of the stud 14, and in the blade are slots 19 that radiate from the center of the blade and there are similar slots 21 in the guard plate, these slots being of such size and number and relative position that they may readily pass over the lugs. This device of the lugs and slot secures the various parts together so that no turning movement of one with reference to the other can take place, and the provision of the radial slots in the blade has the very important advantage of contributing to the flexibility of the blade as the slots being entirely outside of the handle can be made of considerable length and reach well out toward the blade edges without undue weakening of the blade. Preferably with a square blade the slots extend diametrically. And to add still further to the flexibility of the blade I make a slit 22 from each corner thereof inward on a diagonal line.

It will be seen that the assembly of the parts of my razor can be very easily and quickly done. Thus, with the upper plate 11 lying in one hand the blade and guard plate are simply dropped in position over the lugs and then the handle screwed upon the stud 14. The separating operation is as simple, because upon the removal of the handle the remaining pieces readily fall apart.

While I show the rectangular square form of blade, it will be understood I do not limit myself to that particular shape.

Having thus described my invention what I claim is—

1. A safety razor comprising a blade, clamping members on opposite sides thereof, one of which forms the guard for the blade, a threaded stud attached to the outer clamping member and passing through coinciding openings in the blade and other clamping member, a handle having screw engagement with said stud, and lugs on one of the clamping members exterior to the handle and engaging slots in the blade, said slots extending outward from the blade opening and said lugs being spaced at their

inner ends away from said threaded stud, and the screw-engaging portion of the handle entering the space between the inner ends of the lugs and the stud.

2. A safety razor comprising a blade, clamping members on opposite sides thereof, one of which forms the guard for the blade, a threaded stud attached to the outer clamping member and passing through coinciding openings in the blade and other clamping member, a handle having screw engagement with said stud, and lugs on one of the clamping members exterior to the handle and engaging slots in the blade, said slots extending outward from the blade opening and said lugs being spaced at their inner ends away from said threaded stud, and the screw-engaging portion of the handle entering the space between the inner ends of the lugs and the stud, and slots in the other clamping member and the blade being polygonal and provided with slits extending from its corners inward.

3. A safety razor comprising a blade, clamping members on opposite sides thereof, one of which forms the guard for the blade, a threaded stud attached to the outer clamping member and passing through coinciding openings in the blade and other clamping member, a handle having screw engagement with said stud, and lugs on one of the clamping members exterior to the handle and engaging slots in the blade and slots in the other member, and the end of the handle having a bearing against portions of said member between the slots therein, said slots extending outward from the blade opening, and said lugs being spaced at their inner ends away from said threaded stud, and the screw-engaging portion of the handle entering the space between the inner ends of the lugs and the stud.

In testimony that I claim the foregoing I have hereunto set my hand.

HARRY G. LUTZ.