July 7, 1931. R. E. THOMPSON 1,813,471

SAFETY RAZOR

Filed Sept. 29, 1930

Fig. 1.

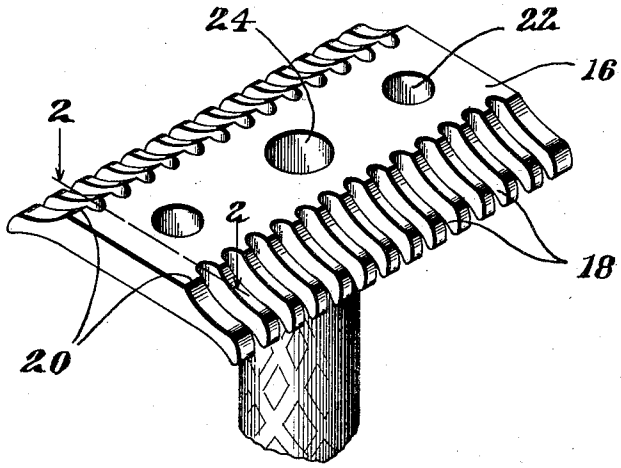
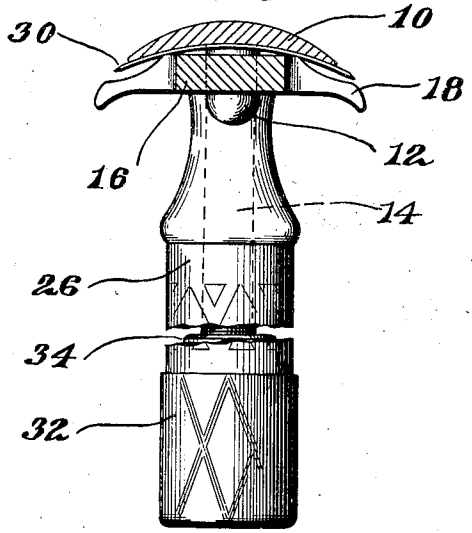


Fig. 2.



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UNITED STATES PATENT OFFICE

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SAFETY RAZOR

Application filed September 29, 1930. Serial No. 485,003.

The invention relates to razors of the type employing a flexible blade which is adapted to be maintained in a position of transverse curvature between cooperating cap and guard members.

Heretofore it has been necessary after each shaving operation to take the razor apart in order to clean and dry the blade. With the advent of blades protected by lacquer and those made of rust-resisting steel, however, it is no longer necessary to dry the blade and the user needs only to remove the shaving débris from the edge of the blade when he has finished shaving.

An object of the present invention is to provide a safety razor so organized that the shaving edge of the blade may be conveniently flushed without the necessity of separating the parts of the holder. To this end an important feature of the invention consists in cooperating cap and guard members, one of which has a longitudinal fulcrum shoulder and the other of which is shaped to bend the blade transversely thereover and in which one member is provided with a series of transverse spaces or slots extending inwardly from its edge and beyond the fulcrum shoulder. In such a construction the line contact which the blade makes with the fulcrum shoulder is rendered discontinuous by the spaces or slots which intersect the shoulder. It results, therefore, that a series of spaced areas in the face of the blade are exposed through openings in one of the blade members and through these a stream of water may be directed so that it flows outwardly along the surface of the blade and flushes its edge.

As herein shown the slots or openings are provided in the guard member of the holder which is located in the shaving operation on the side of the blade away from the face and where the shaving débris accumulates. The slots or openings formed in the edge of this member therefore facilitate not only flushing the blade but also the guard itself and the fulcrum shoulder therein.

These and other features of the invention will be best understood and appreciated from the following description of a preferred embodiment thereof selected for purposes of illustration and shown in the accompanying drawings in which—

Fig. 1 is a view in perspective of the guard member of the razor.

Fig. 2 is a view of the complete razor in side elevation with the cap and guard shown as sectioned on the line 2—2 of Fig. 1.

The cap member 10 is of the usual construction being convexed on its outer face and having an inner concave blade-shaping face, blade-locating studs 12 and a threaded shank 14 projecting from the concave face of the cap.

The blade 30 is of thin flexible steel perforated to receive the locating studs 12 and the shank 14 and sharpened at its opposite longitudinal edges.

The guard member 16 is of substantially the same length as the cap but somewhat wider and is provided upon its upper or inner face with longitudinal fulcrum shoulder 20. The surface of the guard between the shoulders is substantially flat and the surface of the guard outside of the shoulders is somewhat concaved transversely.

The opposite edges of the guard are provided with guard teeth 18 being separated by spaces or slots extending inwardly from the edge of the guard a sufficient distance to intersect the shoulders 20. In other words the slots extend through the shoulders 20 and terminate in the flat intermediate surface of the guard or in the material of the guard beneath such flat surface. The inner wall of each space or slot is curved in a substantially semicircular surface. It will be seen that the series of slots which intersect the fulcrum shoulders render the line of contact with the blade discontinuous and expose the blade in strips or elongated areas which extend from its outer edge to points within its line of contact with the shoulders of the guard.

The guard member is herein shown as provided with a hollow tubular handle 26 into which the threaded shank 14 of the cap extends. Freely rotatable within the handle 26 is a sleeve 22 having an outer portion 32 and a reduced cylindrical nut 34 adapted to

engage the threaded shank 14 and draw the cap and guard into clamping engagement with the interposed blade.

It will be apparent from an inspection of Fig. 2 that in flushing the razor after shaving a stream of water will be directed by the slots between the teeth 18 of the guard into contact with the adjacent surface of the blade and that this stream of water will flow outwardly upon the surface of the blade disengaging and carrying with it whatever shaving débris may have accumulated during the shaving operation. The discontinuous fulcrum shoulder moreover acts as a partial dam to arrest the shaving débris substantially along the line of its contact with the blade and a stream of water directed as above explained has been found particularly effective in removing all such accumulation from the blade as well as from the sides of the teeth where it may have lodged.

I have herein shown the blade as positioned by cylindrical blade locating studs but it will be understood that the construction of the blade and holder in this respect is immaterial and that my invention may be applied with equal advantage to holders equipped with any form of blade-locating device and correspondingly apertured blades.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is:—

A safety razor comprising a guard member having spaced parallel fulcrum shoulders bounding a flat intermediate surface flush with such shoulders, a cap having a concave blade-shaping surface extending over said shoulders, a flexible blade clamped between the two and having a portion of its concave face exposed by slots formed in the guard which extend through the shoulders and terminate in said flat intermediate surface of the guard member.

Signed at Boston, Massachusetts, this 26th day of September, 1930.

RALPH E. THOMPSON.