March 16, 1943. H. J. GAISMAN 2,313,818

RAZOR BLADE

Filed April 10, 1941

Fig. 3.



Fig. 1.

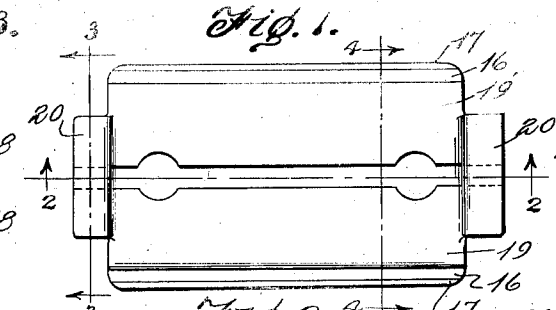


Fig. 4.

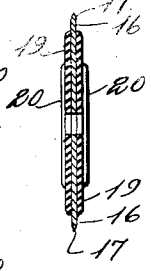
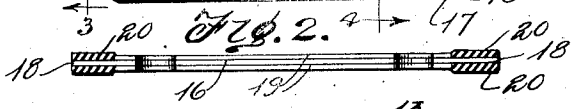


Fig. 2.



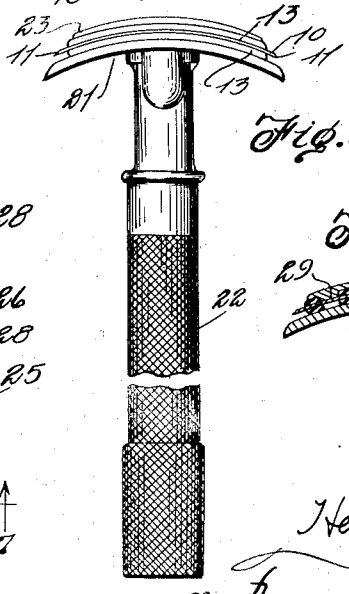


Fig. 6.

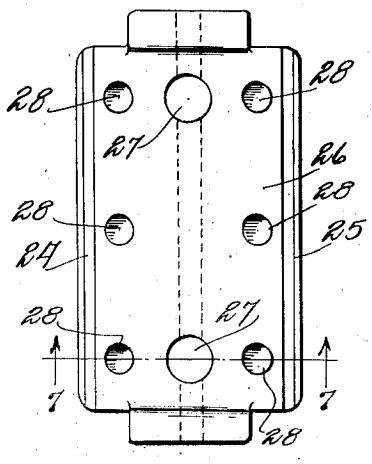
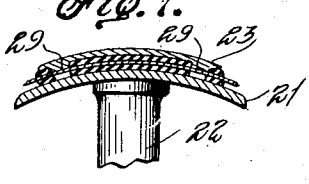


Fig. 5.

Fig. 7.



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2,313,818

RAZOR BLADE

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Application April 10, 1941, Serial No. 387,953

9 Claims. (Cl. 30—346)

This invention relates to shaving appliances, and has special reference to a flexible razor blade, in which the cutting edge or edges of the blade may be projected or retracted with respect to the guard, according to pressure exerted on the blade by the blade holding instrumentality, and provision is made furthermore for supporting the blade at its cutting edge even though it is located at varying distances from the guard. In the use of razor blades which have slots through their longitudinal centers, the cutting edge of the blade is not steady unless the blade is clamped to its final tightened position, but through the use of a yielding material, coating or facing on the blade back of its cutting edge the blade may be clamped and the interposed yielding material can be so compressed as to hold the cutting edge steady, while at the same time permitting the adjustment of the cutting edge and affording a more dependable and wider range of selection of exposure of the cutting edge by the use. Hence, it is an object of the invention to provide a blade with a cushioning covering back of its cutting edge which will serve to stabilize the cutting edge when in use.

A further important object of the invention is to provide doubled edged razor blades formed in sections, the said sections being covered and joined together by a flexible, resilient means which may act as a yieldable web between the two sections that they may be expanded and thereafter retracted to change the positions of the cutting edges of the blade members with relation to the guard.

It is furthermore the purpose of the inventor to provide a novel two-part blade, the parts of which are joined together by a flexible, resilient means applied to one or both surfaces of each part and to provide additional means at the ends of the sections for reinforcing or holding the two parts of the blade so that said covering will be thicker near the ends than at the intermediate portions thereof.

With the foregoing and other objects in view, the invention consists in the broad practice of placing on a surface of a razor, yieldable material, a facing or a coating which will serve to support the blade back of its cutting edge or in providing a yieldable facing which may be elastic so that the sections of the blade may be moved with relation to each other; and furthermore, the invention resides in the arrangement and combination of parts to be hereinafter more fully described, illustrated in the accompanying drawing, and particularly claimed.

In the drawing forming part of the application, like characters of reference indicate corresponding parts in the several views, in which:

Figure 1 illustrates a plan view of one form of the invention;

Figure 2 illustrates a section on the line 2—2 of Fig. 1;

Figure 3 illustrates a section on the line 3—3 of Fig. 1;

Figure 4 illustrates a section on the line 4—4 of Fig. 1;

Figure 5 illustrates an elevation showing a blade holder with the novel blade mounted therein;

Figure 6 illustrates a plan view of a blade modified as compared with the form shown in Fig. 1; and

Figure 7 illustrates a sectional view of a blade holder in which the blade is shown in section on the line 7—7 of Fig. 6.

As shown the blade proper consists of two like parts 16, each having a cutting edge 17 and a reduced end portion 18, these two parts being spaced as shown. Each blade part is covered by suitable material 19 which terminates at the space between the parts 16. The thickened portions 20 in this form constitute flexible or elastic connecting elements at the ends 18.

As shown in Fig. 5, the invention may be used in connection with a holder having a head 21, handle 22 and bending or clamping plate 23, the whole being of an ordinary type of construction.

From the foregoing description it is obvious that when a razor blade is held in the ordinary blade holder, the retaining action of the holder can be such as to force the cutting edges of the blade to some variable positions with respect to the guard; that is to say, the distance of the blade edge from the guard may be determined by the user according to the pressure brought to bear on the blade during the adjustment of the holder, and furthermore, the interposed yielding or compressible material, rubber or the like, will support the cutting edge of the blade so that it may be employed in a comparatively wide range of action by reason of its exposure with relation to the guard.

If desired, the yieldable means 13 or 19 may be omitted from one face of the blade.

Referring now to Figure 6, the two sections 24 and 25 of the blade may be connected by a yieldable covering 26 on one or both surfaces of the two sections which also extends across

the space between the edges of the blade, forming a web, and this web may be provided with a plurality of apertures 27 to receive positioning studs of the ordinary blade holder, and it will be obvious furthermore that in addition to the covering just described that the ends could be further reinforced by connections at the ends similar to the connections 18 shown in Figures 1 and 3. The covering 26 may also be provided with holes 28 near its edges so that projections 29 on the blade cap may press directly on the blade through the holes.

The material that is employed on the blade or blade sections may be in the nature of a coating having a rubber base which will stretch or yield to permit movement of the sections of the blade or may be a separate element of like characteristics applied to the blade and held thereon by adhesives and, obviously, from what has been stated, the object is to stabilize the cutting edge of the blade even though it is not as close to the guard as such cutting edges are located by razors now in common use, and provision is made to permit movement of the sections of the blade toward or away from each other, in order that the cutting edges of the blade may be projected or retracted with relation to the guard.

I claim:

1. A razor blade comprising two parts, each with an outer cutting edge, and means for resiliently connecting the two parts whereby they may be moved toward or away from each other when adjusted in a blade holder.

2. A razor blade comprising two spaced parts, each having an outer cutting edge, and expansible means on the surfaces of the two spaced parts extending across the space between the inner edges of the parts, the said expansible means having apertures for positioning posts of a blade holder.

3. A razor blade comprising two spaced parts, each having an outer cutting edge, and an expansible coating on the surfaces of the parts extending across the space between the parts whereby the parts are joined together for movement laterally in the plane of the adjusted blade when the blade is adjusted in a blade holder.

4. In a razor blade, a metallic double-edged cutting member having elastic means permanently affixed to at least one face of the member, said means terminating in spaced relation to the edges of said member, said member consisting of two like parts spaced from each other and each provided with a cutting edge, said parts having their end portions connected by said elastic means.

5. In a razor blade, a metallic double-edged cutting member having cushioning means permanently affixed to at least one face of the member, said means terminating in spaced relation to the edges of said member, said member consisting of two like parts spaced from each other and each provided with a cutting edge, said parts having their end portions connected by said cushioning means, said cushioning means being elastic and at the ends forming bands surrounding the ends of the parts.

6. In a razor blade, a metallic double-edged cutting member having cushioning means permanently affixed to at least one face of the member, said means terminating in spaced relation to the edges of said member, said member consisting of two like parts spaced from each other and each provided with a cutting edge, said parts having their end portions connected by said cushioning means, said cushioning means being elastic and at the ends forming bands surrounding the ends of the parts and thicker than the remainder of the cushioning means.

7. A razor blade comprising two spaced parts, each having an outer cutting edge, and elastic means on the surfaces of the two spaced parts extending across the space between the inner edges of the parts, the said elastic means having apertures for positioning posts of a blade holder.

8. A razor blade comprising two spaced parts, each having an outer cutting edge, and an elastic coating on the surfaces of the parts extending across the space between the parts whereby the parts are joined together for movement laterally in the plane of the adjusted blade when the blade is adjusted in a blade holder.

9. A razor blade comprising two spaced parts each having an outer cutting edge, an elastic coating on the parts of the blade joining them together with their inner edges in spaced relation to each other, the said coating having apertures exposing the enclosed blade parts to contact with portions of a razor.

HENRY J. GAISMAN.