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3,362,068

SAFETY RAZOR

Filed June 30, 1966

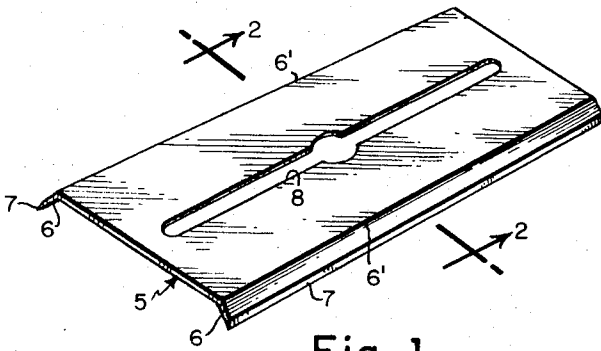


Fig. 1

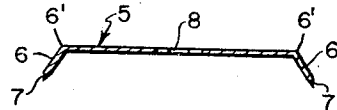


Fig. 2

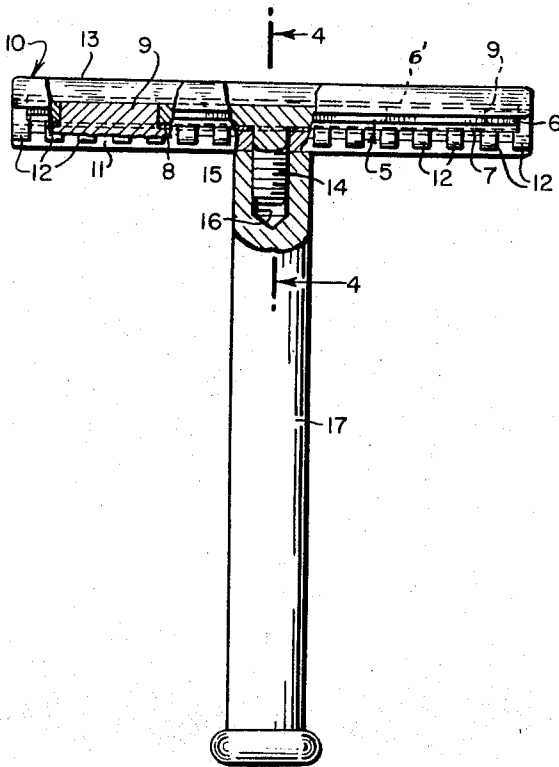


Fig. 3

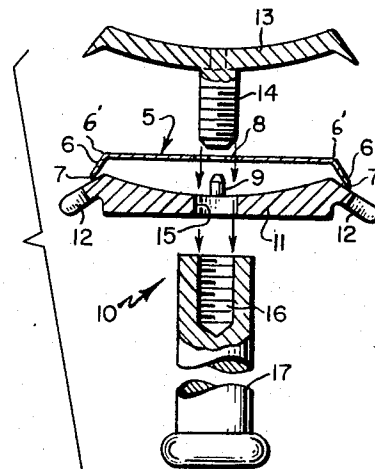


Fig. 4

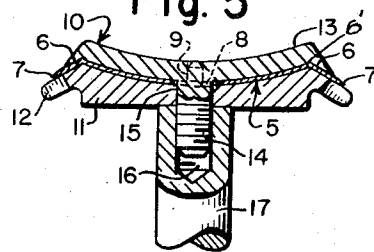


Fig. 5

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3,362,068

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1 Claim. (Cl. 30-70)

ABSTRACT OF THE DISCLOSURE

This invention relates to a safety razor blade adapted to be clamped within a razor head and with the razor head having guards upon each side over which the blade fits and with a clamp engaging the razor head to force the blade into engagement with the guards at an angle and with the razor head being concave to force the body of the blade into a concave groove of the razor head.

This invention relates to a safety razor blade for use in connection with razor blade holders of the double edge type and has fitment into razor blade holders, such as the Gillette razor.

The invention contemplates a razor blade that is provided with angular downturned edges that are sharpened and to engage the usual and well known blade holder, having guards upon both edges.

The blade is centrally slotted to receive the well known bar of the razor blade holder. The blade holder includes a clamping head adapted to force the blade downwardly on to a concave surface of a mating head portion and to bias the edges of the blade downwardly over the guards at each side of the razor blade holder, thereby pressing the blade edges into close engagement with the guards which imparts additional strength to the cutting edges at their points of bending.

Novel features of construction and operation of the device will be more clearly apparent during the course of the following description, reference being had to the accompanying drawings wherein has been illustrated a preferred form of the invention and wherein like characters of reference are employed to denote like characters throughout the several figures.

In the drawings:

FIGURE 1 is a perspective view of a double edge razor blade constructed in accordance with the invention,

FIGURE 2 is a transverse section taken substantially on line 2—2 of FIGURE 1,

FIGURE 3 is a side elevational view, parts in section and showing the razor blade in mounted relation to the conventional blade holder,

FIGURE 4 is a vertical sectional view taken substantially on line 4—4 of FIGURE 3, and

FIGURE 5 is an exploded view showing the razor head, the clamping bar and the razor blade in its initial position within the blade holder and prior to the clamping bar engagement.

Referring specifically to the drawings, the numeral 5 designates a razor blade of generally rectangular form and stamped to form angularly disposed downturned cutting edges 6, that are sharpened at their terminal edge as indicated at 7. The blade 5 is provided with the usual slot 8 and has fitment over a positioning lug 9.

The razor blade holder, as illustrated as a whole by the numeral 10 embodies a head portion 11 and outwardly angled guards 12. The razor blade 5 has fitment over the guards 12 and is forced downwardly by an arcuate clamping head 13, carrying a screw threaded lug 14, that passes through an opening 15 to engage a threaded socket 16, of a handle 17. The upper surface of the head 11 is arcuately formed and conforms to the curvature of the clamp 13.

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In the use of the device, the blade 5 is disposed upon the head 11, with its opposite cutting edges resting upon the guards 12. The clamp 13 is then engaged through the opening 8 of the blade 5 and extends through the opening 15 of the razor head for threaded engagement into the socket 16 and, with the clamp 13 being forced downwardly by threaded engagement with the socket 16, the blade 5 is forced to conform to the curvature of the head 11, such for instance as shown in FIGURE 4, slightly bending the edges 6 upwardly to conform to the guards 12. With the handle rotated sufficiently to securely clamp the blade 5 onto the head 11, the edges 6 are biased upwardly to a slight degree, imparting a powerful bend to the cutting edges 6. The blade 5 is preferably formed of any suitable metal that may be stamped into the shape shown and to further flex the blade to conform to the curvature of the head 11 and to also bend the edges 6 outwardly to conform to the angularity of the guards 12.

The angular downturned edge of the blade results in more rigidity of the cutting edge; this in turn makes the blade sharper than a blade without such a downturned edge. In FIGURES 4 and 5 the pressure of the clamp forces edge 6' first down and then upwards into clamp 13. This creates additional pressure against edge 6' and this adds to the sharpness. This shape for the blade and its corresponding razor builds up more tension and pressure along the cutting edges. The following items create more sharpness in cutting edges: (1) Narrowness of the blade; in this case the blade is very narrow.

(2) When hard and brittle materials are sharpened at the edges, these edges lose their stiffness and thus their degree of sharpness unless rigidity is created by the outside pressure of the razor. By the downturning of the edge 6' and the undersection of downturned edge 6' with blade 5 creates an angle or shoulder and the shoulder creates tension upon the blade and its cutting edge and as a result will not require extreme clamping pressure of the razor. Due to the concave curvature of the blade in the razor effected by the clamping bar, shaving visibility is greatly improved. This blade with the corresponding shaped razor can reach and shave in hard to reach areas, such as under the nose.

(3) Sharpness is created by longitudinal pressure of the razor clamp as with all other blades, but in this case the shape of the blade and the shape of the razor clamp results also in upward pressure against the blade. Therefore pressure in two directions is obtained creating more rigidity than in ordinary flat blades without this bent edge.

The quality of stiffness has been sought by others in the direction of increasing the tension against a flat blade by designing and inventing razors that have stronger pressures against the blade. In my invention it is the blade that makes its own pressure resulting in a quality of stiffness never before attained in a razor blade.

The blade as shown in FIGURE 4 permits a close shave with no scraping of the face possible and the material of the blade must be capable of withstanding the bending of the edges 6. The blade 5 may be dispensed in a package, with several of the blades lying upon each other and in their overlying relation preventing possible contact of cutting edges when any object that would affect the sharpened edges 7 and the blade of this invention is adapted to have fitment into any well known blade holder or double edge blades.

It is to be understood that the invention is not limited to the precise construction shown, but that changes are contemplated as readily fall within the spirit of the invention as shall be determined by the scope of the subjoined claim.

I claim:

1. A safety razor comprising: a blade holder, said blade holder including an elongated handle member and

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a transverse head portion located at one end of the handle member, the upper surface of the head portion being bowed toward said handle member and bowed along the entire length of said head portion, and said head portion having guards on opposite edge thereof that are inclined downwardly, a thin flat blade, said blade having opposite end portions inclined downwardly and the edges thereof being sharpened, said blade holder having projection means received in slot means on said blade to register the inclined blade edges with the inclined edges of the head portion, a clamping bar, the lower surface of said clamping bar being complementary to the upper surface of said head portion, said clamping bar having engaging means to engage the blade holder thereby clamping the blade against the head portion in conforming relation therewith.

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References Cited

UNITED STATES PATENTS

1,124,668	1/1915	Shure	30—84 X
2,113,772	4/1938	Rothschild et al.	30—48 X
2,141,339	12/1938	Bauerle	30—84 X
2,191,324	2/1940	Segal	30—72
2,502,062	3/1950	Rieger	30—84 X

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