Nov. 9, 1943. H. L. SMITH 2,333,894

RAZOR

Filed March 16, 1940

Fig. 4

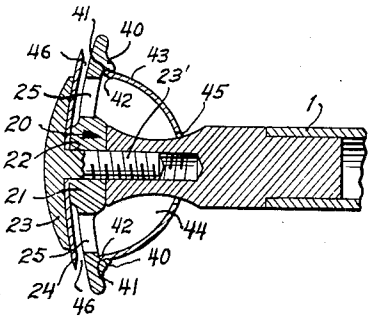


Fig. 1

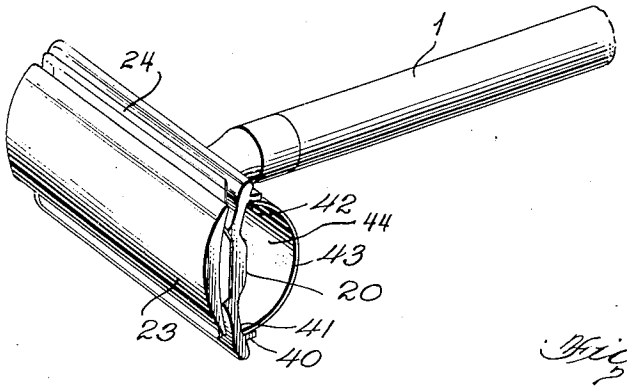


Fig. 2

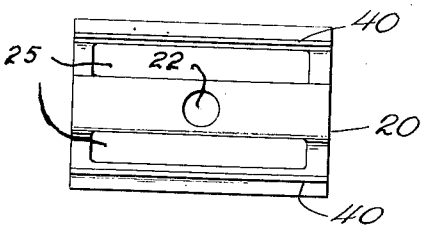
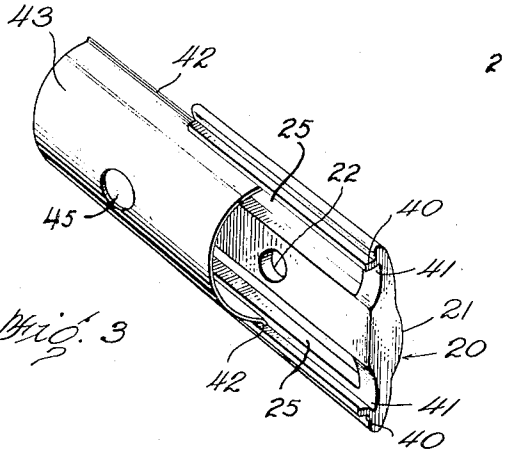


Fig. 3



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RAZOR

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4 Claims. (Cl. 30—41)

This invention relates to safety razcrs of the type which are provided with a removable blade.

Heretofore, the efficiency of safety razors has been largely diminished after a few moments of use when the bristles and lather have clogged the razor. This clogging occurred at the cutting edge of the blade and the bristles and lather became wedged between the blade support and the blade edge. Moreover, bristles and lather or other shaving materials, such as shaving cream, when removed from the face often fell on the person of the shaver or on adjacent objects, such as the washstand, floor, and so forth.

It is an object of my invention to provide means for preventing the material removed by the razor from falling on adjacent objects or the person of the user.

An important object of the invention is to provide a razor which will not clog and lose its efficiency after the first few strokes during the shaving operation.

I have solved these problems, and reached these objectives, by eliminating the cross bar immediately beneath the cutting edge of the blade, and by raising the cutting edge so that it is entirely clear of the safety guard of the razor frame. This arrangement permits the whiskers and lather removed from the face to flow easily back and away from the cutting edge into the semi-cylindrical recess or receptacle behind the blade.

This method of construction not only provides a cavity for the shaving material, as it passes by the cutting edge of the blade, but it also prevents the material thus removed from falling on adjacent objects or the person of the user.

With these and other objects in view, which may be incident to my improvements, the invention consists in the parts and combinations to be hereinafter set forth and claimed, with the understanding that the several necessary elements comprising my invention may be varied in construction, proportions and arrangements, without departing from the spirit and scope of the appended claims.

In order to make my invention more clearly understood, I have shown in the accompanying drawing means for carrying the same into practical effect without limiting the improvements in their useful applications to the particular constructions which, for the purpose of explanation, have been made the subject of illustration.

In the drawing:

Fig. 1 is a perspective view of my razor.

Fig. 2 is a bottom plan view of the support for the blade.

Fig. 3 is a detailed perspective view of the removable receptacle and support.

Fig. 4 is a fragmental transverse sectional view of the razor shown in Fig. 1.

In the drawing I have shown a safety razor having a knurled handle 1 upon which is adapted to be screwed a support 20 which has a central rib 21 and an aperture 22 formed therein through which is adapted to pass the threaded shank 23' formed on an arcuate cap piece 23 which fits over the support 20 and is adapted to hold a safety razor blade 24 in place on the support 20. Formed on the cap piece 6 is a screw threaded shank 23' adapted to be screwed into an aperture therefor in the end of the knurled handle 1.

The support 20 is cut away to provide slots 25 between the central rib 21 and the longitudinal edges of the support.

The support 20 is provided on its underface with ribs 40 which are set at an angle to the underface so as to form grooves or guideways 41 in which are adapted to slide the outturned edges 42 of a curved plate 43 which forms when in place a receptacle 44 for receiving the matter removed from the face of the user. The outturned ends 42 fit into the guideways 41. If desired, the curved plate 43 may be so formed as to require slight deformation to force the edges 42 into the guideways 41, thus insuring a tight fit by reason of the resilience of the plate 43. The curved plate 43 is provided with an aperture 45 which is adapted to align with the aperture 22 when the curved plate 43 is in position for use, as shown in Figure 1. The razor is assembled for use in the usual manner, that is, the blade 24 is placed in position on the upper face of the support 20 lying on the rib 21, the threaded shank 23' on the cap piece 23 is passed through the aperture 22, the apertured end of the handle inserted through the aperture 45 in the curved plate and screwed up on the shank 23'. It will be noted that since the rib 21 is raised above the surface of the face of the support the cutting edges of the blade will be elevated slightly above the support to provide spaces 46 between the blade and the support to permit the passage of lather or shaving cream and the whiskers removed in shaving to pass through the slots 25 and into the receptacle 44.

The receptacle 44 permits the bristles and lather or cream to be held without allowing it to fall on the person of the user or on adjacent

objects during the shaving operation. The slots 25 provide ample space for matter removed during shaving to pass freely into the receptacle. The dangers of clogging of my razor so constructed are greatly minimized over those types in ordinary commercial usage.

When the user has finished shaving the collected matter may be easily cleaned from the receptacle by running water therethrough or, if more thorough cleaning is desired, the razor may be disassembled, the curved plate 43 may be removed from the support and the whole razor washed.

While I have shown and described the preferred embodiment of my invention, I wish it to be understood that I do not confine myself to the precise details of construction herein set forth by way of illustration, as it is apparent that many changes and variations may be made therein, by those skilled in the art, without departing from the spirit of the invention, or exceeding the scope of the appended claims.

I claim:

1. In combination in a safety razor having a removable blade, a support, contact members on the support adapted to hold the blade away from contact at its shaving edges with the support, said support being formed with apertures through which matter removed in shaving is adapted to pass through the support and behind it, a removable cap piece to hold the blade to the support and in contact with said contact members on the support, a curved plate forming a removable receptacle behind the support for the receipt and collection of the matter removed in shaving, and guideways formed on the support in the rear thereof in which the edges of the curved plate are adapted to slide.

2. In a safety razor of the type employing a removable double edged blade, a handle, a support carried by the handle, a cap piece adapted to cooperate with the support to hold a blade therebetween, guards on the support in substantially the same plane as the support and having skin engaging surfaces, a raised portion on said support to hold the blade so that the edges thereof are spaced from said guards when the cap piece is assembled thereon, said support having elongated apertures therein between said guards and the raised portion, an arcuate receptacle in the rear of said apertures to collect the material removed during the shaving process, and means carried by the rear face of the support to detachably secure the receptacle on said support.

3. In a safety razor of the type employing a removable double edged blade, a handle, a support carried by the handle, a cap piece adapted to cooperate with the support to hold a blade therebetween, guards on the support in substantially the same plane as the support and having skin engaging surfaces, a raised portion on said support to hold the blade so that the edges thereof are spaced from said guards when the cap piece is assembled thereon, said support having elongated apertures therein between said guards and the raised portion, a removable receptacle in the rear of said apertures to collect the material removed during the shaving process, and means for detachably securing said receptacle directly to the rear face of the support.

4. In a safety razor of the type employing a removable double edged blade, a handle, a support carried by the handle, a cap piece adapted to cooperate with the support to hold a blade therebetween, guards on the support in substantially the same plane as the support and having skin engaging surfaces, a raised portion on said support to hold the blade so that the edges thereof are spaced from said guards when the cap piece is assembled thereon, elongated apertures in the support between said guards and the raised portion, guideways in the support adjacent to said elongated apertures, and an arcuate plate having edges adapted to slide in said guideways thereby providing a receptacle to collect the material removed during the shaving process.

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