Feb. 26, 1963 M. M. SIDNEY ET AL 3,078,569

ONE PIECE DISPOSABLE RAZOR

Filed March 22, 1961

Fig. 1.

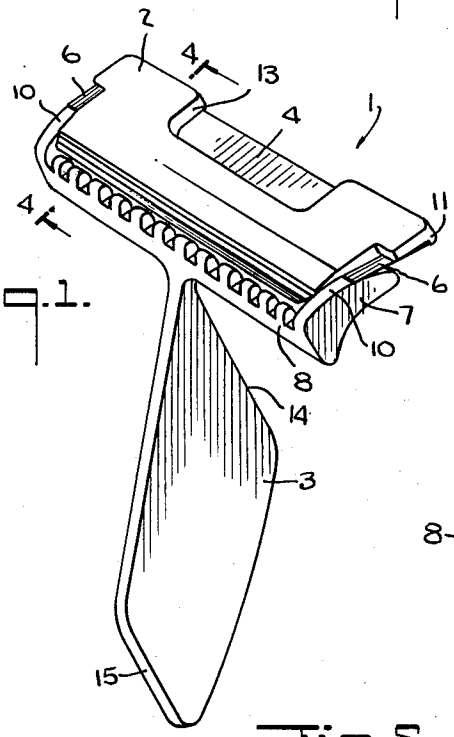


Fig. 4.

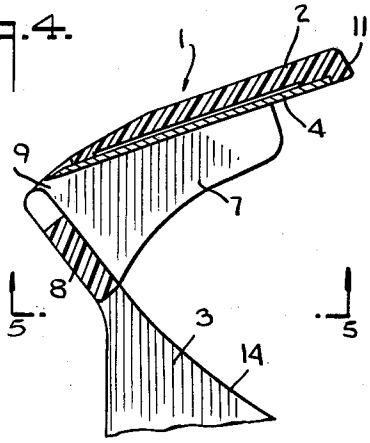


Fig. 5.

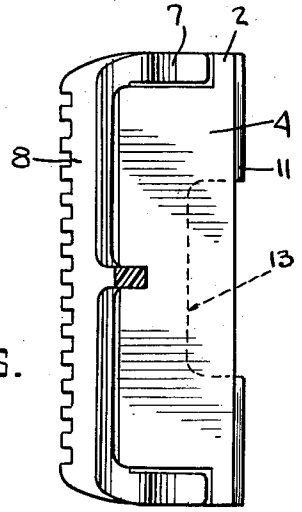


Fig. 2.

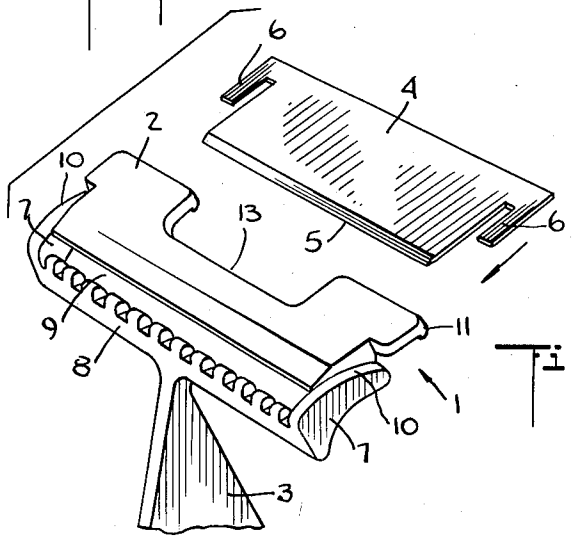
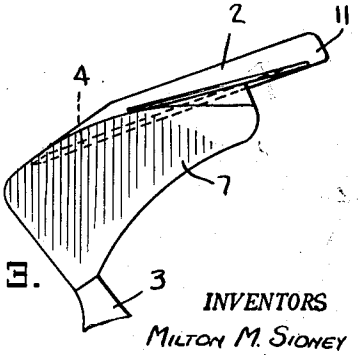


Fig. 3.



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ONE PIECE DISPOSABLE RAZOR

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1 Claim. (Cl. 30—32)

The present invention relates to safety razors and more particularly to an improved safety razor which may be easily disposed after use.

There is need for a safety razor which is inexpensive to manufacture and which can be disposed after use. Such disposable safety razors may be stored in cabinets in washrooms on trains, airport terminals, etc., so that a person may buy one, use it in the washroom and dispose of it immediately.

In addition, such razors may be used in surgical shaving so that they may be packaged in a sterile condition, used only once and then disposed, thereby eliminating the necessity of re-sterilization.

One object of the present invention is the provision of an improved disposable razor which is adapted to be disposed after use.

Another object of the present invention is the provision of an improved disposable razor which is inexpensive to manufacture.

Another object of the present invention is the provision of an improved disposable safety razor which is molded in one piece from the same material.

Another object of the present invention is the provision of an improved disposable safety razor which may be easily stored.

Other and further objects of the invention will be obvious upon an understanding of the illustrative embodiment about to be described, or will be indicated in the appended claim, and various advantages not referred to herein will occur to one skilled in the art upon employment of the invention in practice.

A preferred embodiment of the invention has been chosen for purposes of illustration and description and is shown in the accompanying drawings, forming a part of the specification, wherein:

FIG. 1 is a perspective view of the disposable razor of the present invention;

FIG. 2 is an exploded perspective view showing the blade in position to be inserted in the razor;

FIG. 3 is a side elevational view of the razor;

FIG. 4 is a side sectional view taken along line 4—4 of FIG. 1; and

FIG. 5 is a sectional view taken along line 5—5 of FIG. 4.

Referring more particularly to the drawings, the present invention comprises a single-piece safety razor 1 having a head 2 and an integral depending handle 3. The head 2 is adapted to accommodate the blade 4, shown in FIG. 2, which has a cutting edge 5 and a pair of holding tongues 6 spaced from the side edges of the blade 4. The razor head 2 is molded as an integral portion of the handle 3 and side plates 7 to thereby obviate the necessity of any mechanical connection between razor head 2 and handle 3.

The head 2 has integral side plates 7 which support an integrally formed toothed front guard 8. The front guard 8 is spaced from the head 2 to form a blade-exposing opening 9. The tops 10 of side plates 7 are below the level of the head 2 and are beveled upwardly toward the front of the head, so as to permit the tongues 6 of the blade 4 to bear against these edges and hold the blade in place.

The rear edge of the head 2 has a depending flange 11 which is adapted to accommodate the rear edge of the blade 4 to lock the blade in place so that it does not move during the shaving operation. The head is provided with a cut-out slot 13 to permit the blade 4 to be fully inserted. The slot 13 also permits the blade 4 to be gripped when it is to be removed.

The handle 3 is integral with the front guard 8 and depends therefrom. The handle 3 is relatively flat with the flat side of the handle preferably at right angles to the longitudinal axis of the head 2. The handle has opposed beveled edges 14 and 15 to facilitate gripping, and its overall length is relatively and approximately the same as the overall length of the head 2. The particular shape and size of the handle permits greater economy in manufacture, permits the user to get a better grip, and permits the razor blade to be easily packaged for shipping and dispensing purposes. The razor may be made in one piece from a plastic to reduce the manufacturing expenses and to make the razor light-weighted.

When the razor is to be used, the blade is inserted beneath the head, and the side tongues 6 are slid along the tops 10 of the side panels 7 until the rear edge of the blade 4 snaps in front of the rear flange 11 of the head, as shown in FIG. 4. The slot 13 in the head 2 will facilitate the inward movement of the blade. The blade is held in place by the cooperation of the side tongues 6 with the tops 10 of panels 7 and the cooperation of the rear edge of the blade with the rear flange 11 in the head. In this condition the razor can be easily packaged for sale or stacked in a suitable dispenser. If it is to be used for surgical shavings, it is sterilized after being hermetically packaged.

In use, the user merely removes the package and uses the razor for shaving purposes. After use, the razor can easily be disposed. If, for some reason, it is desired to remove the blade 4, the rear edge of the blade is gripped, and the blade is flexed downwardly until it clears the depending flange 11, after which the blade is slid out.

It will be seen that the present invention provides an improved razor which is easily disposable after use, which can be manufactured inexpensively, and which can be molded in one piece and easily stored.

As various changes may be made in the form, construction and arrangement of the parts herein without departing from the spirit and scope of the invention and without sacrificing any of its advantages, it is to be understood that all matter herein is to be interpreted as illustrative and not in a limiting sense.

Having thus described our invention, we claim:

A one piece disposable razor comprising a head having a rear edge and a front edge, said rear edge being recessed intermediate with its sides and including a downwardly extending flange, a toothed front guard having upstanding teeth and side plates extending rearwardly therefrom including curved upper edges adapted to cooperate with said downwardly extending flange to hold a blade therebetween, said toothed front guard being spaced below the front edge of the head to define a blade-exposing opening, a flat, thin, handle depending from the center of said toothed front guard, the plane of said handle being at right angles to the plane of said toothed front guard, said handle having a front and a rear edge, the front edge of the handle being aligned with and merging into the plane of the front edge of the toothed front guard and the rear edge of the handle being spaced from the toothed front guard.

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