Nov. 26, 1968 J. W. ANDERSEN 3,412,465

LUBRICATING DEVICE FOR SAFETY RAZOR

Filed July 29, 1966

Fig 1

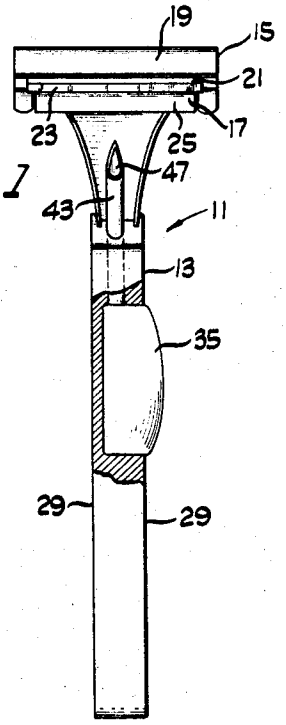


Fig 2

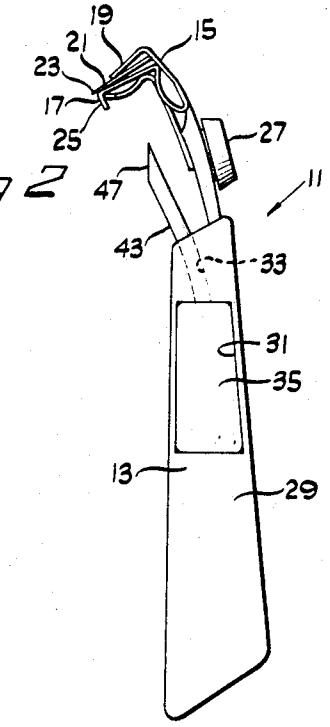


Fig 3

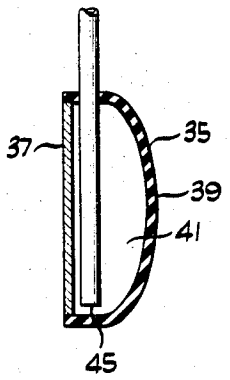


Fig 5

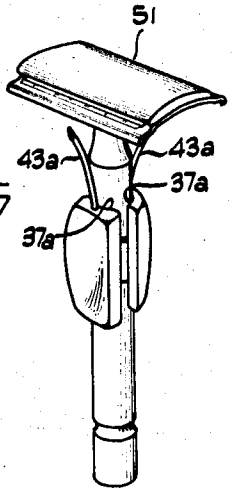
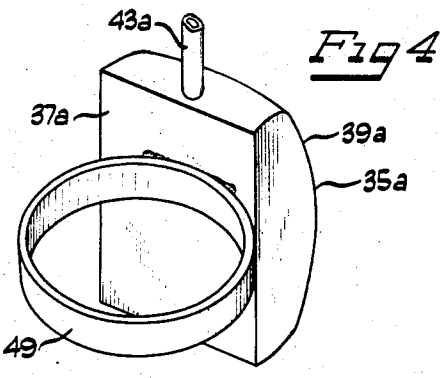


Fig 4



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LUBRICATING DEVICE FOR SAFETY RAZOR

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ABSTRACT OF THE DISCLOSURE

A safety razor including a handle and a transverse head portion which includes a liquid retaining bulb secured to the handle having at least one resilient wall. A tube extends outwardly of the liquid retaining bulb terminating in an open end disposed in operative association with the edge of a razor blade adapted to distribute liquid onto the surface to be shaved.

This invention relates to a shaving device. More particularly it relates to a razor adapted to enable the user to reshave or touch-up a previously shaved area.

With the advent of the stainless steel blade for safety razors certain problems associated with the shaving process have been significantly magnified. One such problem is that of reshaving or touching-up a previously shaved area. As is well known, prior to shaving it is necessary to prepare the area to be shaved with a lather or other moistening solution. This preparatory step softens the beard and provides a lubricating film upon the skin to allow the razor edge to glide easily over the shaving surface.

As the razor is stroked across the skin during shaving the moist film provided by the lather or other solution is almost entirely removed because of the squeegee action of the blade. This is especially true in instances where a stainless steel blade is used. The shaved surface almost instantaneously becomes dry and tacky. It is thereafter almost impossible to touch-up a shaved area by retracing the shaved path unless the skin is remoistened. Since it is often necessary to reshave an area to remove undesirable stubble, the ability to touch-up a shaved area is an important aspect of the shaving process.

Accordingly, it is the principal object of the present invention to provide an improved form of shaving device.

It is another object to provide an improved form of shaving device which enables the user to quickly and easily treat a shaved area for purposes of reshaving or touching-up the shaved surface.

These and other objects of the present invention will become apparent from a reading of the specification with reference to the accompanying drawing.

In the drawing:

FIGURE 1 is a frontal elevational view, partly in section of a shaving device illustrating various of the features of the present invention.

FIGURE 2 is a side elevational view of the apparatus of FIGURE 1.

FIGURE 3 is a fragmentary sectional view of a portion of the apparatus of FIGURE 1 showing other features of the invention.

FIGURES 4 and 5 are views illustrating slightly modified forms of the invention.

Very generally, the invention relates to a shaving device which allows the user to quickly remoisten a shaved area so that the shaved area may again be contacted with a razor edge for reshaving without injury or irritation to the skin.

Referring particularly to FIGURE 1 there is shown a shaving instrument of the injector type generally designated **11**. The instrument **11** includes a handle portion **13**, and a transverse shaving head **15**.

The transverse shaving head **15** includes a blade supporting plate **17** and a blade clamp **19**, between which is disposed a single edged razor blade **21**. The blade **21** is retained in its operative position by the plate **17** and clamp **19** and includes a shaving edge **23**. A guide flange **25** is formed on the blade support plate adjacent to the blade edge and extends generally perpendicularly to the blade in a direction toward the handle portion **13**. This flange is provided to allow the user to place the shaving head against the surface to be shaved and guide the razor edge across that surface.

In the illustrated embodiment, and as best shown in FIGURE 2, an adjustment arrangement **27** is provided which allows the user to adjust the blade position to effect the most efficient relationship between the blade edge **23** and guide flange **25**.

The handle portion **13** includes a pair of parallel gripping surfaces **29**, which enable the user to grasp the shaving instrument for use. As best seen in FIGURE 2, one gripping surface **29** is provided with an inwardly directed pocket **31**. Intermediate the gripping surfaces **29**, there is provided a longitudinally extending passage **33** which extends outwardly of the handle portion adjacent the connection of the handle portion with the shaving head **15**.

In accordance with the present invention, there is provided a liquid retaining bulb **35** secured to the handle portion **13** within the pocket **31**. As best shown in FIGURE 3, the bulb includes a connecting plate **37**, which is secured to the handle portion by any suitable means such as bonding or other suitable adhesive. The remainder of the bulb is formed by a resilient wall **39** secured to the contacting plate **37** in liquid tight relation and defining a fluid retaining chamber **41**.

It should be noted that the bulb **35** may be made entirely of resilient material such as rubber or plastic with the plate **37** integrally formed with the wall **39**.

A hollow tube **43** extends outwardly of the bulb **35** and includes a portion extending through the passage **33**. The tube **43** includes an open liquid receiving end **45** exposed to the chamber **41** and an open dispensing end **47** disposed in spaced relation to the razor blade **21**. The tube is secured to the resilient wall **39** at the point where it enters the chamber **41** in liquid tight relation.

The liquid dispensing end **47** is formed obliquely to the longitudinal axis of the tube. It is formed such that when the razor edge **23** is in operative position with respect to the surface to be shaved, the liquid dispensing end **47** is parallel to and adjacent the shaving surface, for reasons as will become apparent shortly.

To utilize the improved shaving device **11** the bulb **35** is first filled with a suitable lubricating or moisturizing solution. The bulb is filled by depressing the resilient wall **39**, placing the open end **47** of the tube **43** into the solution to be used and releasing the wall **39**. The solution used may be water, a wetting agent, a lotion, or any solution which would provide a lubricating film upon the shaved surface to enable the user to reshave that area.

During shaving, when it becomes necessary to reshave or touch-up an area the user merely squeezes the resilient wall **39** to dispense a quantity of lubricating solution from the bulb **35**. It is important to note, that the surface to be shaved is initially treated with a lather solution and use of the liquid contained in the bulb **35** re-establishes the lubricating film to allow reshaving of an area previously dried by the squeeze action of the razor edge. As can be seen the open end **47** of the tube **45** is arranged such that it is disposed in immediate proximity to the shaving surface when the razor is held in the shaving position. This makes it possible to quickly re-establish a lubricating film on a previously shaved surface by passing the tube end **47** over that surface and simultaneously squeezing the bulb **35**. The razor may be held in approximately

the same position during this operation and once the shaving surface is relubricated it may be reshaved easily and safely.

Referring now to FIGURES 4 and 5, there are shown slightly alternate forms of the invention. As can be appreciated, the device shown in FIGURES 1 to 3 is a complete shaving instrument. However, there are in existence many forms of shaving devices which utilize razor blades which are not provided with the invention shown and described. As illustrated in FIGURES 4 and 5 these shaving devices may be converted for use in the practice of the present invention.

Referring to FIGURE 4 there is shown a bulb **35***a* which includes a connecting plate **37***a* to which is secured a resilient wall **39***a* to define a hollow fluid retaining chamber. There is provided a hollow tube **43***a* (a portion of which is shown) which is appropriately shaped to dispense a lubricating fluid onto a surface to be shaved in immediate proximity to a razor edge.

A resilient band **49** is secured to the connecting plate **37***a*. This resilient band may be expanded and the bulb **35***a* positioned onto the handle portion of any shaving device.

As shown in FIGURE 5, a pair of bulbs similar to the bulb **35***a* may be connected to the handle of a double edged safety razor such as the razor **51** so that the lubricating arrangement may be associated with each working edge of the razor blade.

In the illustrated embodiment of FIGURE 5 a connecting plate **37***a* is formed slightly concave so that it may more readily conform to the cylindrical handle portion of the razor.

From the above it can be readily appreciated that an improved form of shaving device has been provided which enables a user to quickly and safely reshave or touch-up an already shaved area.

Various of the features of the present invention have been particularly shown and described, however, it is obvious to one having ordinary skill in the art that numerous modifications may be used without departing from the

spirit and scope of the invention as defined by the appended claims.

I claim:

1. A shaving device comprising a handle portion including a pair of spaced apart parallel gripping surfaces and defining a pocket open at one of said surfaces, said handle portion further defining a passage extending generally longitudinally of said handle portion intermediate said gripping surfaces, said passage having an open end in communication with said pocket and an open end longitudinally spaced from said pocket, said device further including a transverse head portion connected to said handle portion adjacent said open end of said passage spaced from said pocket, said head portion including a razor blade having at least one edge, a liquid retaining bulb disposed within said pocket including at least one resilient wall exposed at said gripping surface defining said pocket opening, means securing said bulb to said handle portion, said bulb defining a hollow fluid receiving chamber, a hollow tube extending through said passage in said handle portion secured to said bulb in liquid tight relation, said tube including an open fluid receiving end disposed in fluid communication with said fluid receiving chamber and an open, liquid dispensing end disposed externally of said chamber, said liquid dispensing end being positioned such that a quantity of liquid may be dispensed from said bulb by compression thereof through said tube onto a surface to be shaved while said razor is held in a shaving position.

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