May 29, 1956 G. A. OLSSON 2,747,273

LIQUID DISPENSING RAZOR

Filed Dec. 9, 1952

Fig. 1

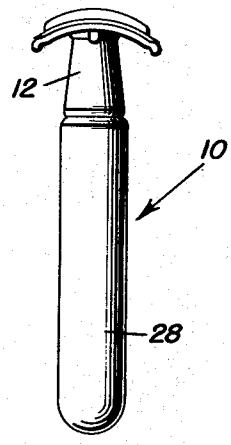


Fig. 2

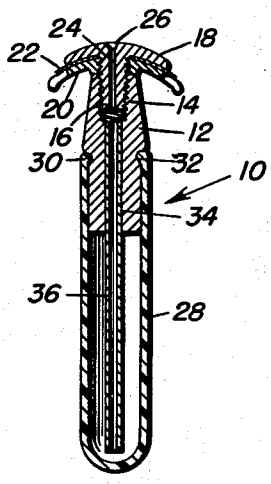


Fig. 3

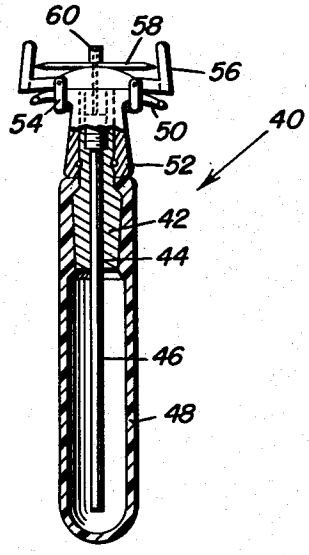


Fig. 4

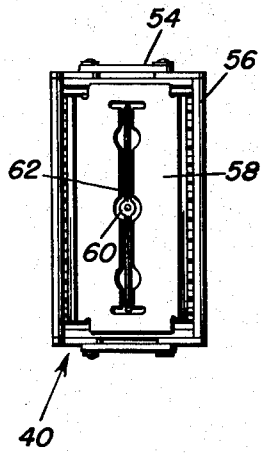


Fig. 5

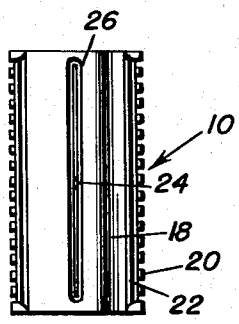


Fig. 6

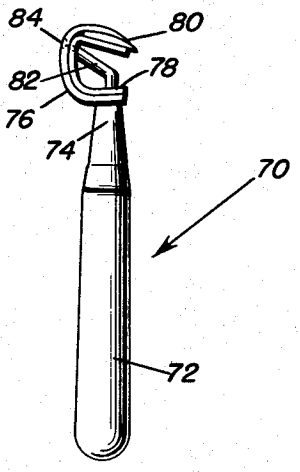
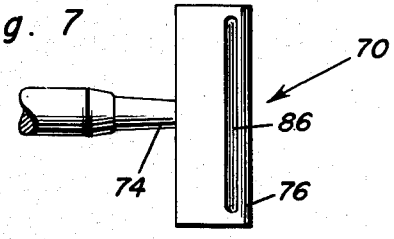


Fig. 7



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2,747,273

LIQUID DISPENSING RAZOR

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2 Claims. (Cl. 30—41)

This invention relates to safety razors and has for its primary object the application of a fluid mixture onto the skin of a shaver in advance of the cutting blade so as to aid the skin and beard in remaining soft and to prevent the primary application of lather or cream from becoming dry and incapable of filling its functions.

While it is important that a beard be fairly softened by lather or a cream prior to shaving in order to shave comfortably, it is equally important that the beard remain moist during shaving. Accordingly, the construction of this invention features means for continuously applying a fluid mixture of water and shaving soap, or the like, to the skin of the shaver. These means include a resilient container secured to the body of the razor and a tube within an aperture in the body which extends into the container. As can be readily seen, these features may be readily applied to various types of razors necessitating but minor modifications to each of these forms of existing razors.

Other objects and features of this invention reside in the provision of a liquid supplying safety razor that is strong, durable, highly efficient in operation, simple in construction and manufacture, capable of being constructed from various readily available materials, and which is relatively pleasing in appearance.

These, together with the various ancillary objects and features of the invention which will become apparent as the following description proceeds, are attained by this safety razor, preferred embodiments of which have been illustrated in the accompanying drawings, by way of example only, wherein:

Figure 1 is a side elevational view showing the device as incorporated on a first form of safety razor;

Figure 2 is a vertical sectional view showing the relationships of the parts of the elements incorporated in the first form of safety razor;

Fig. 3 is a vertical sectional view of another form of safety razor;

Figure 4 is a top plan view of the form of the invention as shown in Figure 3 shown in the open position;

Figure 5 is a top plan view of the form of the invention as shown in Figure 2;

Figure 6 is a side elevational view of another form of the invention showing it installed in a single edged type of razor; and

Figure 7 is a plan view showing the construction of the means for applying the solution to the skin using the single edge type of razor as shown in Figure 6.

With continuing reference to the accompanying drawings wherein like reference numerals designate similar parts throughout the various views, reference numeral **10** is used to designate a first form of the invention shown as applied to a conventional double edge razor. This form of the invention includes a cylindrical body **12** which is provided with internal threads as at **14** for reception of the threaded portion **16** of a cap **18**. Positioned on the threaded portion **16** of the cap **18** is a backing plate **20**. The razor blade as is shown at **22** is positioned between the cap **18** and the backing plate **20** as is conventional.

The novel features of this invention include the provision of an aperture **24** which extends through the cap **18** and which opens into a grove **26** formed in the upper surface of the cap **18**. This groove **26** extends transversely across most of the base of the cap **18** and is adapted to project a desired quantity of the solution onto the face of the shaver. Secured to the body **12** is a container **28** which is formed from a suitable flexible plastic material or from rubber as desired.

The container **28** is preferably cylindrical in shape and is provided with a tongue **30** for reception within a groove **32** in the body **12** in order to securely fasten the container to the body. An aperture **34** is formed in the body **12** in communication with the aperture **24** in the cap **18** and a tubular conduit **36** is secured within the body **12** and extends almost to the bottom of the container **28**. Hence, with water or a soapy solution within the container **28**, pressure upon the sides of the container will force liquid up through the conduit **36** and through the aperture **24** and into the groove **26** from which it is applied to the face. The tube tends to reinforce and strengthen the entire assembly and causes the flexible container **28** to retain its shape.

Referring now to Figures 3 and 4 wherein there is shown another form of the invention, it will be seen that herein there is provided a razor generally indicated at **40** which has a body **42** formed with an aperture **44** extending therethrough. A tubular conduit **46** is secured within the body **42** and extends into the container **48** which depends from the body **42**. The backing plate **50** includes a segment **52** which is rotatably secured on the body **42**. An operating linkage generally designated at **54** of similar nature to the mechanism now in production and on sale by the Gillette Safety Razor Company is actuated by this portion **52**. The capping plate **56** is formed in two segments which are operated by the linkage **54** to hold the razor **58** in place. A tubular conduit **60** is formed from the guide for holding the razor **58** in place. A longitudinally extending slot **62** is formed in the guide for applying water or a soapy solution to the face of the shaver in like manner as does the razor illustrated in the embodiment of Figures 1, 2 and 5.

Referring now to Figures 6 and 7, it will be seen that herein is provided a razor generally indicated by the reference numeral **70** which is provided with a container **72** secured to a body **74** to which a cap **76** and backing plate **78** are attached by conventional means. In this form of the invention, the blade **80** is of the "injector" type or may be of other conventional single edge type and is received between the cap **76** and the backing plate **78**. A conduit **82** which extends into the container **74** in like manner to the conduits **36** and **46**, is provided and extends through the capping plate **76** and the backing plate **78** outwardly thereof. Then the conduit passes again through the backing plate **78** and into engagement with an aperture **84** in the cap which is in alignment with a groove **86** in the capping plate **76**. This groove permits the water or the soapy solution to be applied in like manner to the grooves **26** and **62**.

Since from the foregoing, the construction and advantages of this razor are readily apparent, further descrpition is believed to be unnecessary.

However, since numerous modifications will readily occur to those skilled in the art after a consideration of the foregoing specification and accompanying drawings, it is not intended to limit the invention to the precise embodiments shown and described, but all suitable modi-

fications and equivalents may be readily resorted so which fall within the scope of the appended claims.

What is claimed as new is as follows:

1. A safety razor comprising a body having an aperture therethrough, a container secured to said body, a tube secured to said body passing through said aperture and extending into said container, and a cutting head secured to said body, said head having an aperture therethrough in alignment with said tube, said head comprising a backing plate and a cap, said tube extending out of said body through said aperture and extending into said backing plate, said container being constructed of a resilient flexible material, said cap having a transversely extending groove in its rear surface, said tube communicating with said groove, a blade carried in said cutting head and having an edge extending outwardly of said head, said edge of said blade being oppositely disposed with respect to said groove.

2. A safety razor comprising a body having an aperture therethrough, a container secured to said body, a

tube secured to said body passing through said aperture and extending into said container, and a cutting head secured to said body, said head comprising a backing plate and a cap, said backing plate and said cap having aligned apertures therein, said tube extending out of said body through said apertures and extending into said backing plate, said cap having a transversely extending groove in its rear surface, said tube communicating with said groove.

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