

[54] **SHAVING MOISTURIZER**  
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 3,171,152 3/1965 Corcoran ..... 15/244 A X

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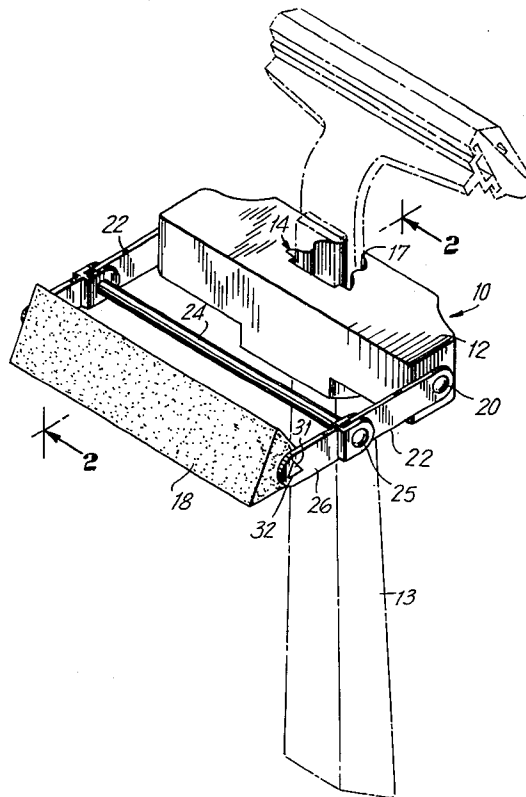
[52] **U.S. Cl.** ..... 30/90; 30/41; 15/244 A;  
 15/246  
 [51] **Int. Cl.** ..... **B26b 21/44**  
 [58] **Field of Search** ..... 30/34.2, 41, 90; 15/244 A,  
 15/246, 250.03, 250.04

[57] **ABSTRACT**

A shaving moisturizer device which comprises an applicator detachably connected to a razor or the like for applying moisture and heat to the lather in a shaving operation so as to soften and set up the beard prior to the actual shaving.

[56] **References Cited**  
**UNITED STATES PATENTS**  
 1,741,891 12/1929 Vallon ..... 30/90

**8 Claims, 7 Drawing Figures**



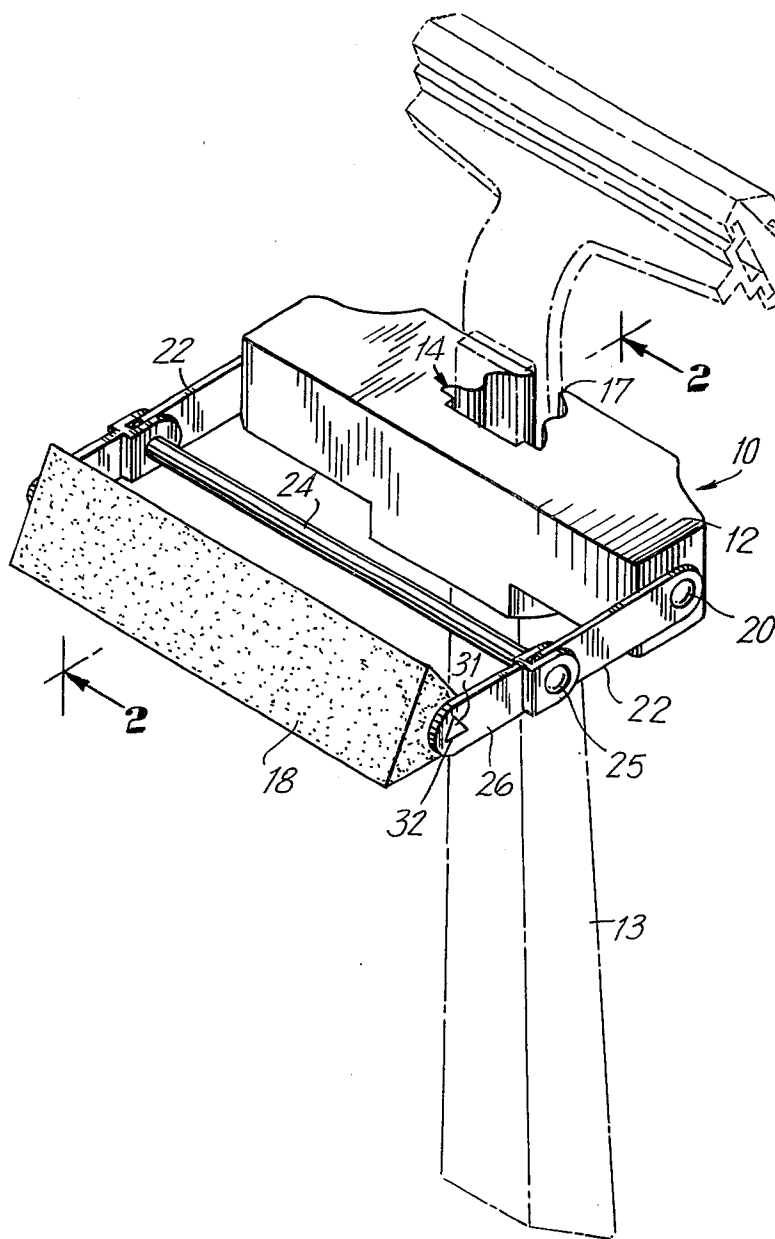


FIG. 1

FIG. 2

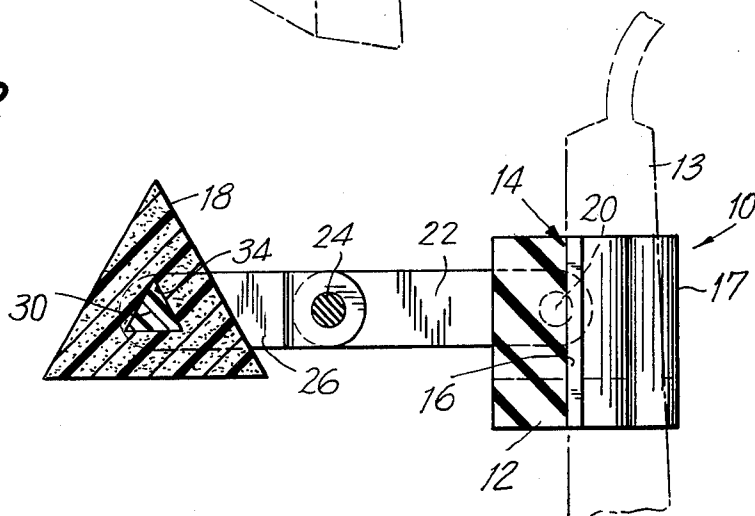


FIG. 3

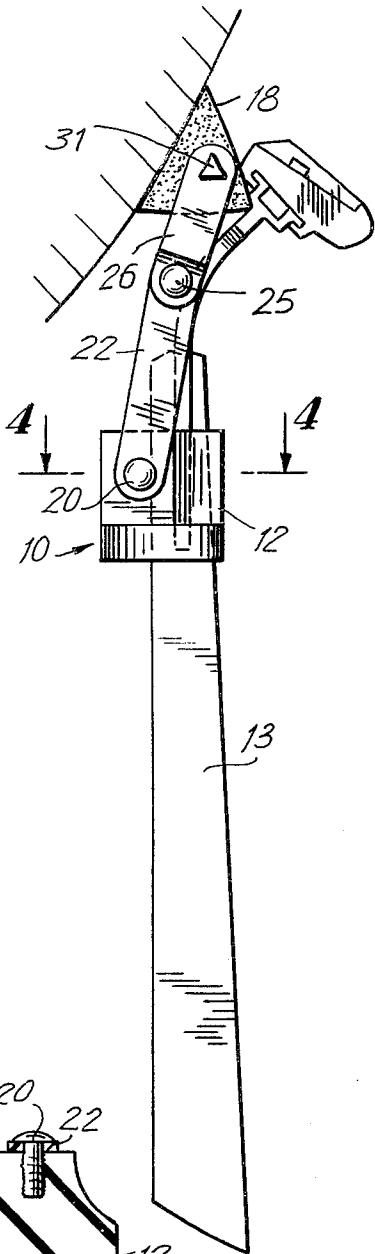


FIG. 4

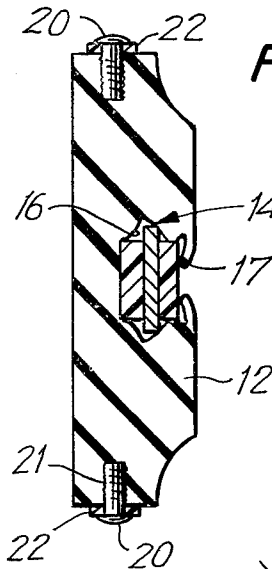


FIG. 5

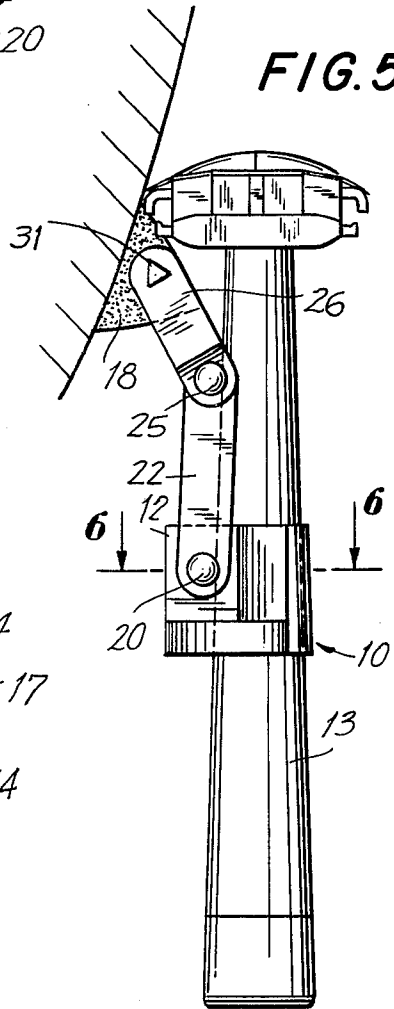


FIG. 6

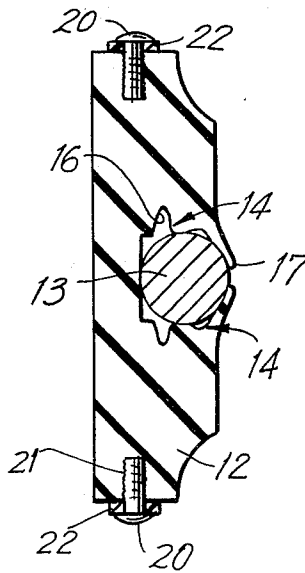
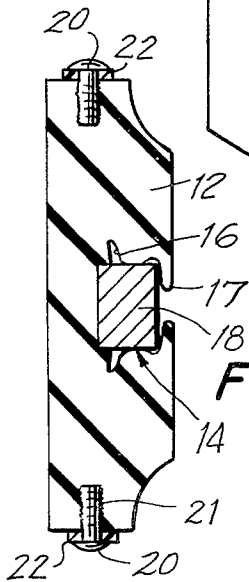


FIG. 7



## SHAVING MOISTURIZER

## BACKGROUND, OBJECTS AND SUMMARY OF THE INVENTION

The present invention relates to shaving apparatus and more particularly to a moisturizer device that can be readily attached to a variety of razors to effectively apply moisture and heat to the shaver's face and thereby to increase the efficiency of a shaving operation.

In order to provide some background for the present invention, reference may be made to certain prior art patents, such as, U.S. Pat. Nos. 2,677,883 to Schallgruber and 2,861,338 to Boland. Both of the aforesaid patents disclose structures in which resilient rollers are attached by frames to a razor so as to assist in a shaving operation. However, the present invention is directed to a number of objects not considered or fulfilled by the prior art.

In particular, it is a primary object of the present invention to enable ready attachability of a moisturizing device to any one of a large variety of commercial razors now on the market.

A further object of the invention is to permit a wide range of adjustability in the positioning of the moisturizing device with respect to the cutting edge of the razor implement. Thus, a wide degree of freedom, while preserving stability, is permitted in locating the moisturizing device relative to the cutting edge as desired by the user. Moreover, the device can be attached and positioned so as to be used either on the blade side of the razor for applying moisture immediately in advance of cutting the whiskers, or the moisturizing device can be used on the opposite side, away from the blade of the razor, so as to allow for first applying the required moisture and for subsequently turning the razor to perform the shaving operation.

The aforesaid object of providing ready attachability is implemented by means of a primary feature of the present invention which comprises a clamp formed in a resilient base member, such clamp being so formed that it can accommodate razor stems of circular or rectangular cross-sections or even irregularly contoured stems.

Another major or primary feature, which likewise makes possible the use of the moisturizing device with a variety of razors, is an arrangement which includes multiple sets of arms and a middle axle, thereby achieving any degree of adjustment called for.

Yet another feature of the present invention resides in the particular configuration of the sponge applicator for the moisturizing device. This application has a triangular cross-section, thereby providing three applicator surfaces, each of which can be used by rotating a new and clean surface into position when the surface already used has become clogged with shaving cream and whiskers. The applicator is retained against rotational movement once it has been placed in a particular position. Being thus stationary in use, it does not hinder the introduction of hot water to the beard. Moreover, unlike a roller, this particular applicator has a sliding effect rather than a matting or patting-down effect on the whiskers.

The axle or holder for the sponge applicator is likewise of triangular cross-section, including the ends thereof, so that the desired stationary result is achieved for the applicator. A further feature lies in the ready

detachability of the sponge applicator from the axle which holds it. Yet another feature resides in the fact that the axle has a number of indented reservoirs for holding moisture on each of its three sides.

Other and further objects, advantages and features of the present invention will be understood by reference to the following specification in conjunction with the annexed drawings, wherein like parts have been given like numbers.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the moisturizing device in accordance with one embodiment of the present invention, shown attached to a typical razor.

FIG. 2 is a sectional view of the moisturizing device taken on the line 2—2 in FIG. 1.

FIG. 3 is an elevational view of the moisturizing device shown in position for applying moisture to the user's face when used with a typical razor.

FIG. 4 is a sectional view taken on the line 4—4 of FIG. 3.

FIG. 5 is another elevational view, similar to FIG. 3, but showing the moisturizing device adjacent the blade side of another typical razor.

FIG. 6 is a sectional view taken on the line 6—6 in FIG. 5.

FIG. 7 is a sectional view of the moisturizing device shown clamped to a razor having yet another cross-section.

## DESCRIPTION OF PREFERRED EMBODIMENT

Referring now to the figures and particularly for the moment to FIG. 1, there will be seen a preferred form of a moisturizing device 10 adapted to be used with a variety of conventional razor instruments. The device 10 includes a base member 12 which is formed so as to be of appropriate thickness, of the order of one-half inch, thereby to provide for firm attachment of the device 10 to a razor stem 13. This base member 12 is made of a stiff but very pliable plastic material, preferably being constituted of polyethylene.

A clamp 14 for attachment purposes is formed at one side of the base member 12 through the entire thickness thereof, that is, through the thickness at that side of the member. The clamp 14 is provided with an irregularly shaped surface 16 terminating in an edge opening 17, so as to accommodate and to clamp on to a variety of stem configurations. Thus, one size of clamp will fit the various sizes and shapes of razor stems, such as from  $\frac{1}{4}$  inch to  $\frac{1}{2}$  inch and either circular or rectangular in cross-section.

The base member is fastened or attached to the stem by squeezing the base member 12 so as to create a sufficient opening, due to the bowing or curving thereof, so that the razor stem can be set into the clamp. Once pressure has been released, the clamp 14 is allowed to close and grip the stem 13. It will be apparent to those skilled in the art that a variety of different plastic materials may be employed to form the base member depending on the gripping power desired. It will also be clear that the base member can be adjusted relative to the height of the stem 13 so that virtually any positioning desired for the device 10 can be achieved. Thus, even in those rare cases where the stem has only a very slight thickness adjacent the blade, the moisturizing device 10 can still have the base member gripping the stem, at a lower portion thereof, and the appropriate

positioning of the arms to be described will permit the applicator to be in the correct position relative to the cutting edge. This can be achieved while ensuring stability for the moisturizing device since, as will be appreciated by reference to FIGS. 3 and 5, the device 10 can be braced against the razor stem in seeking the proper adjustment for the arms.

The moisturizing device 10 is arranged such that an applicator 18 is pivotally connected to the base member 12. This is accomplished in the preferred embodiment as seen by a feature involving maximum freedom of movement so as to permit a wide range of adjustability in the position of the applicator 18 relative to the cutting blade of the razor. To this end, a pair of pivot pins 20 are imbedded within the base member 12 at opposite ends thereof. Mounted for pivotal movement about these pins and in tight fitting relationship therewith are a pair of arms 22, connected respectively at opposite ends of what may be conveniently referred to as a middle axle 24. Another pair of pins 25 are disposed respectively at opposite ends of axle 24. The pins 20 have a roughened exterior surface 21 on the portion which enters the base member 12 so as to prevent the pins from turning in the base member and from working themselves out, the remaining portion which engages the arm 22 being smooth.

It will be apparent that the entire mechanism can be pivoted about the pins 20 or, alternately, the applicator 18 can be suitably rotated or pivoted about the middle axle 24. Mounted for pivotal movement about this middle axle are pairs of bifurcated arms 26 at either end of the axle 24 in tight fitting relationship with the respective pins 25. Alternately, of course, rather than a bifurcated arm at either end, pairs of parallel arms can be utilized.

In order to accommodate the applicator 18 and to maintain the applicator stationary when in use, that is, when used in the shaving operation for the purpose of moisturizing the beard, the applicator axle 30 is shaped or configured so as to have a triangular cross-section, as will be especially appreciated by reference to FIG. 2. Also, it will be noted in this figure that the ends 31 of the applicator axle 30 have reduced dimensions but retain the triangular cross-section such that they fit appropriately into the triangular openings 32 in the ends of the arms 26. Because of this relationship between the openings 32 and the ends 31, stepwise adjustment in the presentation of a particular side of the applicator can be achieved. It should be noted that for the purpose of the aforementioned adjustment of the applicator, the arms 26 are sufficiently pliable to allow for release of axle 30 so that it may be turned.

It will be seen in FIG. 2 that the applicator, per se, which is preferably composed of sponge rubber or the like, is configured to be carried by the axle 30, being provided with a suitable axially extended opening 34 such that it can be readily fitted over such axle. Accordingly, it will be appreciated that ready detachability of the sponge applicator is enabled so that cleaning or replacement of the applicator can be effectuated.

It will be understood that the moisturizing device of the present invention achieves the functions of heating, moisturizing and lubricating the face and beard through the application of hot water on the face and beard just prior to removing the whiskers, thereby to effectuate a less irritable shave. By reason of the decrease in resistance because of the moisturizing, heat-

ing and lubricating effects a longer life will be provided for the blade or blades and also fewer nicks and cuts on the shaver's face.

The above effects are normally accomplished immediately in advance of the cutting of the beard. That is to say, after application of a cream lather or the like, hot water is continuously being replenished every time the razor is rinsed of whiskers and shaving cream. Hence, moisture is being applied by the moisturizing device immediately in advance of the action of the blade or blades in shaving a particular area. Effectively then, the shaving operation, including the moisturizing provided by the present device, is all produced in virtually one stroke. When it is necessary to change blades on the razor the device can be easily swung out of the way and then can be easily readjusted back into position.

While there has been shown described what is considered at present to be the preferred embodiment of the present invention, it will be appreciated by those skilled in the art that modification of such embodiment may be made. It is therefore desired that the invention not be limited to this embodiment, and it is intended to cover in the appended claims all such modifications as fall within the true spirit and scope of the invention.

What is claimed is:

1. A moisturizing device adapted to be detachably connected to a razor or the like, comprising:

1. an extended base member of substantial thickness having a clamp formed therein at one side, said clamp having an edge opening and an interior surface of irregular configuration so as to be adaptable for clamping onto a variety of razor devices;

2. an applicator pivotally connected to said base member, said applicator including

a. a first axle and a first pair of arms extending from opposite ends of said axle and pivotally connected to said base member,

b. a second axle and a second pair of arms extending from said first axle and connectable with said second axle, and

c. an applicator sponge mounted on said second axle.

2. A shaving moisturizer device adapted to be detachably connected to a razor or the like, comprising: a base member adapted to be clamped to a variety of razor stems of variable thickness and shape;

an applicator pivotally connected to said base member, said means for pivotally connecting comprising a first pair of arms mounted for pivotal movement about a pair of pivot pins embedded at opposite ends of said base member;

an axle to which opposite ends of said first pair of arms are pivotally connected;

another pair of arms in tight-fitting relationship with a further pair of pins disposed at the ends of said axle member;

another axle held within openings at the opposite ends of said second respective pair of arms;

an applicator sponge mounted on said further axle, said applicator sponge having an axial-extending opening therefor.

3. A shaving moisturizer device defined in claim 2, in which said sponge applicator has a triangular cross-section thereby providing three applicator surfaces.

4. A device as defined in claim 3, further including corresponding triangular openings in said ends of said

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second pair of arms for receiving said applicator axle.

5. A device as defined in claim 4, in which said applicator axle includes individual indented reservoirs in each of said applicator surfaces.

6. A device as defined in claim 1, in which said base member is constituted of a stiff but very pliable plastic material so that said clamp may be opened to allow for gripping a variety of razor stems, said clamp being provided with an irregularly shaped surface terminating in an edge opening.

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7. A device as defined in claim 6, in which said base member is constituted of polyethylene.

8. A device as defined in claim 1, in which said second pair of pivot pins disposed at the ends of said axle member includes flanges at either end of said pins so that a tight-fitting relationship is established between said second pair of arms and said axle member and also with said first pair of arms.

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