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ATTACHMENT FOR ELECTRIC RAZORS

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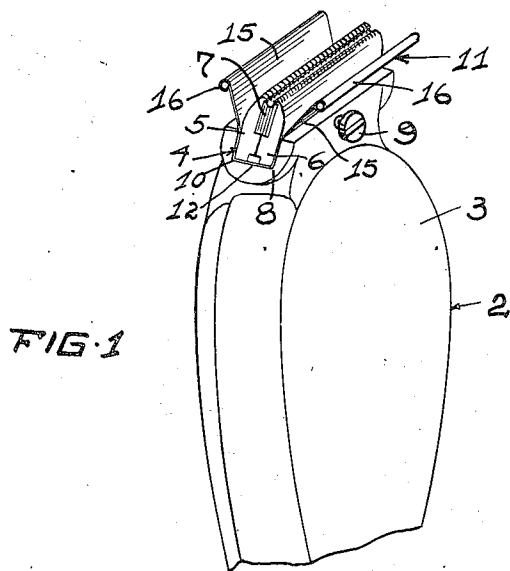


FIG. 2

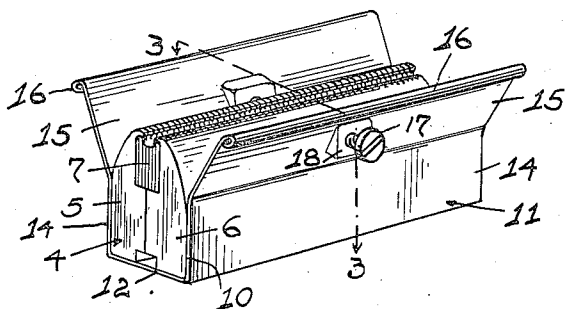
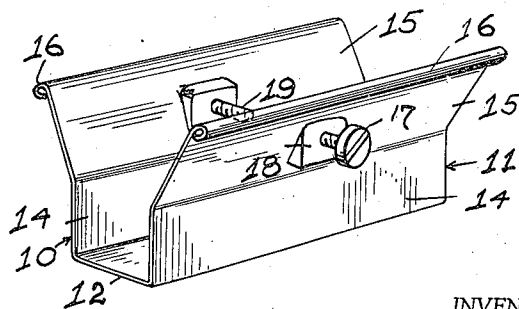
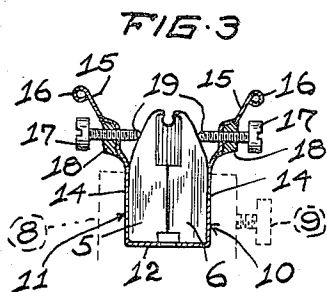


FIG. 4



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ATTACHMENT FOR ELECTRIC RAZORS

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8 Claims. (Cl. 30—34)

This invention relates to attachments for electric or power actuated razors of the type generally known as dry shavers, and its general object is to provide an attachment for razors of this type adapted to automatically lift the hairs to be cut by stretching the skin opposite the cutting elements of the razor, all for the purpose of insuring a closer shave and preventing injury to the skin during shaving operations.

Another object of this invention is to provide an attachment of the character set forth that can readily and easily be applied to a power razor and is readily detachable therefrom for cleaning and other purposes.

A further object of this invention is to provide an attachment of the character set forth which includes means adapted to control the size of the area of the skin to be stretched and the rate of tension to be applied to the skin to be stretched.

Still another object of the invention is to provide a razor attachment of the character set forth that is simple in construction, inexpensive to manufacture, and extremely efficient in use and service.

In addition the invention has certain other marked superiorities which radically distinguish it from presently known structures. These improvements or superior characteristics embodying certain novel features of construction are clearly set forth in the following specification and the appended claims; and a preferred form of embodiment of the invention is hereinafter shown with reference to the accompanying drawing forming part of the specification.

In the drawing:

Fig. 1 is a perspective view of an electric razor having mounted thereon a skin stretching attachment according to the invention.

Fig. 2 is an enlarged perspective view of the assembled cutting elements of the razor shown in Fig. 1 together with the skin stretching attachment skirting the cutting elements.

Fig. 3 is a cross section, partly in elevation, through Fig. 2, the section being taken on line 3—3 of said figure with the cutting elements shown in elevation; and

Fig. 4 is a perspective view of the skin stretching attachment.

Referring more in detail to the drawing which shows my skin stretching attachment applied to an oscillatory type of razor, reference numeral 2 denotes a razor, the housing 3 of which provides the customary handle and mounts cutting means 4 embodying two stationary cutting elements 5

and 6 and a reciprocating cutting element 7. Reciprocating element 7 is slidably arranged between stationary cutting elements 5 and 6 and actuated upon by mechanism (not shown) in housing 3, all according to general practice and therefore not specifically described.

Cutting means 4 is mounted in a U-shaped extension 8 of housing 3, secured to said extension by a set screw 9 and partly encircled by the U-shaped base portion 10 of a skin stretching element 11. This element has the web portion 12 of its base 10 perforated to permit of coupling of reciprocating cutting element 7 with the driving mechanism of the razor and engages with the flanges 14 of said base, the outside faces of stationary cutting elements 5 and 6 when skin stretching element is slipped on cutting means 4. Flanges 14 have integrally extended therefrom diverging wing portions 15, the outer edges 16 of which are rounded and slightly roughened so as to insure proper skin stretching operations by these wing portions which extend freely when skin stretching element 11 is slipped upon cutting means 4 and jointly seated with said element in the U-shaped extension 8 of housing 3. In such a position wing portions 15 effect automatic skin stretching during shaving operations when the cutting means of the razor is brought into contact with the skin to be shaved.

The rate of the skin stretching is brought about by the yielding shifting of wing portions 15 in opposite directions and depends upon the angular relationship of said wing portions to cutting means 4 and the distance of a plane through edges 16 of said wing portions from cutting means 4. This rate of skin stretching is controllable by means of set screws 17 threadedly engaged with threaded bosses 18 in said wing portions, which set screws contact with their inner ends 19 stationary cutting elements 5 and 6 respectively. This arrangement permits of the spreading action of wing portions 15 being pre-set to any desired rate, it being understood that proper shaves are possible only by proper pre-setting of the skin stretching element and that the most desirable stretching of the skin of an operator is individual and depends upon reaction of such skin stretching.

It is to be understood that the form of attachment shown in the drawing is merely an exemplified form of the invention and changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

Having thus described my invention what I claim is:

1. The combination of an electric razor with a skin stretching device embodying oppositely arranged yielding wings divergently extended from opposite sides of the cutting means of said razor, and means at the inner ends of said wings for rigidly securing said ends to said razor without interfering with the yielding action of said wings.

2. The combination of an electric razor with a skin stretching device having oppositely arranged yielding wings divergently extended from opposite sides of the cutting means of said razor, means at the inner ends of said wings for rigidly securing said ends to said razor without interfering with the yielding action of said wings, and means co-operating with said wings for adjusting the divergence of said wings with respect to each other and said cutting means.

3. The combination of an electric razor with a skin stretching device including oppositely arranged yielding wings divergently extended from opposite sides of said razor, and means co-operating with said wings for adjusting the divergence of said wings with respect to each other and the razor.

4. The combination of an electric razor having a housing, a channeled seat extended from one end of said housing, cutting means mounted within said channeled seat, and releasable means rigidly securing said cutting means in said channeled seat, with a skin stretching device including oppositely arranged yielding wings divergently extended from said channeled seat at opposite sides of said cutting means, said skin stretching means and said cutting means being jointly secured in said channeled seat by said releasable means.

5. The combination of an electric razor having a housing, a channeled seat extended from one end of said housing, removable cutting means mounted within said channeled seat, and releasable means rigidly securing said cutting means

in said channeled seat, with a U-shaped skin stretching device including a base portion closely fitting the base of said cutting means and oppositely arranged, yielding diverging wings integrally extended from said base portion at opposite sides of said cutting means, said skin stretching means being slipped upon said cutting means and secured together with said cutting means in said channeled seat by means of said releasable means.

6. The combination of an electric razor having a housing, a channeled seat extended from one end of said housing, removable cutting means mounted within said channeled seat and releasable means rigidly securing said cutting means in said channeled seat, with a skin stretching device embodying a U-shaped base portion slipped upon the bottom portion of said cutting means and secured therewith to said channeled seat, yielding diverging wings integrally extended from the flanges of said base portion and arranged at opposite sides of said cutting means and means on said wing portions co-operating with said cutting means in setting the angle of divergence of said wings with respect to each other and said cutting means.

7. A skin stretching attachment for electric razors having removable cutting means comprising a U-shaped body including a perforated web portion, and yielding wing-like blades extended from the flanges of said body in diverging relation with respect to each other.

8. A skin stretching attachment for electric razors having removable cutting means comprising a U-shaped body including a perforated web portion, yielding wing-like blades extended from the flanges of said body in diverging relation with respect to each other, and means on said blades threadedly engaged therewith adapted to adjust in co-operation with a razor the angle of divergence of said blades when said body is attached to such a razor.

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