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2,937,649

HAIR CURLER

Filed July 24, 1958

FIG. 1.

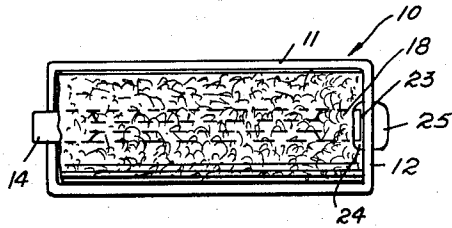


FIG. 2.

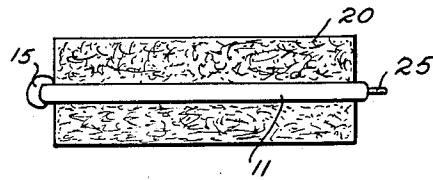


FIG. 4.

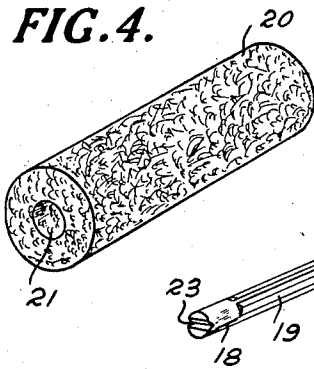


FIG. 3.

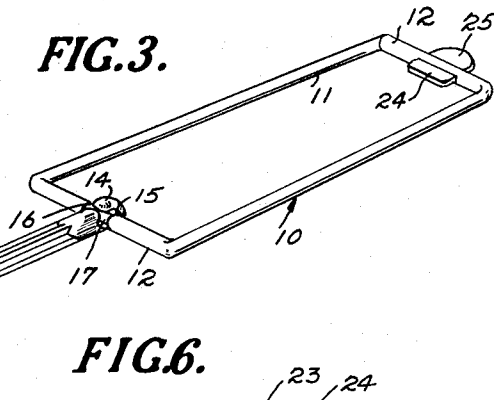


FIG. 6.

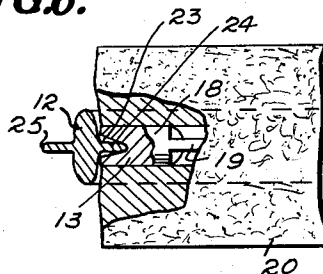
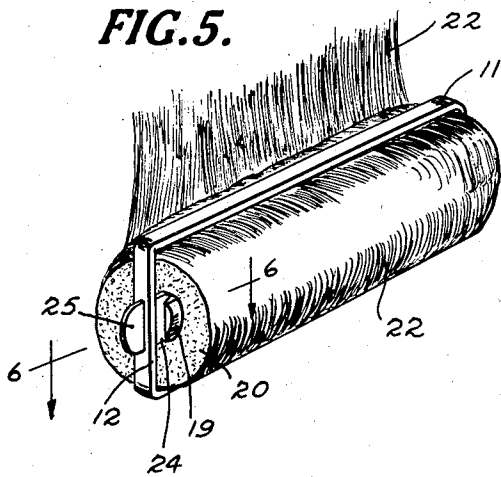


FIG. 5.



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HAIR CURLER

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1 Claim. (Cl. 132—41)

The present invention relates to a new and improved hair curler or roller.

An important object is to provide a simple, efficient and inexpensive hair curler, which includes a supporting member or rod and a bail, each of which is preferably made of light, flexible and durable plastic material, such as polyethylene or the like. The bail is formed with longitudinally spaced yieldable sides and transverse ends. Arranged to be axially slideable but non-rotatably mounted on the supporting member, is a tubular foam or cylindrical sponge rubber member around which the lock or strand of hair to be curled is wound. The supporting member is pivotally connected at one end to the bail and has its opposite or free end arranged to be moved from an open position outside of the bail, to a closed position within the latter. The free end of the supporting member is provided with latch means which co-acts with complementary interfitting latch means on the bail for releasably connecting the supporting member and the foam member to the bail when the bail is swung to its closed position. The outer end of the lock of hair to be curled is wrapped around the supporting member when the latter is in its open position. Thus, it will be seen that when the lock of hair is wrapped on the foam member, if it is of greater diameter than the space between the longitudinal sides of the bail, that upon the parts being moved to their closed position, the flexible sides of the bail will be brought into contact with the wound lock of hair, with the result the more hair that is placed on the supporting member, the tighter the interfitting latch means will be moved into locking engagement for maintaining the supporting member and the hair wound thereon in a fixed position relative to the bail. Additionally, as the supporting member and the lock of hair wrapped thereon are confined within the confronting sides and ends of the bail, the liability of the supporting member being displaced axially relative to the bail is eliminated and the hair wound on the supporting member is prevented from spreading.

Other objects and advantages of the invention will become apparent from the following description when taken in conjunction with the accompanying claim and drawing.

Referring to the drawing, in which is shown a preferred embodiment of the invention—

Fig. 1 is a plan view of a hair curler constructed in accordance with the present invention;

Fig. 2 is an end view of Fig. 1;

Fig. 3 is an enlarged perspective view of the flexible bail and supporting member that constitute a part of the curler;

Fig. 4 is a detailed perspective view of a tubular foam member arranged to be carried by the supporting member and positioned between the sides and ends of the bail when the parts are assembled;

Fig. 5 is a detailed perspective view showing a lock of hair wound on the curler; and

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Fig. 6 is an enlarged sectional view taken substantially along the line 6—6 of Fig. 5.

Referring to the drawing and more particularly to Fig. 3, the flexible hair curler, which may be of any desired size and shape, preferably includes a substantially rectangular bail 10 having the spaced parallel sides 11 connected by the transverse ends 12. The bail 10 may be made of any suitable light, durable plastic material, such as polyethylene, so as to be capable of use with various chemicals. An elongated supporting member or rod 13 is formed at one end with an enlarged curved portion 14 provided with a transverse through opening 15 and an interrupted peripheral transverse slot 16 (Fig. 3) shaped to receive a reduced central portion 17 formed in one of the ends 12 of the bail, so as to provide a pivotal or hinge connection of the supporting member 13 with the bail, in order that its opposite or free end 18 may be swung from an open position outside of the bail (Fig. 3), to a closed position within the bail (Fig. 1). The supporting member 13 may be made of substantially the same light plastic material as the bail 10 and is provided between its ends, with longitudinally extending and circumferentially spaced ribs 19. A tubular cylindrical foam member 20 of slightly shorter length than the supporting member 13 is arranged to be axially slideable on the supporting member. The tubular member 20 has an axial bore 21 and is formed of any suitable soft, compressible foam or sponge rubber capable of readily absorbing moisture, so that a lock or strand of hair, such as 22, will cling to the surface thereof, as the hair to be curled is wrapped thereon.

The outer free end 18 of the supporting member 13 may be provided with a transverse slot or groove 23 which co-acts with a complementary formed inwardly extending rib 24 on the end 12 remote from the pivotal connection 17 so as to provide releasable interfitting latch means for maintaining the supporting member in its closed position between the sides of the bail. The rib 24 may be integrally formed with the end 12 (Fig. 6) and this end may also be provided with an outwardly and laterally extending rib or handle 25 for facilitating the movement of the latch 24 into yieldable snapping engagement with the groove 23, or releasing the same therefrom. Since the supporting member 13 and the rib 24 are connected to the flexible sides 11 of the bail, it will be seen that lateral expansion and contraction of the sides 11 will cause simultaneous movement of the slot 23 and rib 24, either towards or away from each other, so as to control the interfitting engagement of the latch means with each other.

In operation, assuming the parts to be in their open position (Fig. 3), a lock or strand of hair 22 to be curled initially has the outer end thereof wrapped around the body of the foam member 20. When the lock of hair is completely or fully wrapped on the member 20, the supporting member 13 is swung inwardly about its pivot 17 so as to position the foam member 20 and the lock of hair wound thereon, within the bail 10 and between the confronting sides 11 and the transverse ends 12. The transverse groove 23 in the free end 18 of the supporting member 13 is then brought or snapped into locking engagement with the rib 24 so as to maintain the supporting member and the hair wound on the foam member 20, in a fixed position between the sides of the bail. It will be noted that as the amount of hair wrapped on the supporting member 13 increases, it will simultaneously increase the diameter thereof so that when the hair wound on the supporting member exceeds a predetermined diameter or becomes greater than the distance or space between the flexible sides 11 of the bail, it will, upon the supporting member being swung inwardly to its closed

position, frictionally engage the confronting sides 11 so as to cause lateral or outward expansion thereof in opposite directions, with the result that the ends 12 of the bail, which now constitute a stop for the hair, are moved inwardly toward each other, thus causing the rib 24 to be moved into tighter interfitting engagement with the groove 23. In other words, the curler is constructed and arranged so that the more hair that is wound on the supporting member 13, the tighter will be the locking engagement of the latch means 23 and 24 with each other.

It will be seen that when the hair to be curled is wound on the supporting member 13, the parts may readily be moved and locked in their closed position, so as to confine the supporting member 13 and the lock of hair thereon between the ends 12 of the bail, so as to prevent accidental axial displacement of the supporting member 13 or the spreading of the hair wound on the bail member 20. Thus, the foam cylinder member 13, when a lock or strand of hair to be curled is wound thereon and the parts moved to their closed position (Fig. 5), constitutes means for supporting and maintaining firmly in place the curled hair in such manner that the flexible curler may be either concealed or exposed to form an outer curl. Moreover, as the curler avoids the use of metal parts, the soft foam tubular member 13 may be placed comfortably close to the scalp without danger of hurting or pinching the scalp. The ribbed or fluted portion 19 of the supporting member 13 frictionally engages the inner wall of the bore 21 of the foam member 20 so as to allow the latter to be axially slideable on the supporting member but is prevented from rotating independ-

ently thereof. As the tubular member 20 is formed of soft absorbent material, such as foam rubber or the like, it may be saturated with a hair curling compound or a hair or scalp treatment fluid.

It will be understood that the form of the invention shown is merely illustrative and that such changes may be made as come within the purview of the following claim.

We claim:

A non-metallic hair curler comprising: a rectangular bail having longitudinally extending parallel flexible sides and integrally formed transverse straight ends connecting said sides; one of said transverse ends having a reduced portion at its mid-point; a longitudinally extending rigid support member pivotally mounted at one end thereof to said one transverse end on said reduced portion; the other of said straight ends having an integral rib facing inwardly of said bail; the free end of said support member being transversely grooved to engage said rib when said support member is in a closed position within said bail and parallel to its longitudinal sides; and a cylindrical foam member coaxially disposed on said support member and having a diameter less than the length of said transverse ends.

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