Sept. 2, 1952 N. L. SOLOMON 2,608,978

HAIR CURLER

Filed Nov. 26, 1948

Fig. 1.

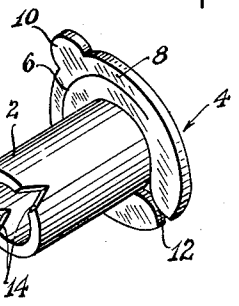


Fig. 3.

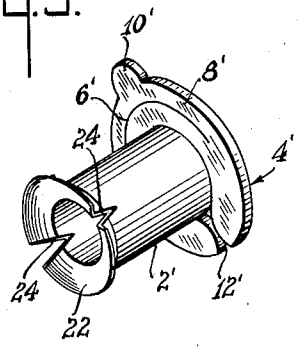


Fig. 2.

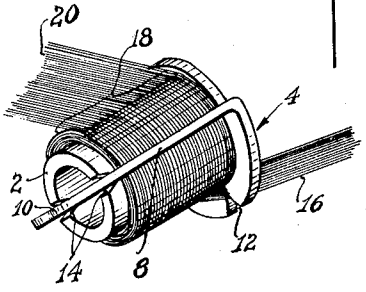


Fig. 4.

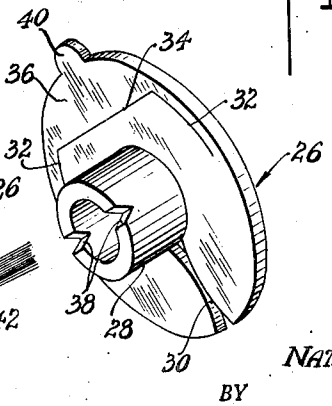
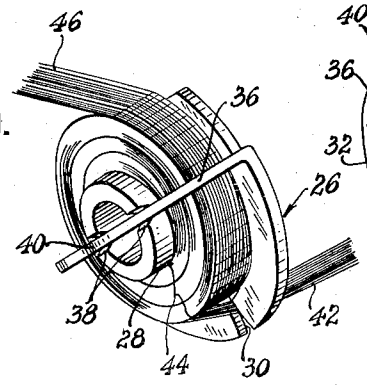


Fig. 5.



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HAIR CURLER

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9 Claims. (Cl. 132—42)

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This invention relates to a slumber curler, that is, a hair curler designed to be worn while the user sleeps.

The invention has among its objects the provision of a novel slumber curler which is economical to manufacture and easy to apply.

The invention has as a further object the provision of a curler of the type described which is compact and which does not include any hard parts which might injure the head of the user.

These and further objects of the invention will be more readily apparent in the following description of preferred embodiments thereof.

Prior hair curlers of the slumber type not only have been somewhat bulky, but have been particularly disadvantageous since they included one or more hard parts which tended to injure the scalp of the wearer as her head rested on them as she slept. Such prior curlers have further been difficult to manipulate to form the curl and to fasten the curler in place. The curler of the present invention, which is preferably made in one piece, is made of soft rubber or rubber-like elastomer which readily yields under the pressure of the head on the pillow or bed, thereby obviating any injury to the head or discomfort to the wearer.

The invention will be more readily understood by reference to the accompanying drawing, in which:

Fig. 1 is a view in perspective of a first embodiment of the curler of the invention;

Fig. 2 is a similar view of the curler shown in Fig. 1 with a swatch of hair applied thereto to form a regular type of curl;

Fig. 3 is a view in perspective of a second embodiment of the curler of the invention;

Fig. 4 is a similar view of a third embodiment of the curler of the invention; and

Fig. 5 is a view in perspective of the curler of Fig. 4 having a swatch of hair applied thereto to form a sculpture curl. The term swatch as used herein is intended to define the collection of a cluster or group of strands of hair usually starting from a localized area of the scalp, which may be rolled or twisted upon a curler in order to change the strands from a relatively straight into a curly or wavy condition.

The embodiment of the curler shown in Figs. 1 and 2 is made from a blank which is molded as an integral structure from soft rubber. Such curler blank has a hollow, cylindrical stem 2 with a flange, generally designated 4, at one end thereof. In forming the curler from the blank, a semicircular slot 6 cut through the flange parallel to

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and spaced from the base of stem 2, is formed in the flange by a lancing operation. Such operation forms a yoke-shaped locking member 8 which normally lies parallel to flange 4. The locking member has on the edge thereof a centrally located manipulating tab 10. A hair swatch receiving radial slot 12 located opposite tab 10 is provided in the flange, such slot flaring at both its inner and outer ends, as shown. Slot 12 may be formed in the molding of the blank or may be lanced into the flange. The end of stem 2 remote from flange 4 is provided with diametrically opposite V slots 14 in its walls. Slots 14 may be formed during the molding of the blank or may be cut or lanced into the end of stem 2, the latter being molded with imperforate side walls if slots 14 are to be lanced. The length of stem 2 and the depth of slots 14 are such that the locking member is stretched somewhat when it is positioned in the locking position shown in Fig. 2.

The curler of Fig. 1 is applied to the head of the user with the flange 4 lying on and parallel to the scalp. A swatch of hair 16 from the scalp is entered into slot 12 as shown in Fig. 2, the free end of the swatch then being wound repeatedly around stem 2, to form the multiple layer curl 18.

The free end of the swatch of hair beyond the curl is designated 20. The locking member is positioned to retain curl 18 in place on the stem 2 by grasping tab 10 and pulling and swinging the locking member 8 around and over the free end 20 of the swatch of hair until the outer end of the locking member lies within the slots 14. When it is desired to release the curl, the locking member is simply stretched longitudinally of the stem 2 by grasping the tab 10, after which the locking member is swung down over the free end 20 of the swatch of hair, leaving the curl free to be withdrawn endwise of the stem 2.

The embodiment of the curler shown in Figure 3 is similar to that shown in Figures 1 and 2 and described above, with the exception of the construction of the end of the stem remote from the flange. Parts of the curler shown in Figure 3 which are the same as those in the first described embodiment are designated by the same reference characters as those in Figures 1 and 2 but with an added prime. The end of the stem in the embodiment shown in Figure 3 is molded with a flared thin flange section designated 22. Flange 22 has provided therein two diametrically disposed locking member receiving slots 24, which may be formed during molding of the blank or may subsequently be lanced into the blank. The

flange 22 of the stem is of value in aiding the retention of the curl on the stem before the locking member 8' has been applied thereto. Because part 22 is of thin section, it is very readily deformed. When the locking member is moved to inoperative position, after the curl has set, flange 22 allows removal of the curl from the stem by sliding the curl axially of the stem, since part 22 is thereupon depressed radially inwardly during such removal of the curl.

The embodiment of the curler shown in Figures 4 and 5 is particularly designed for the formation of sculpture curls. Such device generally corresponds in its elements and their functions to those embodiments above described, the main difference lying in the proportioning of the parts. In Figures 4 and 5, the flange 26 is of relatively larger diameter than that in the previously described embodiments whereas the stem 28 is shorter than of such other embodiments. The curler of Figures 4 and 5 is formed as an integral body from soft rubber or the like elastomer. The flange 26 has the radial slot 30 flared at both ends therein. The lanced narrow slot cut through the flange consists of the arcuate side portions 32, one end of each of which lies substantially on a diameter of the stem, and the straight portion 34 connecting the other ends of the arcuate cuts 32, cuts 32 and 34 forming the locking member 36. The end of stem 28 remote from the flange is provided with the V shaped slots 38 which are diametrically opposed on the stem walls, the length of the stem and the depth of slots 38 being such that when the locking member is swung by the tab 40 into the locking position shown in Figure 5 so that the straight portion formed by cut 34 lies in the grooves 38, the locking member is in tension.

The curler of Figures 4 and 5 is applied to the head with the flange parallel to the scalp and a swatch of hair 42, coming from the scalp, is thrust through slot 30 as shown. Thereupon the free end of the swatch is curled repeatedly upon stem 28 to form a multiple layer spiral curl 44. Locking member 36 is then swung upwardly over the free end 46 of the swatch of hair so that its inner surface formed by cut 34 lies in the grooves 38, as shown. When the curl has set, the locking member is swung down over the free end of the swatch of hair and the curl is slid axially off the stem 28.

Although, for purposes of illustration, I have shown and described preferred embodiments of the slumber curler of the invention, it is to be understood that such embodiments are illustrative only, since the invention is capable of considerable variation as to details.

I claim as new the following:

1. A hair curler made of soft elastomer, said curler comprising a hair receiving stem, a flange connected to one end of the stem, a locking member formed from an outer portion of the flange at one side thereof, said locking member being separated from the remainder of the flange by a slot which extends a substantial angular extent around the stem, locking member retaining means at the end of the stem remote from the flange, the length of the stem being such that the locking member is under tension when it is swung into curl locking position to lie along the length of the stem and with its inner surface engaging the retaining means on the stem.

2. A hair curler made wholly of soft elastomer, said curler comprising a hair receiving stem, a flange connected to one end of the stem, a locking member formed from an outer portion of the flange at one side thereof, said locking member being separated from the remainder of the flange by a slot which extends a substantial angular extent around the stem, a slot in the end of the stem remote from the flange, the length of the stem and the depth of the slot being such that the locking member is under tension when it is swung into curl locking position to lie along the length of the stem and with its inner surface in the slot on the stem.

3. A hair curler made wholly of soft elastomer, said curler comprising a hair receiving stem, a transverse flange on one end of the stem, said flange having a swatch gripping means therein, a locking member formed from an outer portion of the flange at one side thereof, said locking member being separated from the remainder of the flange by a narrow slot which extends a substantial angular extent around the stem, a slot in the end of the stem remote from the flange, the length of the stem and the depth of the slot being such that the locking member is under tension when it is swung into curl locking position to lie along the length of the stem and with its inner surface in the slot on the stem.

4. A hair curler made integrally of soft rubber-like elastomer, said curler comprising a cylindrical hair receiving stem, a transverse flange on one end of the stem, said flange having a swatch retaining means therein, a locking member formed from an outer portion of the flange, at one side thereof, said locking member being separated from the remainder of the flange by a narrow slot which extends a substantial angular extent around the stem, a slot in the end of the stem remote from the flange, the length of the stem and the depth of the slot being such that the locking member is under tension when it is swung into curl locking position to lie along the length of the stem and with its inner surface in the slot on the stem.

5. A hair curler made integrally of soft rubber-like elastomer, said curler comprising a cylindrical hair-receiving stem, said stem being in the form of a tube, a flange on one end of the stem and positioned substantially at a right angle thereto, said flange having a swatch receiving and gripping slot from the edge to the base of the stem, a locking member formed from an outer portion of the flange at one side thereof, said locking member when inoperative lying substantially in the plane of the flange and being separated therefrom by a narrow circular slot which is coaxial of the stem and flange and which extends substantially 180° therearound, diametrically opposed slots in the end of the stem remote from the flange, the length of the stem and the depth of the slots being such that the locking member is under tension when it is swung into curl locking position to lie along the length of the stem and with its inner surface in the slots on the stem.

6. A hair curler made integrally of soft rubber, said curler comprising a cylindrical hair receiving stem, said stem being in the form of a tube, a circular flange coaxial therewith on one end of the stem and positioned at a right angle thereto, said flange having a substantially radial swatch receiving and gripping slot from the edge to the base of the stem, a locking member formed from an outer portion of the flange at one side thereof, said locking member when inoperative lying in the plane of the flange and being separated therefrom by a narrow circular

slot which is coaxial of the stem and flange and which extends substantially 180° therearound, diametrically opposed V slots in the end of the stem remote from the flange, the length of the stem and the depth of the slots being such that the locking member is under tension when it is swung into curl locking position to lie along the length of the stem and with its inner surface in the V slots on the stem.

7. A one piece curler of soft material comprising a stem having a free end, a flange integrally and permanently centered on said stem, and an integral yoke-shaped locking member on and formed from the material of said flange and adapted to extend to end connect with said free end of the stem.

8. A soft curler comprising a stem upon which a swatch of hair may be wound and from which the wound swatch may be slid, an integral flange on said stem having a swatch receiving aperture extending across the flange and opening at the perimeter thereof, and locking means integral with said stem and flange including a notch at the end of said stem and an integral and swingable loop on said flange adapted to confine wound hair upon both the flange and stem.

9. A one piece curler of soft material comprising a stem, integral flanges at opposite ends of said stem, and at least one locking member in the form of an integral resilient loop on one of said flanges extending to and connecting with the other of said flanges.

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