Feb. 26, 1963 R. LOVRET 3,078,855

HAIR CURLER

Filed Dec. 5, 1960

FIG. 1.

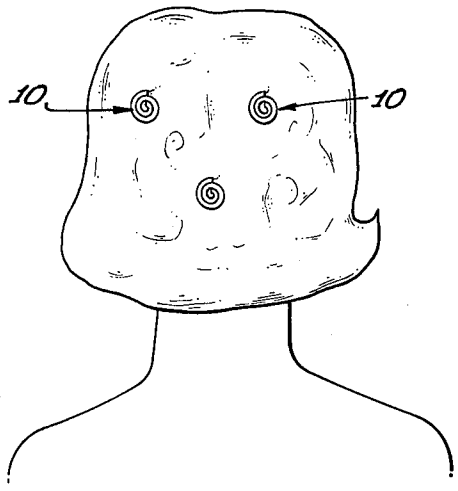
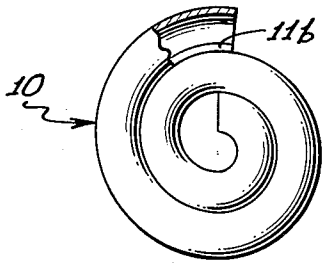


FIG. 2.



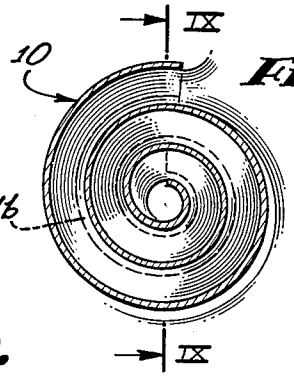


FIG. 5.

FIG. 3.

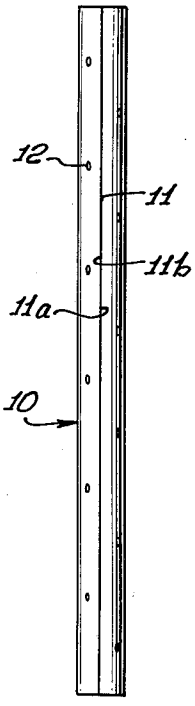


FIG. 4.

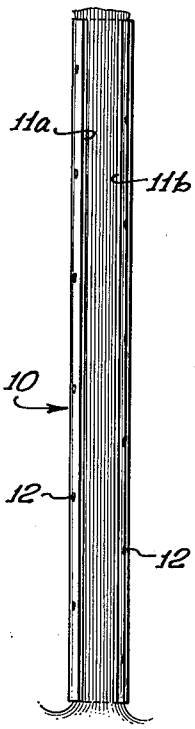


FIG. 9.

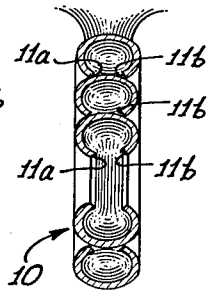


FIG. 6.



FIG. 7.

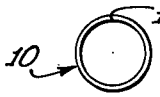


FIG. 8.



INVENTOR.
ROSE LOVRET
BY
Miketta and Glenny
ATTORNEYS.

United States Patent Office 3,078,855 Patented Feb. 26, 1963

3,078,855

HAIR CURLER

Rose Lovret, 614 N. Sloan St., Compton, Calif.

Filed Dec. 5, 1960, Ser. No. 73,604
2 Claims. (Cl. 132—43)

The present invention relates to hair curlers and more particularly to hair curlers that are self-spiralling and do not require clamps, pins or other means for retaining the hair curler in its normal hair curling position.

Women use various types of devices to curl their hair wherein a small portion of hair is wound around a device, the hair and device are allowed to set for a certain period of time, the device is removed, and that portion of hair remains in a curled condition. Heretofore, hair curlers were made of rubber or metal spools around which hair was wound. Tabs, clamps or pins were used to secure the hair on the spools and also to prevent the spools from unwinding. These hair curlers were cumbersome and bulky and extremely uncomfortable, especially if the wearer attempted to sleep with the hair curlers in her hair. Moreover, considerable time was spent in rolling or winding hair around a plurality of individual hair curlers.

The present invention completely obviates the problems of hair curlers used heretofore by providing a tubular element of resilient material spirally wound in its normal position for curling hair. It is adapted to be unwound for receiving hair therein through a longitudinal hair entry slit provided in one side of the tubular element. The tubular element is then released and will assume and retain its normal spiralled position without the aid of clamps, pins or the like. The hair is therefore in a curled condition and will remain so even after the hair curler is removed. In the spiralled, hair curling position, the hair curlers are lying flat on the head of the wearer and are comfortable even when the wearer is sleeping. Moreover, the hair curlers are extremely simple to use and only require a minimum of time to apply.

An object of the present invention is to provide a novel hair curler which does not require clamps, pins, tabs or the like.

Another object is to provide a hair curler which is self-spiralling and only requires a minimum of time to apply to the hair.

A further object is to provide a hair curler which is adapted to lie flat on the head of a wearer and therefore is relatively comfortable, even when the wearer is sleeping.

Still another object is to provide a hair curler which can make a tight curl as well as a loose or fluffy curl without ragged edges.

Another object is to provide a hair curler which is inexpensive to manufacture and is very efficient in operation.

Other objects and advantages of this invention will be readily apparent from the following description when considered in connection with the appended drawings:

In the drawings:

FIG. 1 illustrates the back of a woman's head showing strands or portions of her hair curled with an exemplary hair curler device of the present invention;

FIG. 2 is a top plan view of the hair curler device shown in FIG. 1 before receiving hair to be curled and in the spiralled position for curling hair;

FIG. 3 is a side elevation of the device shown in FIG. 2 in its unwound, elongated position for receiving hair to be curled;

FIG. 4 is a side elevation of the device shown in FIG. 3 containing hair therein to be curled, such hair holding the longitudinal edges of the longitudinal hair entry apart;

FIG. 5 is a section of the spiralled device taken along the plane of the spiral and containing hair curled in spiral form;

FIG. 6 is a top plan view of hair curled in a spiral form by the hair curler device of the present invention with the device removed;

FIG. 7 is an end view of the device in FIG. 3;

FIG. 8 is an end view of the device in FIG. 4 showing the hair entry open; and

FIG. 9 is a transverse section of the device taken along plane IX—IX of FIG. 5.

An exemplary hair curler **10** is shown in FIGS. 1 and 2 and comprises a tubular element of resilient material spirally wound in substantially the same plane in its normal position for curling hair. When hair is desired to be inserted into the hair curler **10**, it is unwound into an elongated position as shown in FIGS. 3 and 4.

A continuous, longitudinal slit **11** is provided on one side of the tubular element and extends from end to end thereof. The slit **11** provides an entry for the hair and includes longitudinal edges **11***a* and **11***b* adapted to be moved laterally and spaced from each other when hair is inserted through the entry **11** and into the tubular element **10**. The hair entry slit **11** lies substantially in the plane of the spirally wound tubular element when hair is being curled therein.

Normally, the hair is wetted before curling it. Therefore, air holes **12** may be provided in the tubular element **10** to aid in allowing the hair to dry while it is curling.

In operation, the hair curler **10** is unwound from its normally spiralled position (FIG. 2) into the elongated position of FIG. 3, the longitudinal edges **11***a* and **11***b* of hair entry slit **11** are spread apart and strands of hair are inserted through the slit **11** and into the curler **10** (FIG. 4).

The curler **10** is then released and immediately recoils into its spiral position (FIG. 5) thereby curling the hair contained therein. After remaining curled for a sufficient time, the hair curler and hair are uncurled into an elongated position and the curler is removed from the hair, preferably in a lateral direction. The hair upon release immediately recoils into a spiralled and curled condition.

It should be noted that after hair is received in the tubular element **10**, the longitudinal edges **11***a* and **11***b* of the slit **11** are spaced from each other (FIG. 4) due to the hair contained in the element **10**. Therefore, when the tubular element returns from the elongated position (FIG. 4) to the spiralled position (FIGS. 5 and 9), the longitudinal edges **11***a* and **11***b* are spaced from each other and grasp the curved sides of the inner lay of tubular element (FIG. 9). The hair contained in the tubular element is therefore compressed between lays of the tubular element and is completely enclosed to prevent ragged edges on the hair curl. By compressing the hair in this manner, it is possible to provide a neat and compact hair curl.

It has been found that a tubular element having a longitudinal slit therein is best suited for making hair curls. A substantially flat strip adapted to be spirally wound allows the hair to laterally extend therefrom and forms a hair curl with ragged edges. An elongated, rectangular section element which may be spirally wound can not compress the hair in order to make a compact hair curl. Moreover, separate clamps or pins would be required with these two latter constructions.

The hair curler of the present invention may be used to make tight or loose curls. A smaller diameter tubu-

lar element is used to make tight curls while loose or fluffy curls may be formed with a larger diameter tubular element. Moreover, the end of the hair curler **10** of the present invention may be spaced any desirable distance from the head of the user when hair is being inserted therein. It is sometimes desirable to only provide a curl on the ends of the hair and therefore, one end of the curler should be spaced from the user's head.

Any suitable resilient material may be used for the tubular element of the present invention, such as plastic, rubber, synthetic rubber, etc. It is believed there are various methods that may be used in making a spiralled tubular element having a longitudinal slit therein, but an exemplary method is extruding an elongated tubular element from a resilient material such as neoprene, cutting an elongated strip in the tubular, resilient element, spirally winding the element, raising the temperature of the material above its softening point, curing the material in the spiralled condition, and cooling the element.

It is also contemplated that the hair curlers of the present invention may be of different colors or even transparent to enhance their appearance and attractiveness.

It can therefore be understood that the hair curler of the present invention will curl hair without the aid of any clamps, pins or tabs, will provide tight or loose curls, requires a minimum of time to assemble on the hair and lies flat on the head of a user and may therefore be comfortably worn even when the wearer is sleeping.

Obviously, many modifications and variations of the present invention are possible in the light of the above teaching. It is therefore to be understood that within the scope of the appended claims, the invention may be practiced otherwise than as specifically described.

I claim:

1. A self-spiralling, clampless hair curler, comprising: a tubular element of resilient material spirally wound in substantially the same plane in its normal position for curling hair and adapted to be unwound into an elongated position for receiving hair to be curled, and a continuous, longitudinal slit on one side of said tubular element and extending from end to end thereof to provide a longitudinal hair entry having longitudinal edges adapted to be moved laterally and spaced from each other when hair is inserted through said entry and into said tubular element, said hair entry slit lying substantially in the plane of said spirally wound tubular element, and in the normal, spiralled, curling position of said hair curler, the longitudinal edges of said hair entry are spaced from each other and grasp the curved sides of the inner lay of tubular element and the hair in said tubular element is enclosed and compressed between lays of said tubular element.

2. A self-spiralling hair curler as stated in claim 1, including hair holes in said tubular element.

References Cited in the file of this patent

UNITED STATES PATENTS

2,871,865 Anderson ---------- Feb. 3, 1959