

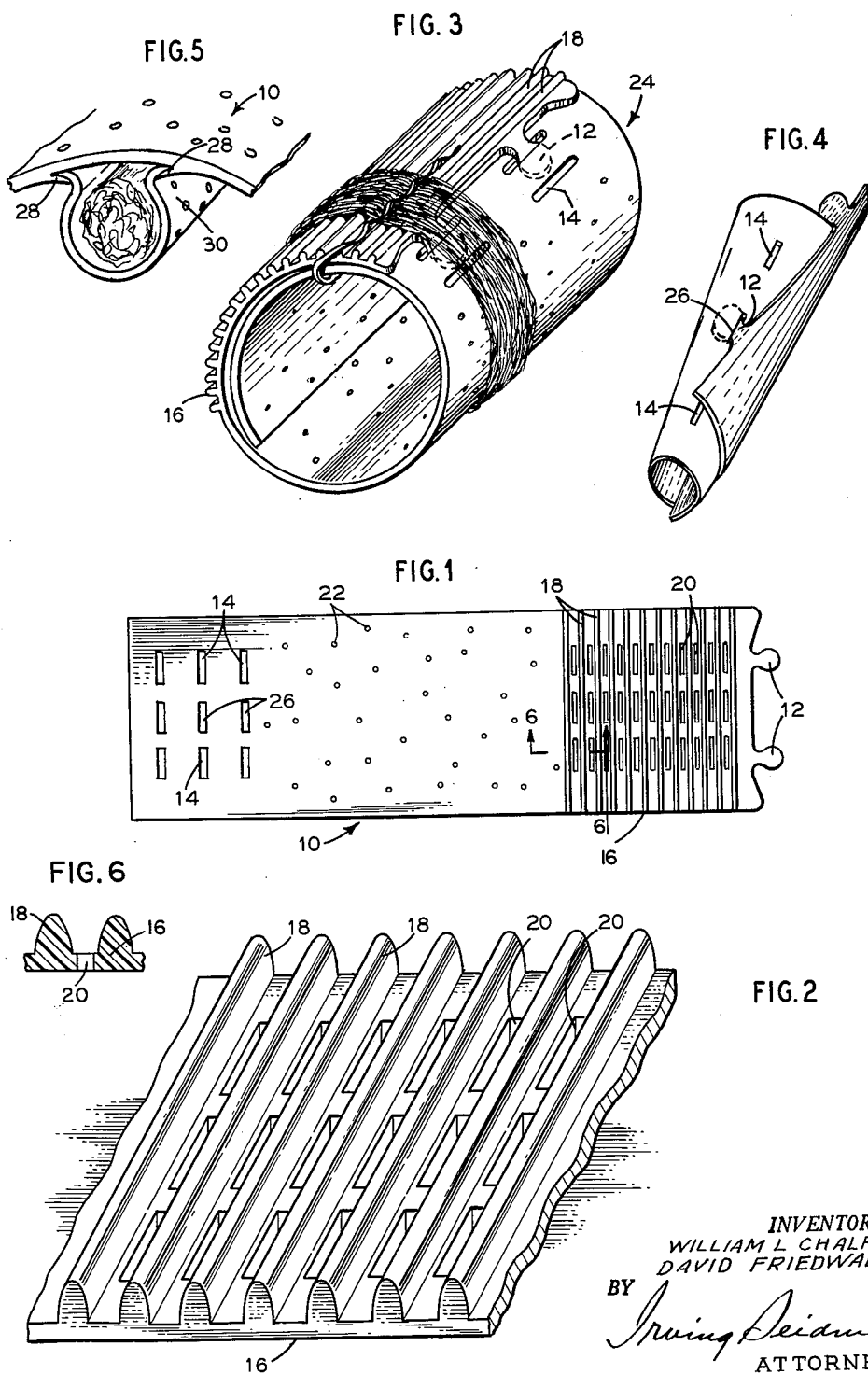
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HAIR CURLER

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HAIR CURLER

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The present invention relates to a hair curler and more particularly to a hair curler of resilient plastic material adapted to be secured to the hair by a "bobby pin" or the like.

The vast majority of women who curl their hair at home do so at night so that the curl will set during the sleeping hours and be ready for combing out in the morning. Since the curlers are generally inserted over the greater portion of the scalp it is almost impossible to be comfortable with a rigid type of curler. To avoid this difficulty, curlers should be resilient enough to cushion and conform to the shape of the head while the wearer sleeps.

Another consideration which should be made is the variation which exists among women in the natural curliness of their hair. A woman who has perfectly straight hair will have to set her hair in tighter rolls than a woman with a natural curl. Obviously, curlers of different diameters would be required in each case. Indeed, there are hair styles which call for both tight and loose curls to achieve a single hair-do. In order to answer all purposes it is desirable to have a curler which may be adjusted to the diameter required by the individual user. It is certainly more economical to manufacture an adjustable curler than a series of non-adjustable curlers each having a different diameter. Furthermore, the retailer need stock only one size hair curler and the consumer need buy only one size hair curler.

It is, therefore, an object of the present invention to provide a hair curler which will meet the foregoing and other requirements.

Additional features and advantages of the present invention will be apparent from the following description and drawing.

The hair curler of the present invention comprises a flat strip of a resilient plastic material which is adapted to be formed into a generally cylindrical roll. In the preferred embodiment, means are provided to adjust the diameter of the cylindrical roll as desired.

Referring now to the drawing:

FIG. 1 is a plan view of the plastic strip of the present invention;

FIG. 2 is an enlarged view of a portion of the plastic strip of FIG. 2;

FIG. 3 is a perspective view of the hair curler of the present invention as it is used;

FIG. 4 is a perspective view of a hair curler showing an added feature which may be incorporated therein; and

FIG. 5 is a perspective view, partly in cross-section of another embodiment of the present invention.

FIG. 6 is an enlarged sectional view taken through lines 6-6 of FIG. 1.

A flat plastic strip 10 of approximate rectangular shape has a pair of lugs 12 at one end. The lugs 12 are spaced to fit in corresponding slots 14 which are arranged in pairs spaced at increasing distances from the other end of the strip 10.

The under surface of the plastic strip shown in FIGS. 1 to 4 is smooth and flat but the upper surface has a ridge area 16 at the lug end. The ridge area 16 is composed of a plurality of rounded ribs 18 disposed transversely of the strip 10 and covering about one-third of the surface. Between the ribs 18 are a number of slits 20 which in-

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crease flexibility in the ridge area 16 and also provide access to the hair for ventilation and application of hair dressings. Additional access is achieved by perforations 22 over the central area of the strip. The perforations 22 should be punched out from the undersurface up through the outer surface. In this way, a peripheral protrusion is formed during the punching operation about each perforation.

A hair curler having a generally cylindrical body portion 24 is formed by rolling the plastic strip 10 and engaging the lugs 12 in one of the pairs of slots 14, as shown in FIG. 3. According to the selection of slots made, the diameter of the body portion 24 is determined. The smooth undersurface permits easy sliding as the cylinder is formed.

When hair is wound on the curler both the hair and the curler are kept in place by insertion of a bobby pin, or the like, in the ridge area 16, with one leg through the cylinder and the other leg over the hair. The ribs 18, which extend lengthwise of the body portion 24, form channels to prevent the bobby pin from slipping. This is shown in FIG. 3 where only a few strands of hair have been illustrated in the interests of clarity. The ribs 18 also prevent slippage of the hair while it is being wound and after it is secured on the curler. The protrusions formed when punching out the perforations 22 also contribute to the prevention of hair slippage.

The hair curler may be made of any flexible plastic material, such as polyethylene, and is produced in a single extrusion operation, followed by a cutting operation.

In one modification of the invention, a series of slots 26 may be made in the plastic strip intermediate of the slots 14, as shown in FIG. 4. When one of the lugs 12 is engaged in this central slot 26 the curler assumes a tapered shape suitable for special curling effects.

In another embodiment of the present invention, which is shown in FIG. 5, a pair of lips 28 is provided on the undersurface transversely of the plastic strip 10. A perforated flexible, flat plastic sheet 30, whose edges are shaped for engagement with the lips 28, is dimensioned for insertion by sliding between the lips 28 after having been bent to form part of a cylinder. The resulting structure provides an inner tube 32 lying lengthwise within the cylindrical body portion 24. The tube 32 may be used to hold cotton-wadding, or the like, containing a drying agent such as silica gel to aid in drying the hair.

It may be seen, then, that the present invention provides a hair curler comfortable for use while sleeping. Further, the adjustable features of the hair curler permit universal usage for a variety of effects. In addition, not only are the flat strips inexpensive to produce but they may be compactly packaged for economy of storage space and shipping costs.

While specific embodiments of the invention have been shown and described in detail to illustrate the application of the invention, it will be understood that the invention may be embodied otherwise without departing from such principles.

What is claimed is:

1. A resilient plastic hair curler adapted for use with a bobby pin, said hair curler comprising a normally flat strip of generally rectangular shape having a series of pairs of slots spaced at increasing distances from one end thereof and all located toward one end of the flat strip, a pair of lugs extending out from the other end of and in the plane of said strip and arranged for selective engagement with the said slots to form a generally cylindrical body portion of desired diameter, and a plurality of ribs extending lengthwise of the body portion, protruding from the surface thereof and all located toward the op-

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posite end of the flat strip, thereby to provide channels in which a bobby pin may be secured.

2. A resilient plastic hair curler adapted for use with a bobby pin, said hair curler comprising a normally flat strip of generally rectangular shape having a plurality of slots spaced at increasing distances from one end thereof, and a plurality of lugs extending out from the other end of and in the plane of said strip and arranged for selective engagement with the said slots to form a generally cylindrical body portion of desired diameter, said strip having a flat undersurface and a ridge area on the outer surface having ribs protruding therefrom, said ridge area comprising approximately one-third of the outer surface of the body portion adjacent the said lugs, said strip also having a plurality of punched out perforations formed therein with protrusions around each perforation on the outer surface of the strip, said perforations being located solely in the area of the strip extending from the slots to the ridge area, said protrusions preventing slippage of hair and the perforations providing access to the hair for ventilation and treatment.

3. A plastic hair curler adapted for use with a bobby pin, said hair curler comprising a generally cylindrical body portion having a plurality of ribs extending lengthwise of the body portion and protruding from the surface thereof thereby to provide channels in any of which a bobby pin may be secured and having a pair of lips in the undersurface lengthwise of the body portion, and a perforated plastic inner tube dimensioned for slideable engagement within said lips and adapted to hold a treating agent.

4. A resilient plastic hair curler adapted for use with a bobby pin, said hair curler comprising a normally flat strip of generally rectangular shape having a plurality of slots spaced at increasing distances from one end thereof, a lug extending out from the other end of and in the plane of said strip and arranged for selective engagement with the said slots to form a generally cylindrical body portion of desired diameter, a pair of lips in the undersurface lengthwise of the body portion, and a normally flat perforated plastic sheet slidably engaged within said lips to form an inner tube adapted to hold a treating agent.

5. A resilient plastic hair curler adapted for use with

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a bobby pin, said hair curler comprising a normally flat strip of generally rectangular shape having a plurality of slots spaced at increasing distances from one end thereof, a plurality of lugs extending out from the other end of and in the plane of said strip and arranged for selective engagement with the said slots to form a generally cylindrical body portion of desired diameter, said strip having a ridge area on the outer surface having ribs protruding therefrom, said ridge area comprising approximately one-third of the outer surface of the body portion adjacent the said lugs, said ribs extending lengthwise of the body portion thereby to provide channels in any of which a bobby pin may be secured, a pair of lips in the undersurface lengthwise of the body portion, and a normally flat perforated plastic sheet slidably engaged within said lips to form an inner tube adapted to hold a drying agent.

6. A resilient plastic hair curler adapted for use with a bobby pin, said hair curler comprising a normally flat strip of generally rectangular shape having slots confined to one end thereof, lugs extending out from the other end of and in the plane of said strip and arranged for engagement with the said slots to form a generally cylindrical body portion, and a plurality of elongated continuous ribs extending lengthwise of the body portion and protruding from the surface thereof confined to the other end of the strip thereby to provide channels in which a bobby pin may be secured, said strip having a plurality of slits between said ribs for flexibility of the curler and to provide access to the hair.

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