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PLASTIC CURLERS

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Fig. 1.

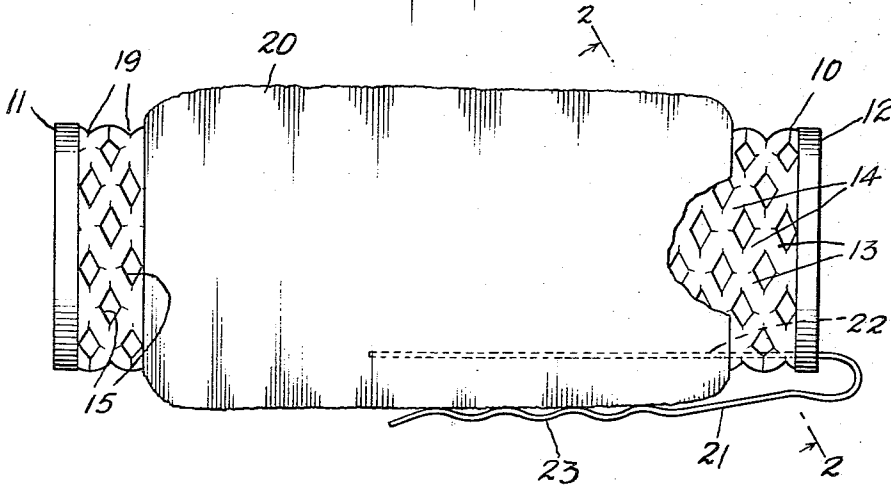
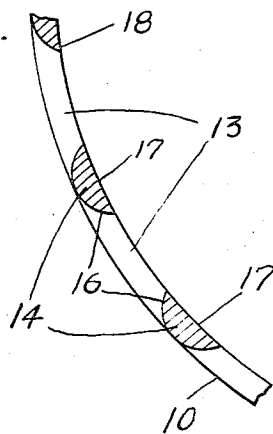


Fig. 2.



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PLASTIC CURLERS

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5 Claims. (Cl. 132—33)

This invention relates to devices for use in forming curls in a swatch of hair. More particularly, the invention deals with a plastic curler in the form of an openwork tube, having a multiplicity of diamond-shaped openings and crossed ribs forming said openings, which are in spiral arrangement upon the curler, said openings forming, on the periphery of the curler, a multiplicity of longitudinally arranged valleys, in which the hair is positioned to aid in support of the hair upon the curler.

Still more particularly, the invention deals with a curler of the character described, wherein the ribs are rounded on their outer surface and flat on their inner surface, thereby facilitating moulding of the device and freeing the moulded product from the dies or moulds and cores employed.

The novel features of the invention will be best understood from the following description, when taken together with the accompanying drawing, in which certain embodiments of the invention are disclosed and, in which, the separate parts are designated by suitable reference characters in each of the views and, in which:

Fig. 1 is an enlarged side view of the device, showing a swatch of hair wound thereon and held in position by a bobby pin, part of the hair being broken away; and

Fig. 2 is an enlarged sectional detailed view on the line 2—2 of Fig. 1 to illustrate the cross-sectional contour of the ribs of the device.

In practice, I provide a curler in the form of an elongated tubular body 10, having circumferentially continuous integral end rings 11 and 12. The remainder of the wall structure of the curler comprises spirally arranged crossed ribs 13 and 14 forming, on the wall structure of the tube, a multiplicity of diamond-shaped openings 15, these openings having their greatest dimension extending circumferentially of the tubular body. The ribs 13 and 14 are substantially equal in width to the width of said openings or apertures 15, and the ribs 13 and 14 and rings 11 and 12 have a common outside diameter.

Considering Fig. 2 of the drawing, it will appear that the outer surfaces of the ribs are rounded, as seen at 16, and these walls extend into flat inner surfaces 17, which results in forming a smooth bore 18 in said tubular body. In Fig. 2, the section is taken through the ribs 14. It will be apparent, however, that the ribs 13 are of the same cross-sectional contour.

The apertures 15 form, longitudinally of the tubular body 10, a multiplicity of longitudinally and circumferentially spaced valleys 19, which aid in positioning the swatch of hair 20 upon the body 10 in the operation of winding the swatch of hair thereon in the formation of a curl. This engagement, however, does not interfere with withdrawal of the tubular body from the formed curl, as the rounded surfaces of the ribs permit the curler to be freely withdrawn from the curl, after removal of the bobby pin 21. In this connection, it will be apparent that the diameter of the end rings 11 and 12 is the same as the diameter of the ribs at the high point of the ribs.

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After a swatch of hair has been wound upon the curler body, the bobby pin 21 is mounted in position, preferably with the straight side 22 of the bobby pin arranged upon the inner surface or bore 18 of the body 10 and with the corrugated or rib portion 23 of the bobby pin disposed upon the outer surface of the swatch of hair 20. The showings of the swatch of hair 20 and the bobby pin 21 in the drawing are purely diagrammatic in generally illustrating the use of the curler.

By arranging the ribs 13 and 14 in the crossed spiral arrangement disclosed to form the diamond-shaped openings 15 and by rounding the outer surfaces of the ribs, as indicated at 16 in Fig. 2 of the drawing, it is possible to mould the curler body from plastic material having reasonably high flexibility such, for example, as polyethylene, and be able to strip the moulded product from the dies or moulds and the core employed. The resulting moulded curler produces a firm and, yet, slightly yieldable tubular body which will be soft upon the head and can conform to the contour of the head.

It will also be apparent that, when the swatch of hair is moistened preparatory to forming the curl, the multiplicity of apertures in the tubular body will expedite the drying of the hair.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A plastic curler comprising a generally tubular body having circumferential end rings joined by spirally arranged cross-ribs extending integrally from said end rings, the rings and cross-ribs being of common outside diameter, said cross-ribs forming, on the wall of the body intermediate the end rings, a multiplicity of diamond-shaped apertures, and the width of said cross-ribs being substantially equal to the width of said apertures.

2. A plastic curler comprising a generally tubular body having circumferential end rings joined by spirally arranged cross-ribs extending integrally from said end rings, the rings and cross-ribs being of common outside diameter, said cross-ribs forming, on the wall of the body intermediate the end rings, a multiplicity of diamond-shaped apertures, the width of said cross-ribs being substantially equal to the width of said apertures, and said diamond-shaped apertures having their greatest dimension extending circumferentially of the tubular body.

3. A plastic curler comprising a generally tubular body having circumferential end rings joined by spirally arranged cross-ribs extending integrally from said end rings, the rings and cross-ribs being of common outside diameter, said cross-ribs forming, on the wall of the body intermediate the end rings, a multiplicity of diamond-shaped apertures, the width of said cross-ribs being substantially equal to the width of said apertures, and each of said ribs having rounded outer surfaces and flat inner surfaces.

4. A plastic curler comprising a generally tubular body having circumferential end rings joined by spirally arranged cross-ribs extending integrally from said end rings, the rings and cross-ribs being of common outside diameter, said cross-ribs forming, on the wall of the body intermediate the end rings, a multiplicity of diamond-shaped apertures, the width of said cross-ribs being substantially equal to the width of said apertures, each of said ribs having rounded outer surfaces and flat inner surfaces, and said flat inner surfaces, in combination with the inner surfaces of the end rings, forming a smooth one diameter bore in said tubular body.

5. A plastic curler comprising a generally tubular body having circumferential end rings joined by spirally arranged cross-ribs extending integrally from said end

rings, the rings and cross-ribs being of common outside diameter, said cross-ribs forming, on the wall of the body intermediate the end rings, a multiplicity of diamond-shaped apertures, the width of said cross-ribs being substantially equal to the width of said apertures, and said apertures forming longitudinally alined and circumferentially spaced valleys in the outer surface of said tubular body.

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