

May 23, 1961

K. R. MCKOWEN ET AL

2,985,176

CURLING ROD

Filed June 9, 1958

FIG. 2.

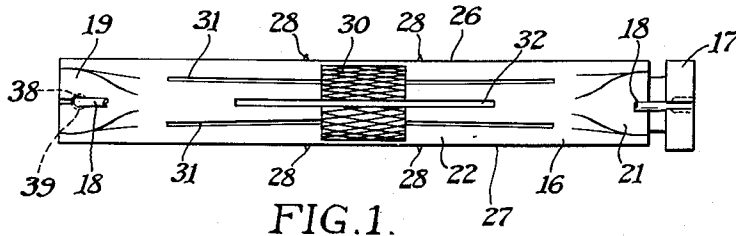


FIG. 1.

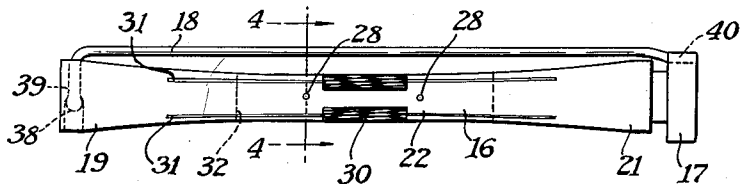


FIG. 3.

FIG. 5.

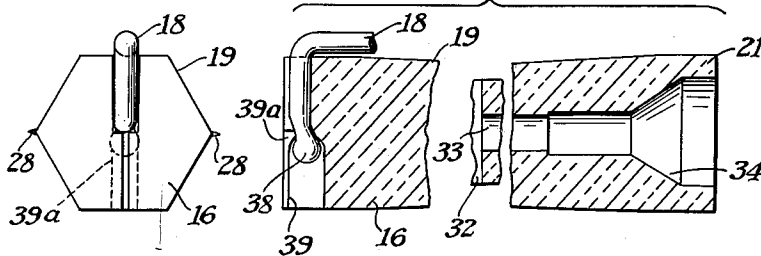


FIG. 4.

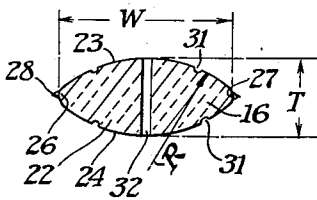


FIG. 12.

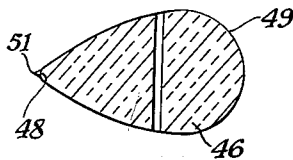


FIG. 10.

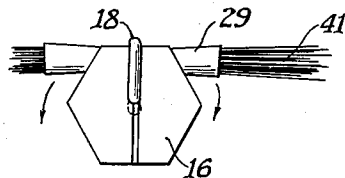


FIG. 9.

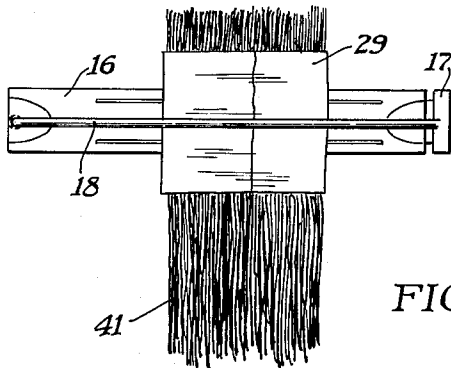


FIG. 11.

FIG. 6.

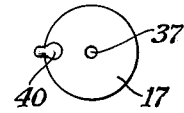


FIG. 7.

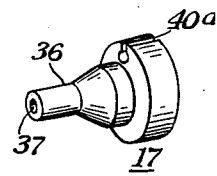
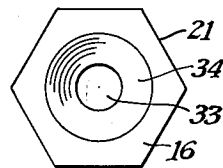


FIG. 8.



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2,985,176

CURLING ROD

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Filed June 9, 1958, Ser. No. 740,899

5 Claims. (Cl. 132—42)

This invention relates to the curling of hair. More particularly, this invention relates to improved curling rods for use in curling or waving human hair.

An object of this invention is to provide a curling rod with which a long lasting, sharply defined wave pattern can be formed without danger of developing a kinky, or frizzy, or too tight curl pattern.

A further object of this invention is to provide a curling rod which forms curls or waves in which each curled lock or strand of hair includes both tight sections of curl of short diameter and looser sections of curl of greater diameter, so that the wave has the long-lasting characteristics of curls of short diameter without any kinky or frizzy appearance.

A further object of this invention is to provide a curling rod having a surface of varying curvature and including at least one section having a curvature of short diameter and at least one other section having a curvature of larger diameter so that curls of varying curvature or diameter are formed on the same curling rod.

The above and other objects and features of the invention will be apparent to those skilled in the art to which this invention pertains from the following detailed description, and the drawing, in which:

Figure 1 is a view in side elevation of a curling rod assembly constructed in accordance with an embodiment of this invention;

Fig. 2 is a plan view of the curling rod assembly illustrated in Fig. 1, a portion of an elastic band thereof being broken away for clarity;

Fig. 3 is an enlarged view in end elevation of the curling rod assembly illustrated in Figs. 1 and 2;

Fig. 4 is an enlarged view in section taken on the line 4—4 in Fig. 1;

Fig. 5 is an enlarged view in lengthwise section of the curling rod illustrated in Figs. 1—4 inclusive, with portions thereof being broken away;

Fig. 6 is a view in end elevation of the curling rod assembly showing details of a cap thereof;

Fig. 7 is a perspective view of the cap removed from the body of the curling rod;

Fig. 8 is a view in end elevation of the body of the curling rod with the cap removed;

Fig. 9 is a plan view showing a lock of hair enclosed in an end paper and about to be wrapped around the curling rod;

Fig. 10 is a view in end elevation of the curling rod with the lock of hair and the end paper in place as illustrated in Fig. 9;

Fig. 11 is a view in side elevation showing a fragmentary portion of a curling rod assembly constructed in accordance with another embodiment of this invention; and

Fig. 12 is a view in section taken on the line 12—12 in Fig. 11.

In the following detailed description, and the drawing, like reference characters indicate like parts.

In Figs. 1 and 2 is shown a curling rod assembly which includes an elongated rod or body 16 and an end button

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or cap 17. An elastic band 18 serves to hold the cap in place, and the elastic band can hold a lock of hair in position upon the curling rod, as will be explained in more detail hereinafter. The body and cap can be molded from appropriate plastic material.

The body has hexagonal-shaped end portions 19 and 21 and a central hair-receiving portion 22 which is of a flattened shape in cross section as indicated in Fig. 4. The end portions merge into ends of the central section. The central section 22 has upper and lower main faces 23 and 24 which are of gentle curvature and may have a radius R of about 0.25 to 0.35 inch, the radius thereof being only slightly less than the width W, as shown most clearly in Fig. 4. In preferred curling rods the width W of the central section is from about 0.40 inch to 0.50 inch and the thickness T is about 0.20 to 0.35 inch with the preferred width W being 0.45 inch. We prefer to use a family or group of rods of various sizes within the limits of dimensions set forth above, using two or more different sizes of rods on a single head of hair. A preferred family or group of rods includes a first set of rods in which T is 0.33 inch and R is 0.26 inch, and a second set of rods in which T is 0.25 inch and R is 0.29 inch. As shown in Fig. 4, the faces of gentle curvature merge into the edge faces.

The surface of the central portion of the body 16 is provided with a plurality of short prongs 28 (Figs. 1—4 inclusive) which can pierce and co-operate with an end paper 29 (see Figs. 9 and 10), to hold the end paper in place on the body of the curling rod. As shown most clearly in Figs. 2 and 4, the prongs are mounted on the edge faces 26 and 27. The central section of the face of the body may be provided with knurling 30 to give a nonskid surface. Grooves 31 are cut in the face of the body for the same purpose and to facilitate more uniform distribution of the waving solutions throughout the hair wound on the rod. As shown most clearly in Fig. 2, the knurling 30 terminates short of the edge faces 26 and 27. A slot 32 extends through the central portion of the body and communicates with a bore 33, as indicated in Fig. 5. The bore 33, in turn, communicates with a well 34 in the end portion 21 of the curling rod. The well 34 receives a funnel-shaped tip 36 (see Fig. 7) of the cap 17. The cap 17 also is provided with a bore 37 therethrough which communicates with the bore 33 in the body 16 of the curling rod when the cap is in place.

The ends of the elastic band 18 are attached to the body 16 and cap 17. An enlarged end 38 on the elastic band is received in a slot 39 in the end portion 19 of the body of the rod and held in a restricted portion 39a thereof. The other end 40 (Figs. 1 and 6) of the elastic band is received in a slot 40a (Fig. 7) in the cap. The elastic band serves to hold the cap in place with the elastic band spanning the central portion of the body spaced therefrom, as shown most clearly in Fig. 1 and to hold hair in place on the curling rod. When hair is to be wrapped on the body of the curling rod assembly, the end portion of a lock 41 of hair is enclosed in the end paper 29 and the end paper is mounted on the central section of the body of the curling rod assembly. The lock of hair is wrapped around the curling rod in the normal fashion to provide a plurality of convolutions which are held thereon by the elastic band. Curling liquid may be injected into the center of the rod or body to reach the hair through the slot 32 and also is applied externally to the hair to curl the hair in the normal fashion. Because of the shape of the central portion 22 of the curling rod, the lock of hair is curled to have sections of curl of short diameter and other sections of curl of large diameter.

In Figs. 11 and 12 is shown a curling rod assembly constructed in accordance with another embodiment of this invention. This assembly includes a curling rod 46

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which is generally similar to that already described, but the curling rod 46 is provided with a central section having a transverse section of generally tear-drop shape as illustrated most clearly in Fig. 12. This provides an edge face 48 of short radius of curvature of about 0.05 inch and a main portion 49 of gentle curvature of large radii.

The other features of the curling rod assembly shown in Figs. 11 and 12 are similar to those of the assembly already described. The rod 46 is provided with prongs 51 and a knurled section 52 for holding an end paper. As shown most clearly in Fig. 11, the knurling terminates short of edge face 48. An elastic band 53 spans the length of the rod. A removable cap 54, which may be similar to the cap already described, is mounted in one end of the body of the curling rod and holds one end of the elastic band 53. The other end of this elastic band is received in a slot 56 in the other end of the body of the curling rod. The use of the assembly of Figs. 11 and 12 is similar to the use of the other curling rod assembly.

In each of the curling rod assemblies illustrated in the drawing and described above, there is at least one section having a very sharp curvature extending through more than 90 degrees. On this section is formed a curl having a short or sharp curve of the type which will provide a long-lasting wave formation. The sections of wave of short curvature are separated by much larger sections in which only a very gentle wave is imparted so that a large overall wave pattern is formed with sections of short long-lasting characteristics.

The curling rods and rod assemblies illustrated in the drawing and described above are subject to structural modifications without departing from the spirit and scope of the appended claims.

Having described our invention, what we claim as new, and desire to secure by Letters Patent is:

1. A curling rod which comprises an elongated body having a central hair-receiving portion, the hair-receiving portion being provided with an edge face having a radius of curvature of approximately 0.05 inch and a main face having a radius of curvature of approximately 0.26 to 0.29 inch, and means for holding convolutions of hair on the body, whereby portions of hair wrapped over the edge face are given a tight curl while intervening portions over the main face are given a soft curl to produce a long lasting, soft waving of the hair.

2. A curling rod which comprises an elongated body having a central hair-receiving portion, the hair-receiving portion being provided with an edge face having a radius

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of curvature of approximately 0.05 inch and a main face having a radius of curvature of approximately 0.25 inch to 0.35 inch, and means for holding convolutions of hair on the body, whereby portions of hair wrapped over the edge face are given a tight curl while intervening portions over the main face are given a soft curl to produce a long lasting, soft waving of the hair.

3. A curling rod which comprises an elongated body having a central hair-receiving portion, the hair-receiving portion being provided with an edge face having a radius of curvature of approximately 0.05 inch and a main face having a radius of curvature of approximately 0.25 inch to 0.35 inch, and means for holding convolutions of hair on the body, there being more than 90 degrees of arc in the edge face, whereby portions of hair wrapped over the edge face are given a tight curl while intervening portions over the main face are given a soft curl to produce a long lasting, soft waving of the hair.

4. A curling rod which comprises an elongated body having a central hair-receiving portion, the hair-receiving portion being provided with an edge face having a radius of curvature of approximately 0.05 inch and a main face having a substantially greater radius of curvature, and means for holding convolutions of hair on the body, whereby the portions of hair wrapped over the edge face are given a tight curl while intervening portions over the main face are given a soft curl to produce a long lasting, soft waving of the hair.

5. A curling rod which comprises an elongated body having a central hair-receiving portion, the hair-receiving portion being provided with an edge face having a radius of curvature of approximately 0.05 inch and a main face having a substantially greater radius of curvature, and means for holding convolutions of hair on the body, there being more than 90 degrees of arc in the edge face, whereby portions of hair wrapped over the edge face are given a tight curl while intervening portions over the main face are given a soft curl to produce a long lasting, soft waving of the hair.

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