April 22, 1969 C. D. KLINK 3,439,686

HAIR CURLER

Filed Nov. 28, 1967

FIG. 1

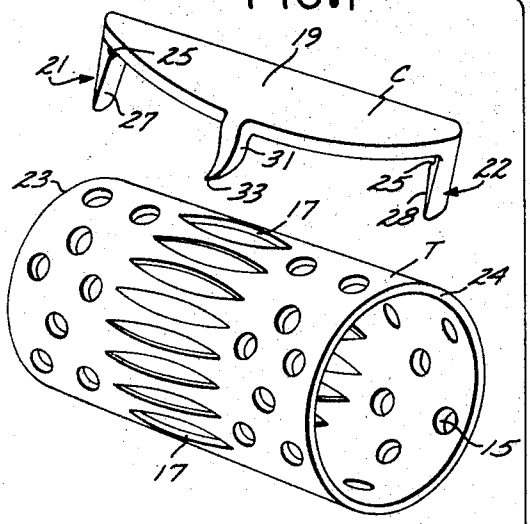


FIG. 2

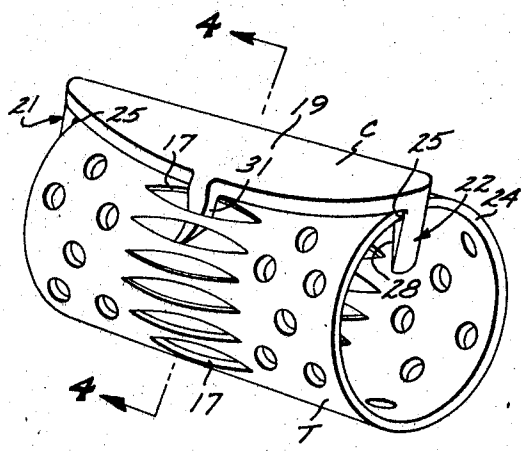


FIG. 3

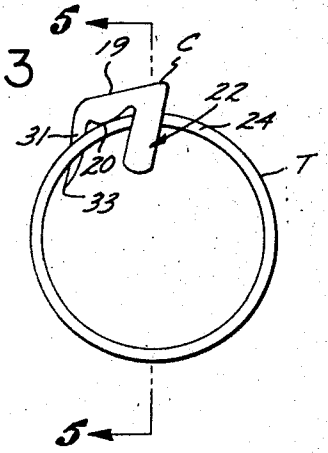


FIG. 4

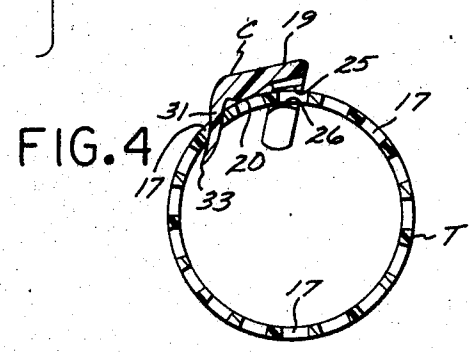


FIG. 5

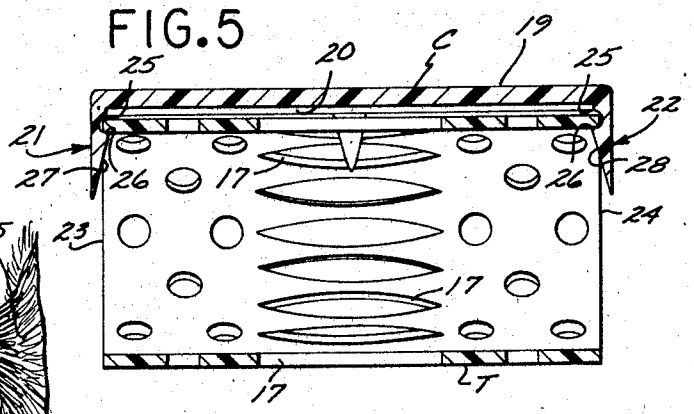
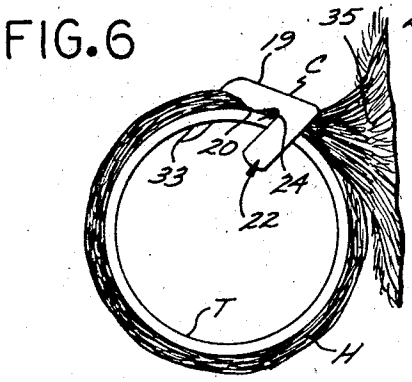


FIG. 6



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HAIR CURLER

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U.S. Cl. 132—40 10 Claims

ABSTRACT OF THE DISCLOSURE

A hair curler including a hollow tube having a plurality of prong-receiving openings spaced around its periphery intermediate its ends. A clip including a pair of oppositely disposed latching elements for engaging the respective opposite ends of said tube and a radially inwardly extending prong for engaging said openings to prevent said clip from slipping on said tube.

BACKGROUND OF THE INVENTION

Field of the invention

The present invention relates generally to hair curlers and more specifically to a hair curler including a clip that can be entirely removed from the curler tube while the hair is being wrapped thereon and that when attached to the tube positively will not slip relative to the tube.

Description of the prior art

There are no hair curlers known to applicant that include a removable clip which, when attached to the curler tube, is positively prevented from slipping thereon.

SUMMARY OF THE INVENTION

The present invention is characterized by a hollow tube including a plurality of prong-receiving holes spaced about its periphery intermediate its ends. A clip is provided for being attached to the tube for holding hair wound thereon captive. The clip includes a pair of opposed resilient latching elements for engaging opposite ends of the tube and a radially inwardly projecting prong for engaging selected ones of the prong receiving holes to prevent the clip from slipping on the tube.

Objects and features of the invention will become apparent from consideration of the following description taken in connection with the accompanying drawings.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is an exploded perspective view of a curler embodying the present invention;

FIG. 2 is a perspective view similar to FIG. 1;

FIG. 3 is an end view of the hair curler shown in FIG. 2;

FIG. 4 is a vertical sectional view taken along the lines 4—4 of FIG. 2;

FIG. 5 is a longitudinal sectional view taken along the lines 5—5 of FIG. 3; and

FIG. 6 is an end view of the hair curler shown in FIG. 1, hair being shown wound thereon.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The hair curler of present invention includes an elongated hollow tube T and a detachable clip C. The tube T includes a series of air circulation apertures **15** and a plurality of prong-receiving openings **17**. The openings **17** are disposed intermediate the ends of the tube T and are elongated in the longitudinal direction of the tube.

The clip C may be made of plastic and includes a longitudinal plate **19** having a protruding bearing surface **20** on its underside and a pair of oppositely disposed end

flanges, generally designated **21** and **22**. The flanges **21** and **22** extend radially inwardly over the respective ends **23** and **24** of the tube T and include confronting grooves **25** for receiving the ends of the tube wall. The lower lip **26** of the grooves **25** is arcuate to complement the diameter of the tube T. The inner surfaces **27** and **28** of the flanges **21** and **22** are sloped upwardly and inwardly, as viewed in FIG. 5, whereby the flanges **21** and **22** will be spread apart as the clip C is pressed onto the tube T.

The clip C includes a prong **31** which is offset from the flanges **21** and which extends radially inwardly for engagement with selected ones of the prong-receiving openings **17**. The prong **31** is flared away from the flanges **21** and is tapered, terminating in a point **33** for ease of insertion between strands of hair. As best seen in FIGS. 3 and 4, the flanges **22** and **23** do not lie on the radius of the tube T but angle slightly toward the prong **31** to enable the clip C to be used on various diameter tubes T.

In operation, the clip C is entirely removed from the tube T while the hair H is wound on the tube. After the hair H has been wound on the tube T the clip C is attached to the tube T near the roots **35** of the hair, as shown in FIG. 6. The clip C is installed by extending the pointed prong **31** inwardly through the hair H on the tube T and through a selected one of the openings **17**. With the prong **31** being flared away from the flanges **21** and **22**, the clip C can be positioned on its side with the flanges out of contact with the tube T while the prong is being inserted. Since the openings **17** are closely spaced around the circumference of the tube T and are elongated, the prong **31** can easily be directed and will be guided into the proper opening **17** even though such hole is covered by strands of hair H. With the prong **31** engaged, the plate **19** is pressed downwardly to cause the protruding bearing surface **20** (FIG. 6) to be pressed firmly against the underlying hair H to hold it firmly in place. As the plate **19** is pressed down the flanges **21** and **22** are brought into contact with the tube T and the wedge surfaces **27** and **28** will engage the ends of the tube and cause the flanges **21** and **22** to be spread apart to clear the ends of the tube wall and enable the grooves **25** to register with the wall ends **23** and **24**. Thus, the hair H will be held firmly captive between the clip C and the tube T and the clip C cannot slide relative to the tube T to enable the hair H to become loosely wound on the tube T.

From the foregoing it will be clear that the hair curler of present invention is straightforward in design and relatively easy to manufacture. The offset prong **31** provides for ease in attaching the clip C to the tube T and maintains the clip C in its proper position on the tube T.

I claim:

1. A hair curler comprising:

an elongated hollow tube including a plurality of prong-receiving openings spaced around the periphery of said tube intermediate its ends; and

an elongated clip including a pair of opposed resilient latching elements for engaging the opposite ends of said tube and a radially inwardly projecting prong intermediate said latching elements for being engaged with selected ones of said prong-receiving openings to prevent said clip from moving relative to said tube.

2. A hair curler as set forth in claim **1** wherein said prong-receiving openings are elongated in longitudinal direction of said tube.

3. A hair curler as set forth in claim **1** wherein said latching elements include flanges forming grooves for latchingly engaging the ends of the tube wall, said flanges having a tapered inner surface for progressively engaging said end of said tube wall to cause said flanges to be spread apart for clearing the ends of said tube.

4. A hair curler as set forth in claim **1** wherein said

prong is flared away from said latching elements to enable said prong to easily be engaged in a selected one of said openings while said latching elements are maintained clear of said tube.

5. A hair curler as set forth in claim **1** wherein said prong is pointed.

6. A hair curler as set forth in claim **1** wherein said prong is offset from a line between said latching elements.

7. A hair curler as set forth in claim **1** wherein said clip includes:

a bearing surface protruding from the underside of said clip intermediate said flanges and prong and extending longitudinally of said clip for being pressed against the hair wound on said tube.

8. A hair curler as set forth in claim **1** wherein said flanges are angled transversely toward said prong to accommodate various diameter tubes.

9. A hair curler as set forth in claim **3** wherein said prong-receiving openings are elongated in the longitudinal direction of said tube.

10. A hair curler as set forth in claim **4** wherein said prong is pointed.

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