April 23, 1957 M. S. VOORHEES 2,789,565

DEVICE FOR AND METHOD OF FORMING CURLS

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Fig. 1

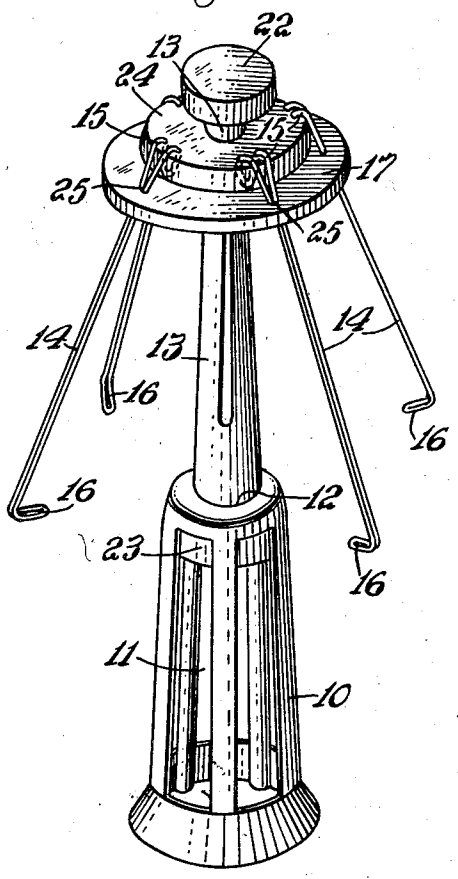
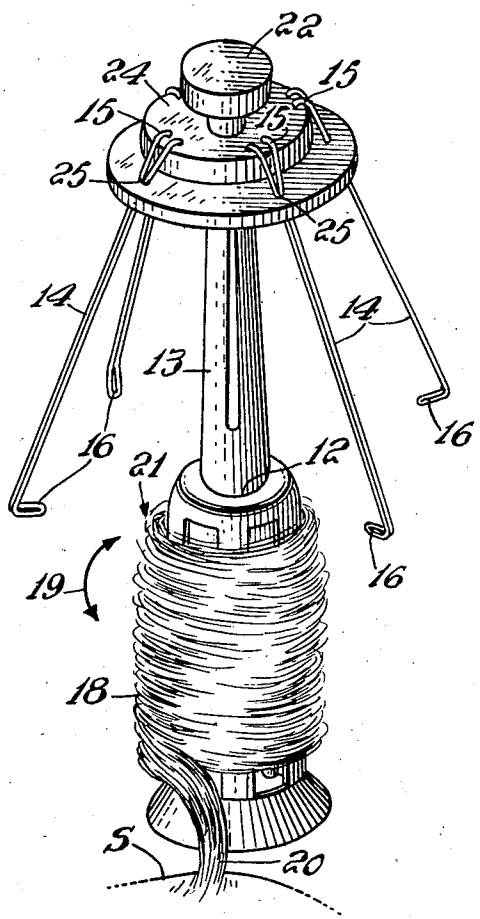


Fig. 2



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Fig. 3

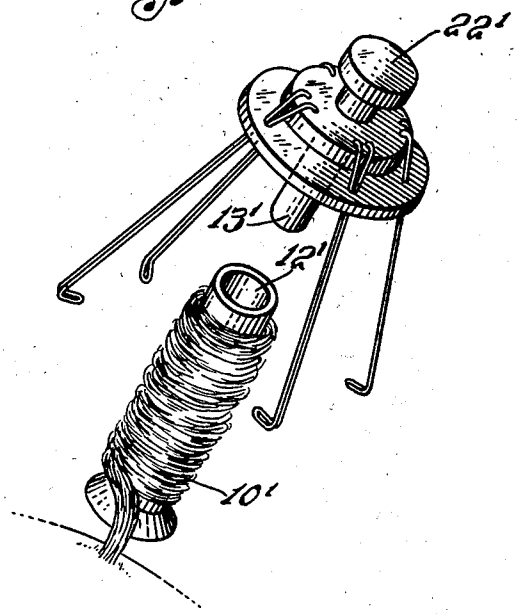


Fig. 4

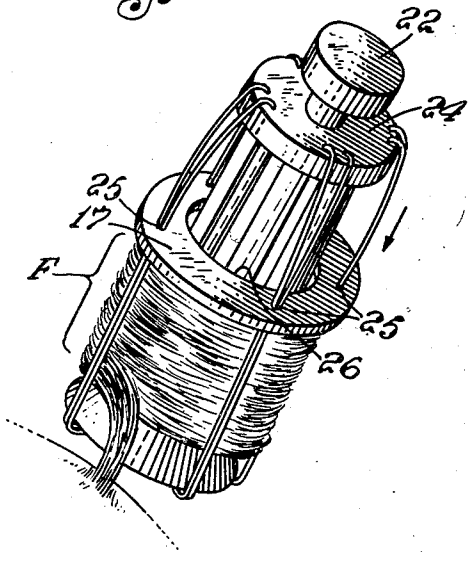
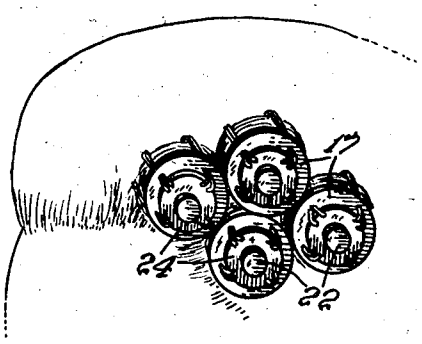


Fig. 5



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DEVICE FOR AND METHOD OF FORMING CURLS

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10 Claims. (Cl. 132—7)

This invention relates to a device for and method of forming curls on the scalp in a self fastening, novel manner which requires no pins, clips or end papers, and pursuant to which a durable, uniform, self-setting permanent wave may be attained. Pursuant to the invention the hair may be wound in sculptured curls in the style desired, may be dried on the device and then combed out. Unlike the present pin curl "permanent" wave which lasts only a few weeks, the wave attained pursuant to the invention is far more durable and lasting.

The invention is effective both for original permanent waving and for setting hair between permanent waves, and involves the use of a novel device for forming curls and method of forming the same, requiring little or no skill in application, while assuring accurate, uniform results, as more particularly described hereinafter and illustrated in the accompanying drawings, wherein:

Fig. 1 is a perspective view of one form of device for forming curls embodying the invention, prior to winding a curl thereon.

Fig. 2 is a similar view, showing a section of hair initially wound in convolutions along the shaft of the device,

Fig. 3 is a view of a modified form of the device, showing the first step in forming a curl pursuant to the invention,

Fig. 4 is a perspective view of a further form of device embodying the invention, showing a curl formed thereon,

Fig. 5 is a schematic side elevational view showing four devices embodying the invention applied to a scalp forming four curls thereon.

As shown in the drawings, the device comprises an elongated shaft **10**, which may be formed open, as shown at **11** (Fig. 1) or essentially closed as at **10'** (Fig. 3). An axial opening **12** is provided in the shaft **10**, (**12'** in shaft **10'** of Fig. 4) to provide a convenient means for slidably receiving the rod **13**. Comparable parts in the form shown in Figs. 3 and 4 to that of Fig. 1 will be designated with the same reference characters to which prime marks are added.

As shown in Fig. 1, the rod **13** is provided with a plurality of elongated fingers **14**, secured at one end (such as **15**) to the rod **13**, the opposite, free ends **16** of the fingers being disposed downwardly; means **17** are provided to engage the fingers to move the free ends thereof inwardly for a purpose presently explained. In the use of the device, a section **18** of hair to be formed into a curl is initially wound in helical convolutions along the rod (as shown at **19** in Fig. 2) by holding the section of hair along the rod and rotating the rod either clockwise or counterclockwise. By this step in the use of the device, a section of hair is disposed along the shaft helically at right angles to the scalp from which the section **18** extends as at **20** (Fig. 2). If desired, means **17** may be moved downwardly to close fingers **14** inwardly from their open (Fig. 1) position to facilitate gripping the device for rotation as above mentioned.

In the form of invention shown in Fig. 1, the rod **13** is then moved downwardly so as to dispose the fingers in overlying relation to the section **18** and then the means **17** is moved downwardly to move the fingers inwardly as shown in Fig. 4 to hold the section of hair on the shaft. Said means **17** is moved downwardly to engage the uppermost convolutions of section **18** so as to compress said section to a fraction (Fig. 4) of the original length thereof (Fig. 2) along the shaft. The rod **13** may be provided with a knob **22** at the upper end thereof to facilitate grasping the same and with an enlarged portion **23** at the lower end thereof to engage the shaft **10** to preclude excessive withdrawal of the rod from the shaft. As shown in Fig. 1, the fingers **14** may be made of spring material, in which case the upper ends **15** thereof may be initially embedded in the enlarged portion **24** formed integrally with or secured to the rod, so as to be normally tensioned to depend downwardly and outwardly of the upper end of rod **13**. The fingers may be formed of a material other than spring material if so desired; they may be formed of flat, round or other outline and may be of greater or lesser number than shown in the drawings. Member **17** may be a disc provided with apertures **25** to slidably receive the fingers and having a medial aperture **26** (Fig. 4) to receive shaft **10**. The parts may be proportioned as shown in Fig. 4 if desired, in which case the lower ends of the fingers **14** would telescope over the lower end of the shaft **10** when the fingers are closed on the shaft. In the form shown in Figs. 3 and 4, the rod **13'** is formed of substantially shorter length than the shaft **10'** and is separable from the shaft **10'**.

It will be noted, from the foregoing, that, pursuant to the present invention, the hair section **18** may be formed on the shaft **10** in any desired style such as sculpture curl automatically locked in a vertical position at right angles to the scalp (as shown in Fig. 5) as contrasted with conventional curlers which form curls on the scalp in a horizontal position. Furthermore, pursuant to the invention, the section of hair is arranged on the sculpture in the style in the final form desired and may be permanently waved in that position, thereby eliminating the necessity of arranging the hair a second time, as would be required with the use of the conventional types of permanent waving devices and methods, resulting in a saving of time and a firmer formation of the newly waved curls. The hair may be dried on the device of the invention instead of being unwound while still wet and then formed into a different size and shape, in accordance with present devices and methods. Thus, in the use of the method and device of this invention, there is less relaxation of the wave being formed and a substantially saving of time is attained by eliminating the necessity of having to set the hair, this step being entirely eliminated.

In order for a wave to be "permanent" the hair must be wound around some type of device to produce tension on the hair and then held in that position until it has been softened and again hardened. Hair which is formed into curls without permanent waving, pursuant to the present invention, will hold a set longer than hair wound in pin curls by hand under conventional methods.

The time required for permanent waving by the use of the present invention is materially less than that required for shampooing and setting of conventional methods. The drying time is also much shorter with the use of the present invention as the hair is not held close to the scalp but is disposed at right angles thereto, providing a substantial air space for drying purposes. The invention is adapted for home use as well as for professional beauty parlor use. Any unskilled person can, by the use of the invention, attain better hair styles than can be attained now by hand because the curls formed pursuant to the present invention will be of uniform size—a result sub-

stantially impossible to attain where the work is done by hand.

I claim:

1. A device for forming curls on the scalp comprising an elongated shaft on which a section of hair to be formed into a curl may be wound, a rod secured to the shaft, a plurality of elongated fingers secured, at one end, to the rod, the opposite, free ends of the fingers being disposed downwardly, and means engaging said fingers to move the free ends thereof inwardly, whereby a section of hair may be wound on the shaft and then by use of the means engaging the fingers, the free ends of the fingers may be moved inwardly to hold the section of hair on the shaft, to form a curl.

2. In a device as set forth in claim 1, said means engaging the fingers to move the free ends thereof inwardly comprising a disc engaging the fingers and slidable over the shaft, whereby the section of hair may be compressed by sliding the disc downwardly on the shaft.

3. In a device, as set forth in claim 1, said rod being secured to said shaft by slidably engaging said shaft for movement of the rod in the longitudinal plane of said shaft.

4. In a device as set forth in claim 1, said rod being so secured to said shaft by providing the shaft with an axial opening and slidably disposing the rod in said opening.

5. In a device as set forth in claim 4, means to preclude complete withdrawal of the rod from the shaft.

6. In a device as set forth in claim 1, a knob on said rod.

7. In a device as set forth in claim 1, each of said fingers being made of spring wire material, and being of greater length than the length of the shaft.

8. In a device as set forth in claim 1, said fingers being of greater length than the length of the shaft and having their free ends inturned so that said inturned ends may be disposed over the lower end of the shaft to hold the section of hair thereon.

9. The method of forming curls on the scalp comprising winding a section of hair helically along a shaft disposed on the scalp, positioning retaining members along the outside of the so wound section of hair, in concentric, spaced relation to the shaft, to confine the section of hair between the shaft and said retaining members in concentric spaced relation to the shaft along its length, and then, while so confining the hair, engaging the upper convolutions of the section and moving the same downwardly toward the scalp to substantially compress it, and holding the same in said substantially compressed confined arrangement to form a curl.

10. In the method of claim 9, the further step of moving the shaft and retaining members away from the compressed section.

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