Dec. 13, 1938. P. HITZIGRATH 2,139,751

HAIR CURLING APPARATUS

Filed Dec. 29, 1937

Fig. 1.

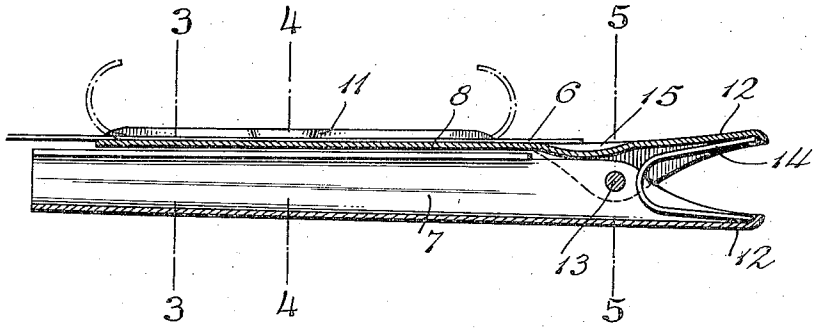


Fig. 2.

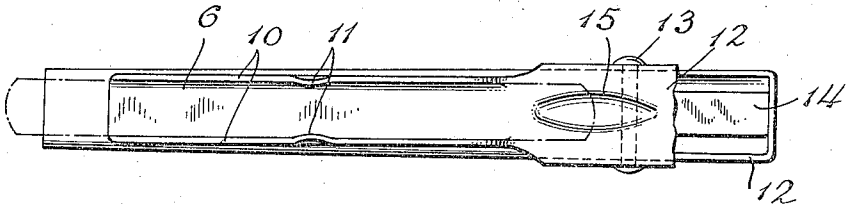


Fig. 3.

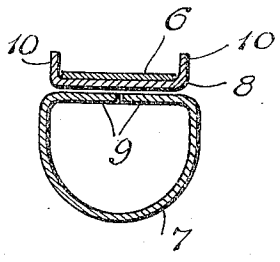


Fig. 4.

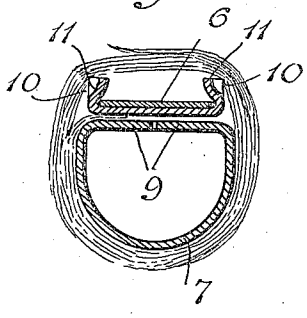
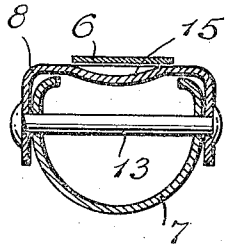


Fig. 5.



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HAIR CURLING APPARATUS

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Application December 29, 1937, Serial No. 182,207

2 Claims. (Cl. 132—33)

This invention relates to improvements in hair dressing appliances and has particular reference to a curler of the type employing a bendable element adapted to clamp and retain a curl in position while it becomes set.

An object of the invention is to provide an improved curler of simple and economical construction by means of which a strand of hair may be easily and quickly formed into a curl and thereafter secured in its curled condition.

Another object is to so construct a curling implement as to facilitate the mounting of a bendable curl-binding member and its retention thereon while a curl is being formed thereabout, and to so position said member on the curling implement that both ends of the member will be readily accessible for bending about the formed curl before the curling implement is removed from said curl.

The above and other objects will appear more clearly from the following detailed description when taken in connection with the accompanying drawing which illustrates a preferred embodiment of the inventive idea.

In the drawing:—

Figure 1 is a longitudinal section through a curling apparatus constructed in accordance with the invention, the dotted lines indicating substantially the position of the ends of the bendable curl-binding element when said ends have been bent to clamp a curl preparatory to removing the curling mandrel therefrom.

Figure 2 is a top plan view of the curling apparatus, and,

Figures 3, 4 and 5 are transverse sections on the lines 3—3, 4—4, and 5—5, respectively, of Figure 1.

In its preferred embodiment, the invention contemplates the use of a curl-binding element 6 in the form of an elongated flat strip of bendable, non-resilient metal which may be bent and straightened for repeated use.

In cooperation with the binding member 6, there is provided a mandrel which, in the form illustrated, consists of two cooperating jaws generally indicated by the numerals 7 and 8 and each formed from a thin sheet of metal.

The strip from which the jaw 7 is made is bent transversely into hollow formation as best illustrated in Figures 3 and 5 and throughout the major portion of the length of said strip the longitudinal edge portions 9 are brought together and flattened to form a clamping surface for the end of a strand of hair which is inserted between the jaws 7 and 8 and held therein preparatory to curling said strand about the mandrel.

The jaw 8 is also struck from a sheet of material of a length less than that of the material from which the jaw 7 is formed, and the longitudinal edges of the former strip are bent outwardly for a major portion of the length of the strip as indicated at 10 to provide a channel of a width substantially the same as that of the strip 6. The length of the channel thus formed is less than that of the strip 6 so that the ends of the latter will project beyond those of the channel when the strip is in position in the jaws as illustrated in Figure 1. In order to frictionally retain the strip 6 in its temporary position on the jaw 8 preparatory to winding a strand of hair about the mandrel and also about the intermediate portion of said strip 6, portions of the side walls 10 of the channel, preferably at opposed points intermediate the ends of the latter, are instruck slightly as indicated at 11 so as to partially over-lie the edges of the strip 6 and prevent lateral displacement thereof with respect to the channel. By making the strip 6 of substantially the same width as that of the channel, the longitudinal edges of the strip will frictionally engage the side walls 10 and thus be held against longitudinal displacement in said channel during the ordinary manipulation of the mandrel while curling a strand of hair thereon. The retention of the strip 6 in the channel in the manner described does not, however, prevent said strip from being readily extracted from engagement with the jaw 8 after the curl has been completed and the ends of the strip have been bent to clamp said curler in place.

Adjacent ends of the jaws 7 and 8 terminate in opposed handle portions 12 adjacent which the jaws are pivotally connected as indicated at 13. Interposed between said handle portions 12 is a leaf spring 14 normally exerting outward pressure upon the handle portion so as to yieldably maintain the cooperating flat clamping surface of said jaws in their clamping positions. On the jaw 8 between the inner end of the channel thereof and the handle portion 12, said jaw is provided with a depression or recess 15 which not only reinforces the jaw at this point but is so located that when the strip 9 is properly placed in position on the jaw, the inner end of said strip will over-lie the depression 15 and in this manner be exposed so that after the curl has been wound about the appliance said inner end of the strip may be readily engaged between thumb and finger of the operator so that it can be bent into

the dotted line position of Figure 1 to clamp one end of the curl.

In practice, when forming a curl, a strip 6 is properly laid in the channel of the jaw 8 with one end of the strip projecting beyond the outer ends of both jaws and the opposite end of the strip disposed in over-lying relation to the depression 15. The strip will then be frictionally held in position while the jaws 7 and 8 are spread by pressure upon the handle portions 12, after which the end of a strand of hair may be inserted between said jaws which will clamp said strand when the handle members are released. The appliance is then manipulated to wind the strand of hair about the jaws and intermediate portion of the strip 6 and when such winding operation is completed the exposed ends of the strip are bent outwardly and over the curl so as to bind the same in position. Finally, the mandrel may be withdrawn from the curl by a sliding longitudinal movement of the mandrel relative to the strip 6. When the curler has been completely withdrawn, the strip 6 will then remain in clamping position on the curl and may be permitted to remain in such position until said curl is set. To remove the binding element from the curl the ends thereof need only be straightened after which the strip may be withdrawn and used for another curling operation.

What is claimed is:

1. A hair curler adapted for use in conjunction with a separate bendable curl-binding element in the form of a flat strip, said curler comprising a mandrel having a channel therein for receiving said binding element, with the walls of said channel formed to frictionally retain said element in position therein and said channel being of less length than said element so that the ends of the latter will project beyond the ends of said channel, and a depression formed in said mandrel underlying one end of said element when the latter is in position on said mandrel so that said end may be grasped and bent over a portion of a formed curl.

2. A hair curler adapted for use in conjunction with a separate bendable curl-binding element in the form of a flat strip, said curler comprising a mandrel consisting of a pair of pivotally connected jaws having opposed handle portions adjacent one end thereof, one of said jaws having a channel therein for receiving said binding element, with portions of the walls of said channel bent to provide inturned flanges adapted to frictionally retain said element in said channel, and the latter being of less length than said element so that the ends thereof will project beyond the ends of said channel, and a depression formed contiguous to the handle portion of the jaw having the channel therein so as to underlie the adjacent projecting end of said binding element.

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