This invention relates to a method and apparatus for curling hair.

An object of the invention is to provide an improved method and apparatus for curling hair wherein a strand of hair to be curled is clamped or otherwise attached to a core and wound thereon by rotating the core so as to form a coil or curl. When the hair has been thus wound on the core a clamp is applied laterally to the coil or curl of wound hair which clamp encircles the curl and confines it in its wound or curled condition. Thereafter, the core is axially removed from the coil or curl of hair, leaving the hair in its wound condition confined within the clamp or curler.

The same operation may be repeated with different strands of hair and the clamps or curlers can be left in position on the coils or curls for the required length of time to allow the hair to become set and adopt the curl. When this time has elapsed the clamps or curlers can be removed from their respective curls, leaving the curls in their wound or set condition. As the clamps are laterally removed there is no necessity for disturbing the curls in the course of removing the curlers, although the hair may be subsequently brushed out to avoid a stiffened or artificial appearance.

The method and apparatus is highly advantageous in that the curling of the hair may be easily and simply performed and either outside curls or inside curls, such as are used on "page boy" boys, may be wound on the core. Furthermore, the core may be of relatively small diameter so that a relatively close or tight curl can be formed, if desired. If a loose curl is desired, this may be accomplished by merely using a core of larger diameter.

Another object of the invention is to provide a clamp or curler for retaining the wound hair in its coiled or curled condition consisting essentially of two opposed handled jaws that are hinged together and which are engaged into mutual engagement with each other. These jaws are approximately semi-cylindrical in form so as to receive and confine the wound portion of the strand of hair. The swinging or free edges of the jaws are designed to grip upon the hair leading to the coil or curl and the construction is so designed that when the clamp or curler is fully opened the distance between the swinging or free edges of the jaws is at least as great, if not greater than, the diameters of the jaws. This enables the clamp or curler to be applied laterally to the wound hair and to be removed therefrom after the hair has adopted its set without disturbing or in any way unwinding the curl.

With the foregoing and other objects in view, which will be more manifest in the following detailed description and specifically pointed out in the appended claim, reference is had to the accompanying drawing for an illustrative embodiment of the invention, wherein:

Figure 1 is a perspective view illustrating a strand of hair in the process of being wound upon the core; Fig. 2 is a perspective view illustrating the manner in which the core is withdrawn from the curl after the clamp or curler has been applied thereto; Fig. 3 is a sectional view taken substantially upon the line 3—3 of Fig. 2, illustrating the clamp or curler in closed or clamping condition; Fig. 4 is a sectional view similar to Fig. 3, but illustrating the clamp or curler in open position and in the process of being removed from the coil or curl of hair; and Fig. 5 is a view in front elevation of the clamp or curler.

Referring to the accompanying drawings wherein similar reference characters designate similar parts throughout, the method of curling the hair in accordance with the present invention consists of clamping or otherwise temporarily attaching a strand of hair 5 to an elongated core. For purposes of convenience, I use for the core one conventional form of rattail comb, the comb being indicated at 10 and the rattail being indicated at 11. This type of comb has a pivoted clamping bar 12 pivotally attached thereto, as indicated at 13, and which is urged into clamping engagement with the rattail by means of a compression spring 14.

In accordance with conventional design the rattail 11 is tapered in an axial direction from the comb body towards its end. This form of apparatus is preferred inasmuch as the comb 10 can be used for combing and straightening the strand of hair prior to its application to the rattail. After the strand has been combed, the end of the rattail is clamped against the rattail 11 by means of the clamping bar 12. The comb is then rotated about its longitudinal axis so as to wind the hair thereon. The hair may be so wound about the rattail as to form an outside curl, as illustrated in Fig. 1, or it may be reversely rotated to form an inside curl wherein the hair ends extend inwardly towards the neck and head as in the case of "page boy" bobs.

The extent to which the strand is wound on the rattail 11 will depend on how close it is desired to have the curl to the scalp. In other words, the winding of the hair may be only one or two wraps about the rattail or it may be a multiplicity of wraps.

When the winding of the hair on the rattail is completed a clamp or curler is applied. This clamp or curler consists of two opposed semi-cylindrical jaws 15 and 16 which are equipped with handles 17 and 18, respectively, and which are hinged connected together, such as by a hinge pin 19. A torsion spring 20 encircles the hinge pin and urges the jaws into mutual engagement with each other. The swinging or free ends of the jaws are preferably serrated or toothed, as indicated at 21. The walls of the jaws are preferably perforated or equipped with relatively large apertures 22 so that air can freely circulate therethrough to allow the hair to dry, if the hair is wound on the rattail in a wet condition.

The clamp or curler is applied laterally over the coil of hair wound on the rattail. This lateral application is permissible due to the fact that the swinging or free ends of the jaws are capable of being opened to such a wide extent, namely, at least as great as the diameter of the jaws. When the handles are released the free ends of the jaws clampingly engage the strands 5 where it leads to the curl or coil as indicated on Fig. 3. When the clamp or curler is in applied position, the rattail 11 is withdrawn by sliding it axially in the direction of its large end and leaving the curler in its attached and curl-confining position. The rattail may then be used to wind up another
strand of hair and a similar clamp or curler can be applied to other or consecutive curls. The clamps or curlers are allowed to remain in position the required length of time that is necessary to allow the hair either to dry or adopt the set and when this time has elapsed, the clamps or curlers are merely opened and withdrawn laterally from the curl. It will be appreciated that such lateral withdrawal does not involve an unwinding of the coil or curl to enable its removal. Consequently, the curl may be allowed to remain in its tightly wound or curled condition. It is, of course, possible to subsequently brush out the hair to distribute the strand somewhat and to avoid a stilted or artificial appearance.

It will be appreciated from the above-described method and apparatus that it is possible to very easily and quickly wind the hair into curls that can be properly located. Furthermore, the application and removal of the curler is very easily accomplished. As the size of the conventional rattail is relatively small, it is possible to secure a very tight curl of if a looser curl is desired, this can be accomplished by using a rattail or core of somewhat greater cross-sectional size.

Various changes may be made in the details of construction without departing from the spirit and scope of the invention as defined by the appended claim.

I claim:

The method of curling hair which includes winding a strand of hair on a core to provide a curl, applying a confining and gripping device to the curl and with said device simultaneously confining the curl circumferentially and gripping the strand adjacent the curl transversely of the strand, axially removing the core from within the curl, causing the curl and strand adjacent the curl to remain respectively confined and gripped until the curl is set, and then releasing the curl and strand adjacent thereto from said confining and gripping device.

References Cited in the file of this patent

UNITED STATES PATENTS
1,442,260 Fister .......................... Jan. 16, 1923
1,664,000 Steffen .......................... Mar. 27, 1928
2,145,539 Bottorf .......................... Jan. 31, 1939
2,579,204 Renstrom .......................... Dec. 18, 1951

FOREIGN PATENTS
662,466 Germany .......................... July 14, 1938
174,163 Austria .......................... Mar. 10, 1953