This invention relates to hair setting devices and more particularly is directed to hair rollers having means for concealment when in use in hair setting.

Among the objects of the invention is to generally improve hair rollers of the character described to provide concealment thereof when in use in the hair by obscuring the unsightly ends of such rollers enabling the wearer to appear in public during the relatively long intervals of time required for setting the hair in currently popular styles, which improvement in hair roller construction is readily adaptable to a wide variety of tubular rollers presently being manufactured including the helical wire and woven plastic sleeve combination and those fabricated of molded or extruded plastic, which concealment shall be accomplished in a simple, facile and inexpensive manner utilizing wefts of simulated hair colored to match or blend with the hair of the wearer, which weft is secured around the roller inwardly of each end thereof with the strands of simulated hair curled over the respective end of the tube and tucked into the bore, and which rollers shall be practical and efficient to a high degree in use.

Other objects of the invention will in part be obvious and part will hereinafter be pointed out.

The invention accordingly consists of features of construction, combinations of elements and arrangements of parts which will be exemplified in the constructions hereinafter disclosed, the scope of the application of which will be indicated in the claims following.

In the accompanying drawing in which various illustrative embodiments of the invention are shown:

FIG. 1 is a perspective view of the rear and right side of the head of a wearer showing roller constructed to embody the invention in use in setting a hair style.

FIG. 2 is a perspective view of a helical wire and woven plastic sleeve type hair roller constructed with concealment means embodying the invention.

FIG. 3 is a perspective view similar to FIG. 2 but showing a weft of simulated hair about to be secured to one end of the roller.

FIGS. 4 and 5 are enlarged sectional views taken on lines 4—4 and 5—5 in FIGS. 2 and 4, respectively, showing details of construction.

FIG. 6 is a perspective view similar to FIG. 2 but showing the simulated hair to which has been imparted an axial twist upon insertion into the open end of the roller providing a more natural appearance.

FIG. 7 is a perspective view of a modified hair roller shown similar to FIG. 3 but utilizing a weft of modified construction having a pair of spaced binding strips.

FIGS. 8, 9 and 10 are fragmentary perspective views showing the sequence of steps in applying the modified weft to the hair roller, and

FIG. 11 is an enlarged fragmentary sectional view of the modified hair roller taken on line 11—11 in FIG. 10.

Referring in detail to the drawing, 20 denotes a concealable hair roller constructed to embody the invention herein illustrated as applied to a roller 21 of conventional construction having a spring helix 22 fitted with a coarse woven plastic sleeve 23 having opposite ends 23a folded over the opposite ends 22a and tucked into the hollow core thereof.

A weft 24 is seen in FIG. 3 to comprise multiple strands 24a of hair, human or animal or of any suitable synthetic fiber as conventionally used in the manufacture of synthetic, that is, simulated hair arranged substantially parallel to each other in a layer bound together at one end thereof by suitable means, such as, stitching, to form a selvage or binding 24b. The latter may be considered to extend longitudinally of weft 24 with strands 24a extending transversely thereof.

Each weft 24, cut to a proper length to wrap completely around roller 21, is attached thereto at a point sufficiently inwardly of the opposite ends of roller 21 for the intended purpose of concealment when roller 21 is in the hair of a user. Any suitable means of attachment may be utilized, here shown as the tacking together of the opposite ends of binding 24b to form an annulus which tightly fits roller 21. Binding 24b may also be anchored in position by means of stitches or threads 21a tacking binding 24b to the wire of spring helix 22 and/or to the fibers of woven plastic sleeve 23. Strands 24a, extending from binding 24b substantially longitudinally of the roller 21, are folded over the end of roller 21 and tucked into the bore thereof. Weft 24 is made sufficiently thick so that strands 24a in their folded over and tucked in condition substantially cover and conceal from view the underlying roller 21 and particularly its unsightly opposite ends.

The practical utility of the invention will now be apparent. Concealable rollers 20 constructed as hereinbefore described will be provided in a variety of colors of weft 24 so that the user may choose the color which best matches or blends with her hair. Concealable rollers 20 are used to "put-up" the hair in the conventional well defined manner this end for the desired style and set. While in this condition concealable rollers 20 will be substantially hidden from view and the user's appearance materially improved during the time required for the hair to set. It is understood that concealable rollers 20 embodying the invention are to be used to set an entire head of hair as well as prominent portions thereof as shown in FIG. 1. Concealable rollers 20 may also be incorporated in the hair style and used in place of "rats" or other cores or fillers, wefts 24 materially reducing the problem of concealment and increasing the versatility of such devices.

In FIG. 6 a concealable roller 30 is shown which may be identical in construction to roller 20 but for purposes of appearance and style, strands 24a, instead of extending substantially parallel to the longitudinal axis of roller 21 as hereinbefore described and shown in FIG. 2, are given an axial twist with respect to roller 21 so as to be disposed in spiral fashion thereabout.

In order to facilitate the control of the strands of hair or synthetic fiber constituting weft 24 and to reduce the possibility of strands becoming loose from their tucked-in position in the bore of the roller, suitable means may be provided to bind together the ends of strands 24a opposite ends 23a being shown in FIGS. 7, 8, 9 and 10 utilized in combination with roller 21 to provide concealable hair roller 40.

Weft 44 has both of its opposite longitudinal edges formed with selvages or bindings 44b and 44c between which strands 44a transversely extend. As is clear from FIGS. 7 and 8, weft 44 may be attached to roller 21 by means of binding 44b in a manner similar to weft 24 in forming concealable roller 20 as by stitching or threads 21a shown in FIG. 11. Binding 44c which extends beyond the end of roller 21 is then gathered and fastened together with stitching 44d to provide a closed ended sheath shown in FIG. 9. Thereafter, the sheath of weft 44c having 44d is easily tucked into the open end of roller 21. An axial twist may also be imparted to wefts 44 to provide concealable roller 40 with an appearance similar to roller 30 shown in FIG. 6.
Other forms of rollers may be utilized in practicing the invention, for example, the extended tubular plastic roller having a perforated wall, the plastic foam cylinders having a substantially rigid tubular plastic core, or the plastic molded roller having radially extending integral spines. In each case suitable means may be utilized to secure the binding 24b or 44b of wefts 24 or 44, respectively, about the roller, such as, by sewing, adhesive or otherwise, while opposite ends of the strands 24a or 44a are tucked into the bore of the roller through the open end thereof in the manner hereinbefore described and shown in the drawings with respect to concealable rollers 20, 30 and 40.

The term “simulated hair” as used in the claims following is to be understood to include human or animal hair as well as synthetic fibers.

The improved concealable hair rollers herein disclosed are seen to achieve the several objects of the invention and to be well adapted to meet conditions of practical use. As various possible embodiments might be made in the above invention, and as various changes might be made in the disclosed constructions, it is to be understood that all the matters herein set forth or shown in the accompanying drawings are to be interpreted as illustrative and not in a limiting sense.

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

1. A hair roller comprising a cylindrical tube having open opposite ends, spaced wefts of simulated hair attached to the tube covering and concealing each of said opposite ends; each web having multiple strands of simulated hair extending from a binding strip, the latter being wound about said tube and fastened thereto at a predetermined distance inwardly of its respective tube end, the multiple strands of each web extending over its said end and being folded and tucked into its respective open end.

2. The hair roller defined in claim 1 in which said cylindrical tube is a helical spring covered by a woven plastic sleeve to which each said binding strip is attached by tacking.

3. A hair roller comprising a cylindrical tube having open opposite ends, spaced wefts of simulated hair attached to the tube covering and concealing each of said opposite ends, each web having multiple strands of simulated hair connected at opposite ends thereof to a pair of spaced binding strips, one of the strips of each web being wound about said tube and fastened thereto at a predetermined distance inwardly of its respective tube end, the other of each of said strips being gathered together and inserted into its respective open end so that the multiple strands are folded over the tube end effecting said concealment.

4. A hair roller comprising a cylindrical tube having open opposite ends, spaced wefts of simulated hair attached to the tube covering and concealing each of said opposite ends, each web having multiple strands of simulated hair extending from a binding strip, the latter being wound about said tube and fastened thereto at a predetermined distance inwardly of its respective tube end, means gathering and securing together the ends of said multiple strands opposite said binding strip, said means and multiple strand ends being tucked into the respective open end of the tube to effect said covering and concealing.

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