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HEATED SLEEVE FOR HAIR CURLS

Filed March 18, 1960

FIG. 1.

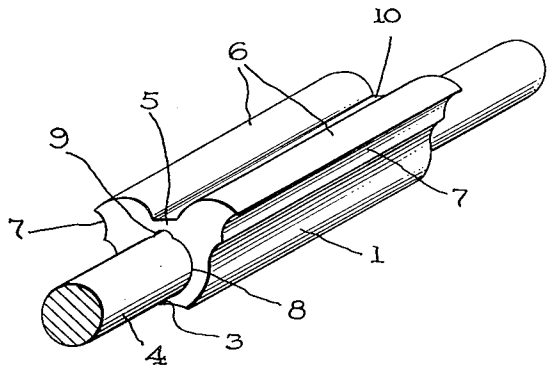
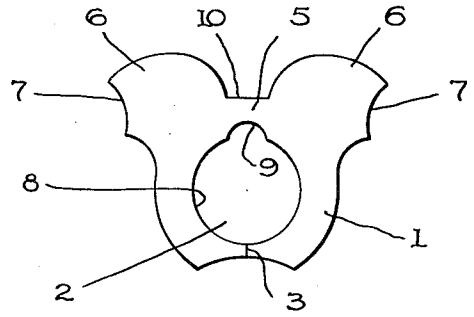


FIG. 2.



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HEATED SLEEVE FOR HAIR CURLS

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This invention relates to the heating of hair curls and is particularly useful in the creation of permanent waves in human hair.

Heretofore sleeves have been used to heat hair curls in permanent waving which sleeves are initially placed on heated bars to heat the sleeves. After the sleeves are heated they are then placed on the hair curls and give up their heat to the hair of the curls, the hair having previously been impregnated with a curling fluid. These sleeves usually have had various inconvenient characteristics. Because of the heat to which the sleeves are submitted the elasticity of the sleeve is rapidly reduced which prevents proper contact with the hair curl to be heated.

When the sleeves include metal parts and metal elastic components the sleeves are heavy and create a problem in prevention of burning of the person whose hair is being curled.

The present invention has as an object a heated sleeve for hair curls which overcomes these several difficulties and which retains its elasticity necessary to its most efficient use.

The sleeve of the present invention is made of an elastic material in the form of a tubular body of elongated length open along its entire length by a longitudinal slot with the part of the elongated body diametrically opposite the slot forming a hinge with the two sides of the hinge forming wings. This construction is shown generally in my United States Patent No. 2,652,839. When these wings are forced together the tubular body is opened along the slot. The hinge portion of the tubular body between the wings is in the form of a bridge with the face of the bridge adjacent the interior of the tubular body being provided with a concave groove along the length of the body. This concave groove in the bridge is faced toward the interior of the body to form a cooling channel for the bridge.

The invention of the present concept is capable of various mechanical embodiments. An illustrative embodiment of this concept is shown in the accompanying drawings, in which like reference characters indicate like parts. In the drawings, FIG. 1 is a perspective view of an illustrative embodiment of a heating sleeve of the present invention mounted on a heating bar; and

FIG. 1 is an end view of the sleeve of FIG. 1 removed from the heating bar.

The heating sleeve for hair curls shown in the drawings comprises a tubular body 1 having an interior cylindrical hollow portion 2 extending the entire length of the tube. Body 1 is provided with a slot 3 along its entire length to divide the body 1 into two separate parts separable from each other in the region of slot 3 so that the tube or body 1 can be mounted on a heating bar 4 or on the hair curl which is to be heated.

Bridge 5 is located opposite slot 3. The function of bridge 5 will be explained hereinafter.

On each side of bridge 5 tubular body 1 is extended by

portions 6 which form wings having surfaces 7 for engagement by the fingers of the user.

Wings 6 are extended on opposite sides of slot 3 and bridge 5 so that when the user squeezes wings 6 to move wings 6 toward each other with bridge 5 acting as a hinge the edges of slots 3 are separated and the tube can be placed on a heating bar 4 or on the hair curl.

When the sleeve is placed on the heating bar 4 it contacts the heating bar over its interior surface 8 which interior surface is approximately cylindrical in shape. Heat transfer takes place through surface 8 of sleeve 1.

Sleeve 1 is made of a single piece of elastic material. Direct heating of this material, when, for example the material is rubber, decreases the elasticity of the sleeve and particularly of the hinge formed by bridge 5.

In accordance with the present concept, that portion of sleeve 1 which forms bridge 5 also forms a hinge. The interior face 9 of bridge 5 is concave with the concavity opening toward the interior of sleeve 1 and when sleeve 1 is mounted on bar 4, toward heating bar 4. Interior face 9 is sufficiently spaced from bar 4 so as not to absorb calories of heat directly therefrom. Concavity 9 formed in bridge 5 provides an air channel which cools the material of sleeve 1 at a point where the elasticity of the material must be maintained to act as a hinge.

The exterior face 10 of the hinge may be flat, as shown.

It has been found that heating sleeves provided with a bridge 5 having a concave inner face 9 as just described lasts two or three times longer than those which do not have a concave surface 9 opening toward the interior of the sleeve.

For example, a sleeve made of an elastic material comprising by weight 39% of an elastomer such as neoprene, 46% carbon black, 11% of a plasticizer such as acetone and the balance minerals such as zinc oxide or manganese oxide can be heated to 135° C. by a heating bar. Such a sleeve, if not provided with a bridge having a cooling channel 9, will retain its elasticity in the area of the bridge or hinge 5 for no more than about 300 hours. If the bridge 5 is provided with a cooling channel 9, as described above, it retains and exhibits good elasticity for at least 700 hours. Since the sleeve is made of a single material and since the material readily absorbs a large amount of heat this sleeve is particularly useful for uniformly heating hair curls.

It should now be apparent that the objects of the present invention as described above are in every way satisfied by the above described illustrative embodiment thereof.

Changes in or modifications to the above described illustrative embodiment of this invention may now be suggested to those skilled in the art without departing from the present inventive concept. Reference should therefore be had to the appended claims to determine the scope of the invention.

What is claimed is:

1. A heating sleeve for receiving heat from a heating bar for heating a curl of hair having an elongated single piece tubular heat absorbing, heat destructible rubber body provided with a longitudinal slot extending the length thereof with the portion of the body opposite the slot forming a substantially cylindrical surface and forming a hinge extending the length of the body for each lateral portion of the body on each side of the slot with finger

supports for each lateral portion of the body for manipulating the sleeve, comprising a concave groove formed in and extending the length of the hinge and opening into the cylindrical surface of the body opposite the slot, said groove forming an air channel for cooling the hinge when the sleeve is on the heating bar.

2. A heating sleeve for receiving heat from a heating bar for heating a curl of hair having an elongated single piece tubular heat absorbing, heat destructible rubber body provided with a longitudinal slot extending the length thereof opening into a substantially cylindrical surface and dividing the body two lateral portions having finger engaging projections for rotating the lateral portions away from each other about the hinge portion extending the length of the body opposite the slot comprising a cooling channel formed in and extending the length of the hinge portion of the body adjacent to and in communication with the cylindrical surface whereby, when said sleeve is mounted upon a heating bar with the cylindrical surface in engagement with the bar, cooling air will be drawn through the channel to prevent overheating of the hinge portion.

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