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C. R. LEWIS ET AL

2,630,809

DEVICE FOR USE IN CURLING HAIR

Filed June 14, 1951

FIG. 1.

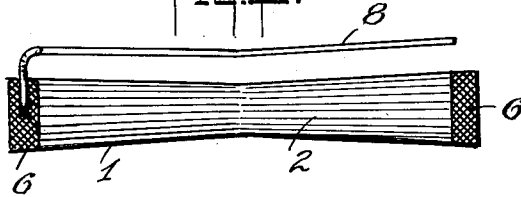


FIG. 2.

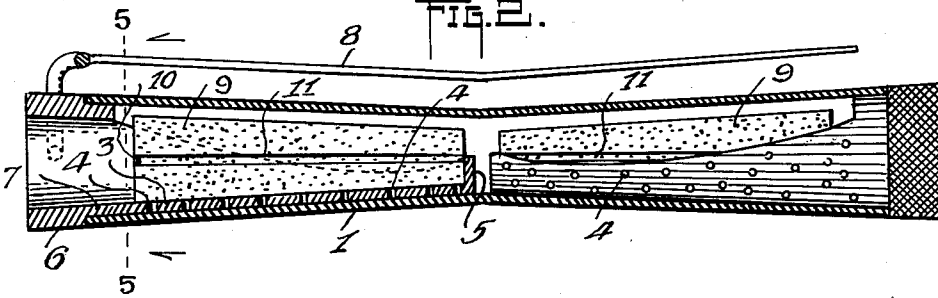


FIG. 3.

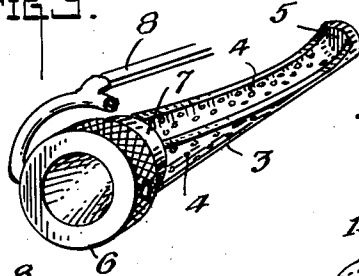


FIG. 4.

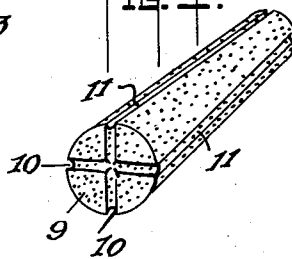


FIG. 5.

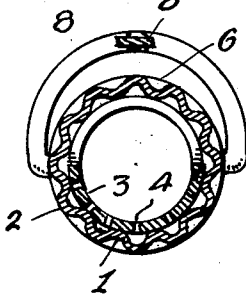
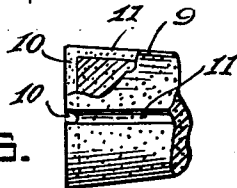


FIG. 6.



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DEVICE FOR USE IN CURLING HAIR

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3 Claims. (Cl. 132-40)

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This invention relates to improvements in means for the waving or curling of hair.

More particularly the invention has to do with improvements in a hair curler of the type that employs an exothermic material as the heat producing agent.

The invention also pertains to a formed core of an exothermic material. The present type of hair curling device employs a metal tube as part thereof wherein an exothermic material is placed and made to generate heat throughout said tube upon which the hair is wound.

Many, if not all of the materials used for heat generation are packed within a tube and upon being exhausted in use become hardened and adhere to the walls of the tube so firmly that the mass can only be removed by a thorough reaming operation.

In order to obviate this difficulty, and so, also, that the operator may always have the curling implement ready for use, it is the purpose herein to provide means by which a core of the exothermic material may be inserted into the tube by means of a special carrier or cradle and which, after serving its purpose, may be readily withdrawn and readily dislodged from said cradle. By such a method the curling devices are kept thoroughly clean and are always, therefore, readily available for use.

In order that the invention may be understood, the appended drawing is appended as part hereof wherein—

Figure 1 is a side elevation of a hair curling tube where with the present invention may be used.

Figure 2 is a longitudinal section of the tube shown in Figure 1, greatly enlarged, wherein the invention is illustrated.

Figure 3 illustrates in perspective a carrier or cradle, two of which are shown in Figure 2.

Figure 4 illustrates a tapered core of exothermic material, two of which are also shown in said Figure 2.

Figure 5 is a transverse section of Figure 2 on line 5-5 thereof, and

Figure 6 is a side elevation in part section of a portion of the core shown in Figure 4.

In the said drawing the character 1 denotes a metal tube whose normal length is about as shown in Figure 1, and which tapers from each end toward its middle so that its bore is greater in diameter at said ends, or extremities, than at its midlength. Further, the tube is fluted throughout longitudinally as indicated at 2, in Figure 5, said tube being that portion of the de-

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vice, of course, upon which the hair is to be wound for treatment. Due to the fact that a tube tapered throughout the length thereof and corresponding to the usual length of a hair curling device, difficulties in manufacture and use would present themselves. Therefore, it is expedient to provide a double form, so to speak, by tapering the tube of customary length from both extremities toward the middle length thereof as shown. By such an arrangement the two tapers are each more abrupt and the device rendered more easily adaptable to its purpose.

Thus constructed the tube receives therein at each extremity a carrier member or cradle, shown in Figure 3 which is a tapered open top shell portion or trough 3 provided with perforations 4 and provided also with an upstanding wall portion or abutment 5 at its small end. Said shell portion 3 is provided at its large extremity with a tubular head 6 which includes a reduced neck portion 7 to snugly fit into an open extremity of said tube 1, it being observed that one of such cradles is fitted into each said tube extremity where it may be held by frictional engagement.

Any usual clip 8 may be swingably mounted at one end on the head of one of the cradles, the opposite free end of said clip being held by any usual means, not shown, to clamp said clip upon the hair as wound upon said tube.

The character 9, shown clearly in Figure 4, denotes a tapered core of the exothermic material which, for example, may consist of permanganate of potassium, highly compressed, together with potato starch, as a binder, the whole thus retaining the form shown.

In the particular form of the tube 1 shown one of the cores is placed in each extremity thereof by placing each in a cradle as in Figure 2, it being observed in said figure that the core is of a diameter slightly less than that of the tube 1, being slightly spaced therefrom as it rests in its cradle.

As may be seen, the cradle mounted core may be introduced into the tube quite readily, after which when its usefulness is at an end may be withdrawn, the upstanding wall portion 5 of the cradle making sure of its removal in its entirety.

Preferably, the large end face of the core is provided with a groove or grooves 10 which communicate with grooves 11 extending longitudinally. Thus the agent such as an oil when introduced into the cavity of the head 6 may follow along the several grooves and cause a thorough reaction within the core.

With the exhaustion of the heat production of the core the latter may be readily withdrawn

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from the tube since having been spaced from the wall of the same, as stated, it cannot become affixed thereto. Thus, a clean insertion and a clean removal of the core is assured, the device as a whole being always available for use without delay or inconvenience.

Naturally, the tapering tube-bore and the tapering cradle, together with the tapering core insures and provides for a quick and sure withdrawal operation, especially should difficulties arise due to careless handling, or unforeseen conditions present themselves where the core may, at some point or other due to heat, have become attached or affixed to the said tube. This advantage would not be had, perhaps, to such an extent where a cylindrical form of tube or body were employed.

It is understood that the fluted tube or body 1, as well as the perforations 4 of the cradle 3 provide for the required movement of the applied liquid throughout the structure described.

What is claimed is:

1. A device for use in curling hair including in its construction a tubular body tapered from each of its extremities toward substantially the middle of its length and upon which to wind the hair to be curled, and a cradle inserted into an extremity of said body and held by friction therein, said cradle substantially conforming to the taper of such extremity and adapted for receiving and introducing an exothermic material into said body.

2. A device for use in curling hair including in its construction a tubular body tapered from each of its extremities toward substantially the middle of its length and upon which to wind the hair to

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be curled, and said body being fluted therearound lengthwise thereof, and a cradle inserted into an extremity of said body and held by friction therein, said cradle substantially conforming to the taper of such extremity and adapted for receiving and introducing an exothermic material into said body.

3. A device for use in curling hair including in its construction a tubular body tapered from each of its extremities toward substantially the middle of its length and upon which to wind the hair to be curled, and a cradle inserted into either extremity of said body, said cradle conforming in type substantially to the taper of the body, and frictionally engaging the latter, and said cradle adapted to receive and to introduce into said body a formed core of an exothermic material, the surfaces of said core being spaced from the inner surfaces of said body.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
Re. 21,704	Caldora	Feb. 4, 1941
1,321,574	Turrettini	Nov. 11, 1919
1,477,873	Jacobs	Dec. 18, 1923
2,074,816	Trotter	Mar. 23, 1937
2,076,521	List	Apr. 6, 1937
2,200,590	Black	May 14, 1940
2,352,951	Geria	July 4, 1944