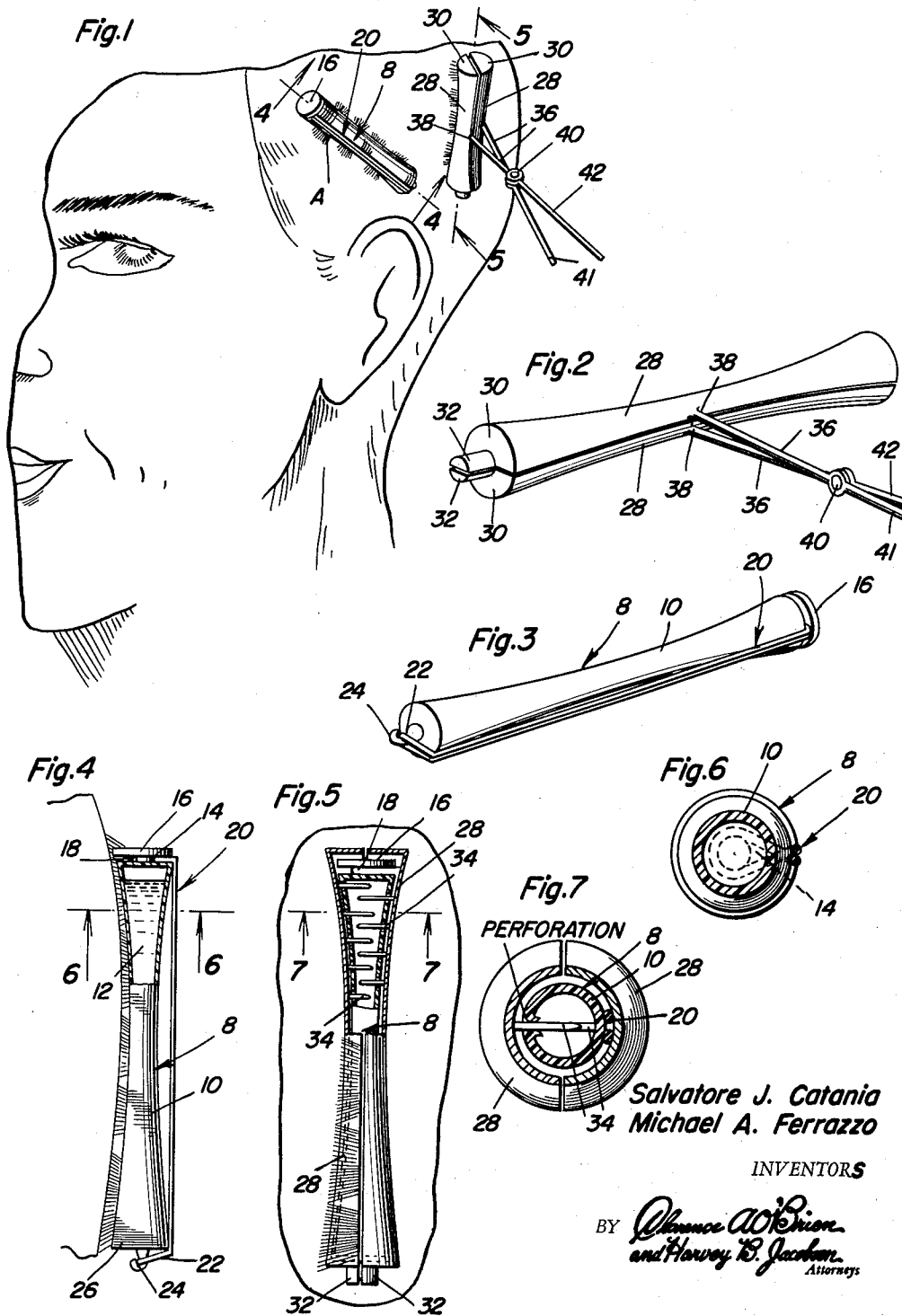


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DISPOSABLE HAIR CURLER

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DISPOSABLE HAIR CURLER

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The present invention relates to certain new and useful improvements in a curling rod which is expressly adapted for use in connection with commercial and home permanent wave kits.

More specifically the concept has to do with a hollow curling rod which, instead of being of wood or metal as is often the case, is constructed of a suitable grade of commercial plastics, a kind of material which, while it is normally imperforate, is nevertheless puncturable when requisite force from an outside source is applied to surface portions thereof. This improved curling rod carries its own supply of waving solution entirely sealed from contact with the air. In use the waving solution does not come into contact with the operator's fingers while the hair is being wound around the curler or rod and is released to saturate the coils or hair windings in an effectual and desirable manner.

The invention is regarded as an advantageous advance in the art which is such that it will more likely than not meet with widespread adoption, endorsement, and use. It can be manufactured more economically than conventional type hair curlers.

The use of this unique liquid containing curling rod will save hours of time for commercial users inasmuch as the conventional hair curlers require considerable washing and sterilization after each use. That is to say, since the curling rod is made up of an economical kind of plastic material it is used only once. Having served its purpose of applying the permanent wave solution to the hair wound thereon, it will be thrown away or in some suitable manner conveniently disposed of.

Novelty is predicated upon a construction which is such that it will conserve storage space in a beauty salon for in each curler will be contained not only the right amount of waving solution, but the intact curler will be contained within each individual kit and no extra storage space for extra conventional curlers will be required.

In carrying out the invention the unique hair curler comprises a hollow plastic imperforate curling rod which has the customary circular cross-section and which has a reduced central portion and gradually tapering or enlarged end portions, there being a head and neck at one end to accommodate an end portion of an elastic band, and an anchoring hook at the other end for the other end of the band.

Novelty is also predicated upon the provision of an implement or hand tool which is to be used in connection with the curling rod. This tool comprises a pair of elongated jaws. The jaws are such in shape and cross-section that they provide an enclosing head which encases the curling rod and which conforms in shape to the shape of the curling rod, the clamping sections providing jaws and said jaws having rows of puncturing pins which when forced against the shell-like curling rod serve to punch holes therethrough allowing the solution to escape and distributively applied to the hair which is wound thereon. The jaws in turn are provided with simple lever-like handles which are crossed and pivotally connected and all that one has to do is to press the handles together to open the jaws, enclose the hollow rod and close the jaws with sufficient force to bring the puncturing or penetrating pins or needles into play.

Other objects, features and advantages will become

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more readily apparent from the following description and the accompanying drawing.

In the drawing, wherein like numerals are employed to designate like parts throughout the same:

FIG. 1 is a perspective view, showing at the left, the improved curling rod and how it is used and which view, also shows at the right, how the novel jaw-equipped puncturing tool is applied and used to liberate the permanent wave solution.

FIG. 2 is a perspective view of the tool by itself.

FIG. 3 is a perspective view of one of the curling rods by itself.

FIG. 4 is a view with parts in section and elevation showing with great particularity the preferred embodiment or construction of curling rod which we use.

FIG. 5 is a view similar in some respects to FIG. 4 with portions appearing in section and elevation and showing how the enclosing jaws of the clamping head come into play to penetrate the curling rod in a manner to liberate the solution.

FIGS. 6 and 7 are exaggerated cross-sections on the lines 6-6 and 7-7, respectively, of FIGS. 4 and 5.

With reference now to the drawing and noting FIGS. 3 and 4 in particular, the numeral 8 designates a hollow curling rod of more or less conventional design or shape that is which has the usual reduced central portion and the gradually tapering and enlarging end portions. This rod may also be interpreted as a plastic shell 10, the "plastics" employed being of such a grade or kind that the desired rigidity and strength and lightness in weight is had and wherein provision is made for puncturing and releasing or liberating the permanent wave solution 12 when desired. One may also think of the "rod" as a veritable "bottle" of permanent wave solution ready to come into play when the solution is distributively liberated or emptied. On one end, somewhat as usual, there is a neck 14 carrying a circular head 16 to accommodate an end portion 18 of an ordinary elastic or rubber band 20. The other looped end of the band as at 22 is releasably connectible with an anchoring hook 24 on the end portion 26 of the shell. The curling rod in accordance with the invention is therefore adapted to receive a coil or strand of hair. The chamber portion of the rod is completely filled with a waving solution which is protected from contact with the air and the surface of the rod being capable of being disrupted by a light mechanical force after a strand of hair has been wound around the rod. The capacity of the chamber is selected to provide the volume of waving solution necessary to wet and condition all convolutions of the hair wound on the rod without unusual excess flow onto the scalp of the user's head. In FIG. 1 at the left the curling rod has been brought into play and the hair A has been wound around it and is fastened in place in the usual manner. All that is necessary now to wet the hair is to puncture the surface portion of the curling rod. While this might be accomplished through the medium of some other implement or means it is desirable to include in the kit a tool or puncturing implement of the type shown in FIG. 2. This figure shows the clamping means made up of a pair of cooperating elongated jaws 28 which are of duplicate construction. The jaws are semi-circular in cross-section and when the abutting edges are brought together an enclosing head is provided which completely surrounds and contains the curling rod in the manner seen in FIG. 5.

The end portions of the jaws at the left are segmental-like in shape as denoted at 30 and these portions carry cooperating half-sections 32 forming a suitable enclosure for the hook 24 when the clamping jaws are in the puncturing position seen in FIG. 5. By opening up the jaws and then closing the jaws the penetrating needles 34, come into play. There are two rows of needles, one row

on each jaw 28. The needles are staggered so that they will effectually force themselves through the cooperating surface portions of the body part of the curling rod. A pair of rod-like handles or levers 36 are provided and these have their inner end portions 38 joined to median portions of the jaws 28. The median portions of the levers are crossed and they are hingedly or pivotally connected together as at 40 and the handle portions 41 are suitably constructed so that they may be opened and closed to likewise open and close the jaws. As before stated FIG. 5 illustrates the curling rod with the clamping means applied to it. At this point the needle points which line the clamping jaws puncture the puncturable shell portion of the curling rod and allow the permanent wave solution to escape and saturate the hair which is wrapped around the rod. After the holes have been punctured and the rod has served its purpose it can be thrown away as already explained.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A hair curler comprising, in combination, a readily puncturable tubular rod of circular cross section for windingly receiving thereon hair to be curled, said rod containing a hair lotion, and means for puncturing the rod after the hair is wound thereon for liberating the lotion into the wound hair, said means including a tool comprising a pair of opposed, elongated, complemental jaws of semi-circular cross-section for receiving the rod and the wound

hair thereon therebetween, and longitudinally spaced pins on the faces of the jaws for puncturing the rod along diametrically opposite sides thereof when said jaws are closed thereon, said jaws being imperforate and including closed ends for substantially enclosing the wound hair and confining the liberated lotion thereto while said jaws are closed thereon.

2. A hair curler comprising, in combination, a readily puncturable tubular rod of circular cross section for windingly receiving thereon hair to be curled, said rod containing a hair lotion, and means for puncturing the rod after the hair is wound thereon for liberating the lotion into the wound hair, said means including a tool comprising a pair of opposed, elongated, complemental jaws of semi-circular cross-section for receiving the rod and the wound hair thereon therebetween, and longitudinally spaced pins on the faces of the jaws for puncturing the rod along diametrically opposite sides thereof when said jaws are closed thereon, said jaws being imperforate and including closed ends for substantially enclosing the wound hair and confining the liberated lotion thereto while said jaws are closed thereon, said tool further comprising a pair of levers crossed and pivotally connected at an intermediate point and having one end affixed to the jaws at intermediate points for mounting said levers on said jaws at right angles thereto.

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