

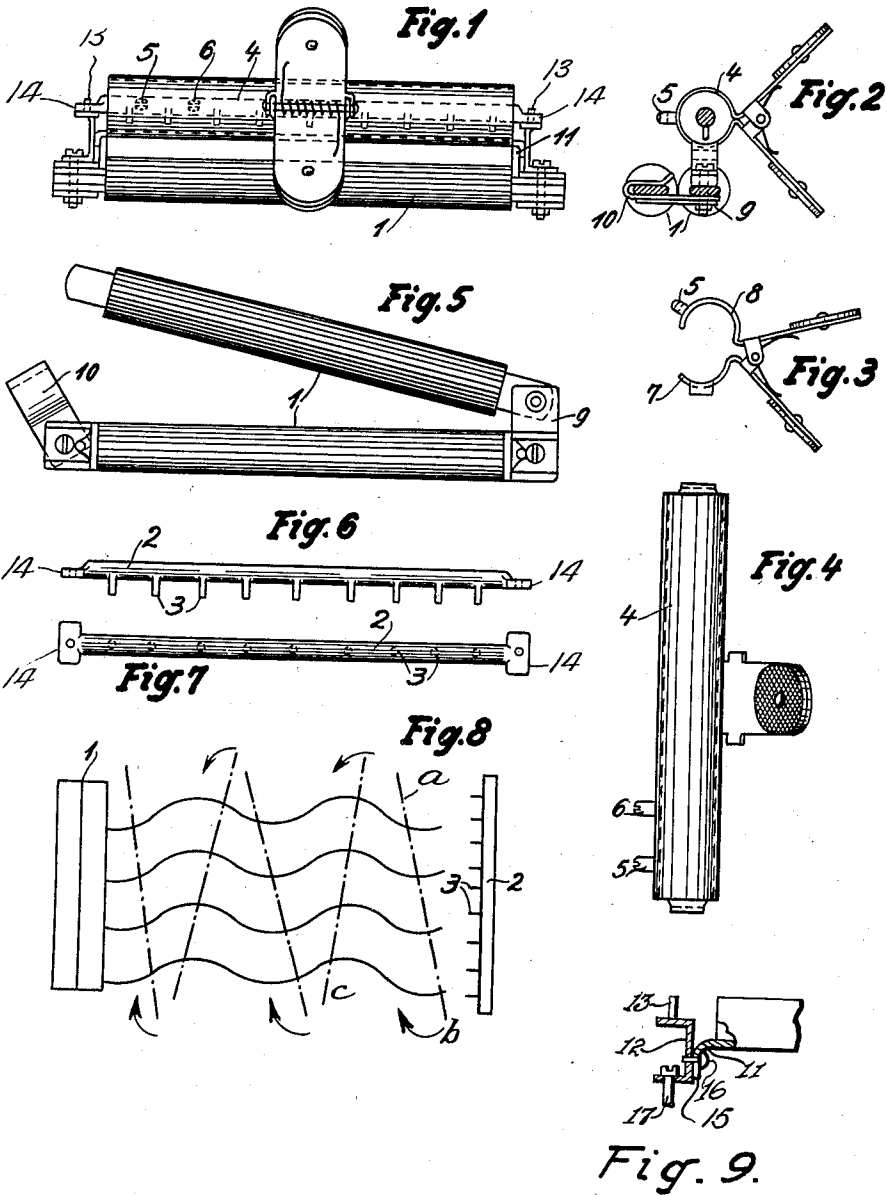
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HAIR CURLING DEVICE

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HAIR CURLING DEVICE

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2 Claims. (Cl. 132—36)

This invention relates to hair curling devices comprising a bipartite protector clamp of known construction holding a flat strand of hair as close as possible to the scalp, a winding rod adapted to be detachably secured to said clamp, a plurality of winding pins on one side of said winding rod and a heating clamp adapted to be attached over the winding rod.

Hair curling devices with cylindrical winding rods and a plurality of winding pins arranged on one side thereof are already known. In these known devices the hair, in addition to being wound round the winding rod, is wound round each winding pin, or only some of such pins.

The invention differs from known devices of this type in that the hair, commencing from the tip, is wound on the winding rod, which is inclined relatively to the strand of hair and said protector clamp, the inclination being changed after each complete rotation of the winding rod by turning the latter about the centre of its longitudinal axis.

The invention is illustrated in the accompanying drawing wherein:

Figure 1 is a front elevation of the complete device; Fig. 2 is a fragmentary side elevation; Fig. 3 is a side elevation of the heating clamp of the device; Fig. 4 is a plan of Fig. 3; Fig. 5 shows the protector clamp opened; Fig. 6 is a side elevation of the winding rod; Fig. 7 is a plan view thereof; Fig. 8 is a diagrammatical representation of the winding operation; Fig. 9 is a detail showing the means for mounting the heating clamp.

The protector clamp 1 serving for holding a flat strand of hair close to the scalp and protecting the latter against heat radiated by the heating clamp comprises in known manner two limbs made of rubber, or rubber coated material, connected by a hinge 9, and kept in closed position by a locking clip 10. Detachably secured to this clamp 1 is the winding rod 2 which, on one side thereof, has a plurality of winding pins 3 positioned at intervals. The winding rod 2 which is substantially round in cross-section, has both ends flattened so as to form bearing surfaces 14, each of which is provided with a hole for the location of a stud 13. Each end of the winding rod 2 is supported by these surfaces 14 on an angle iron 12 secured to the clamp 1 by means of a screw 17. The upper portion of each angle iron 12 is provided with a stud 13 passing through the hole in the winding rod 2 and in this way holding in position the winding rod placed thereon from above. The heating clamp

4 is bipartite, the parts being secured together along one edge by a hinge provided with a spring tending to close the parts and said heating clamp 4 may be provided with electric contacts 5, 6. It has claws 7 and 8 surrounding the winding rod from below and above respectively.

Referring specifically to Figs. 1 and 9, slots 15 are located in the springy supports 11 of the heater 4, in which slots, pegs or rivets 16 engage, which are fastened to the supports 12. The slots 15 run in the same direction as the studs 13 serving for retaining the winding rod 2, so that the heater 4, with the winding rod 2 may be raised from the supports 12. The supports 11 are made springy so that they may clamp the heater 4 between the supports 12, and the heater 4 is secured in the correct position by the pegs 16 and slots 15.

The winding operation is hereinbelow described with reference to Fig. 8. After clamping a flat strand of hair as close as possible to the scalp in the protector clamp 1, the hair, commencing from the tip, is wound on the winding rod by rotating the latter about its longitudinal axis which latter is inclined relatively to the hair and the clamp as shown by the dot and dash line *a* in Fig. 8. After one complete rotation, the winding rod is turned about the centre of its longitudinal axis in the direction indicated by arrow *b* so as to bring its longitudinal axis into line with the dot and dash line *c*. This operation is repeated until the whole strand of hair is wound up and the winding rod is then secured to the protector clamp 1 by the means referred to hereinabove. The winding is effected in the form of an inclined 8 each of the loops thereof being placed around a pin 3 on the winding rod 2.

For facilitating the removal of the finished treated hair from the winding rod, the latter may be longitudinally divided or split, one part carrying the pins and the other part being smooth so that the smooth part may be first pulled out of the hair lock and the part carrying the pins may then be easily laterally removed from the hair. The winding pins may be adapted to be flapped down or replaced by cavities in the winding rod.

Prior to the winding-up or thereafter the hair may be wetted or treated with known ingredients.

I claim:

1. Apparatus for permanently waving hair comprising a bipartite protector clamp, a flat strand of hair being held close to the scalp in

said clamp, a bipartite hinged heating clamp connected with said protector clamp, means for opening said heating clamp, means for closing said heating clamp, a winding rod insertable in said heating clamp, pins carried by said winding rod, the hair held by the protector clamp being wound on said winding rod in figure 8 formation and means for heating the heating clamp.

2. Apparatus for permanently waving hair as claimed in claim 1 including a spring for closing the heating clamp, and finger members for opening said clamp against the force of said spring.

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