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G. F. BOTSCHEIDER ET AL

1,853,033

PERMANENT HAIR WAVER

Filed Oct. 13, 1930

FIG. 1.

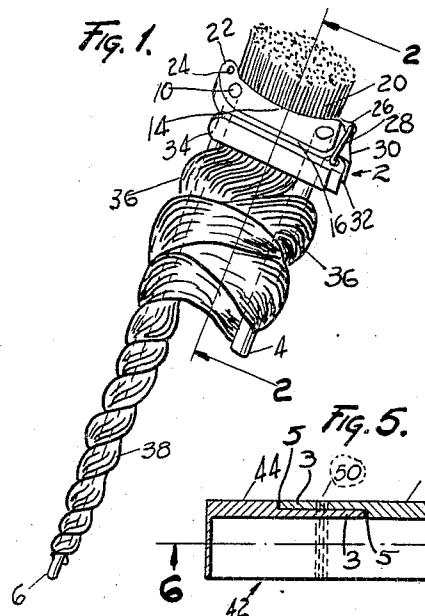


FIG. 2.

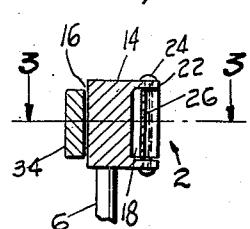


FIG. 3.

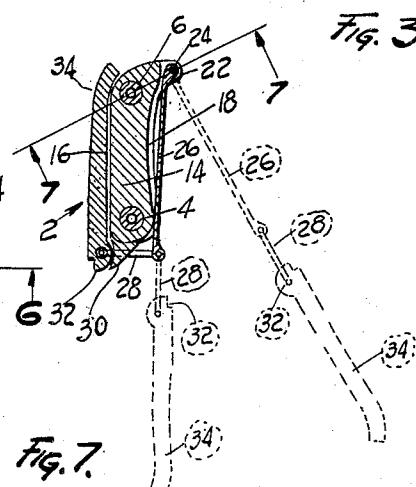


FIG. 4.

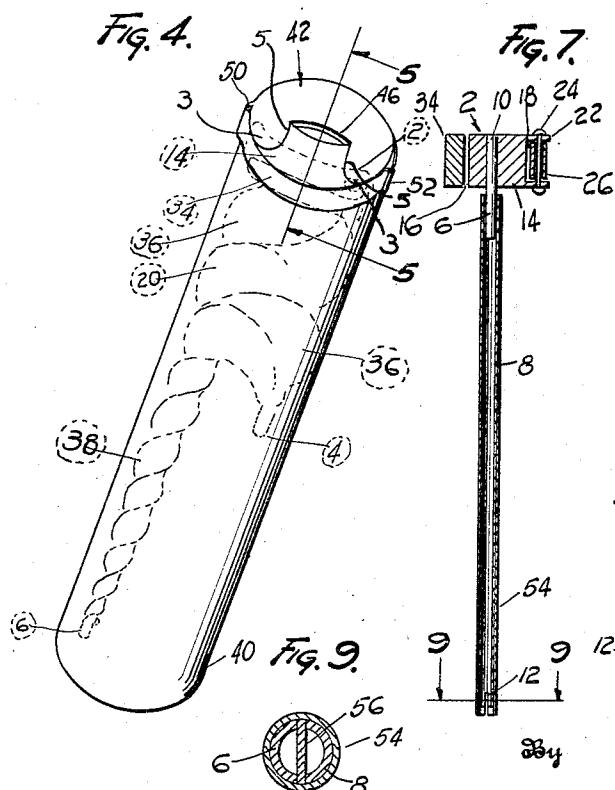


FIG. 5.

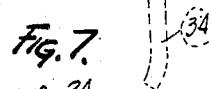


FIG. 6.

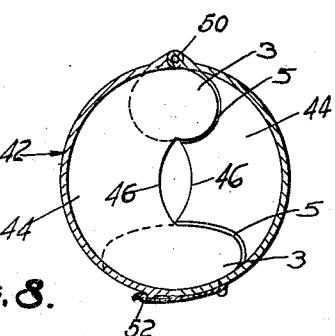
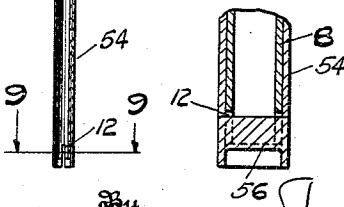


FIG. 7.



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PERMANENT HAIR WAVER

Application filed October 13, 1930. Serial No. 488,380.

Our invention relates to permanent hair waving and hair curling apparatus, in which hair may not only be quickly and expeditiously given a permanent wave, and, if desired, the end portion thereof formed into a curl, but will effectively prevent any condensation drip formed in the heater from reaching the scalp.

It accordingly is an object of our invention to provide a novel form of permanent hair waving apparatus in which a hair holding member, such as a novel or conventional form of clamp has associated therewith, a means such as a set of preferably parallel members, or rods, and which may be both detachably and adjustably connected with said clamp, whereby a strand or lock of hair may be held or clamped, looped over and under said members or rods to form a succession of double loops, means being also provided whereby the looped hair may be held under tension.

A further object of our invention is to provide a novel form of hair clamp in which a body is provided with a cavity or depression for receiving the hair, which body has preferably pivotally associated therewith a clamping device or jaw of desired form, which device is adapted to force the hair into said cavity or depression and hold same securely therein.

It is also within the province of our invention to provide a novel means for preventing the condensation drip of the heater, adapted to be associated with our apparatus, from reaching the scalp, said means, preferably taking the form of a pair of flanged complementary members, pivoted together at one end, and provided at the other with a suitable clasp for holding said members together, said members being preferably of water impervious and non-heat conducting material, such, for example, as the phenol condensation product, known to the trade as "bakelite."

If desired, also, at least one of the hair waving and curling members may be provided with a means for forming a wave or curl of different size, said means, if desired, taking the form of a sleeve, and provided

with a suitable lock for locking said sleeve to said members.

The above, and further objects and advantages of our invention, as will herein-after more fully appear, we attain by the construction described in the specification and illustrated in the preferred form on the drawings, forming a part of our application.

Reference is had to the accompanying drawings, in which similar reference characters denote similar parts. In the drawings,

Fig. 1 is a perspective view of our invention applied to a lock or strand of hair, but with the scalp protector omitted,

Fig. 2 is a cross-sectional view of our novel form of clamp, taken on the line 2-2, Fig. 1,

Fig. 3 is a similar view, taken on the line 3-3, Fig. 2,

Fig. 4 is a view similar to Fig. 1, with heater and scalp protector in position,

Fig. 5 is a somewhat enlarged cross-sectional view, taken on the line 5-5, Fig. 4,

Fig. 6 is an enlarged top plan view of the scalp protector,

Fig. 7 is a cross-sectional view of the permanent hair waver, illustrating also the means by which waves or curls may be made of different sizes,

Fig. 8 is an enlarged fragmentary cross-sectional detail view of the lower end of Fig. 7, and

Fig. 9 is an enlarged cross-sectional view taken on the line 9-9, Fig. 7.

Describing our invention more in detail, in its broader aspects said invention comprises a novel form of permanent hair waver in which a lock or strand of hair is anchored by a suitable anchoring means, such as a novel form of hair clamping means, with which is associated a means, such as a pair of members or rods, which may be in parallel relation, and about which the hair is wound over and under to provide a succession of double loops, one of said members or rods, if desired, being of greater length than the other so the end of said hair may be wound spirally thereabout to form a curl, means being also associated with the

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apparatus, and preferably with one of said members whereby the looped and curled hair may be held under tension.

It is also within the province of our invention to provide a means, such as at least one sleeve, adapted to be associated with one or both of said rods or members, whereby a wave or a curl of different size may be made, means being also provided, if desired, for locking said sleeve to said rod or member.

Another important feature of our invention resides in the means for preventing the condensation drip of the heater from reaching the scalp, which may be associated with said heater in such a way that such a deleterious result will be effectively prevented.

More specifically our invention comprises a permanent hair waving apparatus having on one end a hair anchoring means or clamp 2, which may be of conventional form or that presently to be described, said clamp having associated therewith, in any manner in practice preferred, suitable members or rods 4 and 6, the rod 4 being rigidly secured to the clamp 2, while the rod or member 6 may take the form of a sleeve 8, crimped or otherwise associated with a rod 10 rigidly secured to the clamp 2, so that the sleeve 8 may be rotated about the rod 10 to place the required tension upon the hair as presently to be described.

As seen more particularly in Fig. 7, the lower end of the sleeve 8 is provided with a kerf 12, adapted to be engaged by a suitable tool whereby said sleeve 8 may be rotated upon the rigid rod or member 10 so that a variable tension may be placed upon the treated hair.

The clamp 2 comprises a body 14 of any desired configuration and constructed of suitable material, and which body has on one side a plane face or surface 16, and on the other a cut-out portion or depression 18 in which the hair 20 is adapted to be anchored.

One end of the body 14 is provided with a bifurcation 22 adapted to receive a pintle 24, to which is hinged a preferably flexible member 26, and of such flexibility that the hair 20 will be effectively depressed and securely held within the cavity or depression 18 so it may be anchored therein, the other end of said flexible member having a loop 28 (Figs. 1 and 3) to engage on a projection 30 on the body 2, one end of said loop being hinged to the flexible member, while the other is hinged to the cam portion 32 of an operating lever 34, said cam portion engaging said body to apply an effective pressure upon said flexible member to force the hair 20 within the cavity or depression 18, the dotted lines in Fig. 3 showing the various positions of the parts of the clamp as the strand or lock of hair is being clamped in place.

The hair 20 having been clamped or anchored as seen in Fig. 1, the loose strand is

passed over and under the members 6 and 4, successively, to form a succession of double loops 36, which take the form of a figure 8, and, if desired, the lower end of the looped hair may be wound upon the member 6 spirally to form the curl 38. A suitable tension is then placed upon the looped and curled hair by means of a suitable tool engaging the kerf 12, by which the sleeve 8 may be rotated. The treated hair is then ready for treatment by placing same in any conventional or other form of heater 40 (Fig. 4).

It has been found in practice that the water of condensation from the moist hair frequently drops to the scalp, causing pain and possible injury to the scalp. To overcome this deleterious effect, we provide a protector 42, preferably constructed of a water impervious and non-heat conducting material, such as the phenol condensation product, known to the trade as "bakelite."

The protector 42 preferably consists of a pair of complementary members 44, of suitable shape and dimensions, and having cut-out or cut-away portions 46 of such size as to engage the hair 20 above the clamp 2 so the water of condensation will effectively be prevented from reaching the scalp.

The complementary members 44 are provided with depending flanges, which flanges are adapted to receive snugly the end of the casing of the heater 40 (Fig. 4,) and are suitably hinged together as indicated by the reference numeral 50, while at the other end said members are provided with a suitable clasp or locking means 52 of conventional or other form, overlapping members 3, with curved cam edges 5 being provided to force the hair 20 between the cut-away portions 46, so as to fit snugly therein.

To provide a means for forming a wave or curl of different size, the member 6 may be equipped with a detachable sleeve 54 (Figs. 7-9) the lower end of which has a cross pin 56 for engaging the kerf 12, so said sleeve may be rotated simultaneously with the sleeve 8 as hereinbefore described.

In accordance with the provisions of the patent statutes, we have described the principle of operation of our invention together with the apparatus which we now consider to represent the best embodiment thereof; but we desire to have it understood that the apparatus shown is only illustrative, and that the invention can be carried out by other means.

We claim as our invention:

1. The process of permanently waving hair and simultaneously forming curls at the ends thereof which consists in forming a tightly drawn succession of double loops from a lock of hair by passing said lock over and under itself so said succession of double loops will be in compact juxtaposition, each succession of double loops touching each other,

forming the end portion of said lock in a spiral, and applying heat to said loops and said spiral.

2. In a hair waving apparatus, a positive hair clamp, a pair of hair waving members associated with said clamp, said members being adapted to have the hair looped over and under thereon to form a succession of double loops in compact juxtaposition, a heater adapted to be positioned over said members and said hair, and means associated with said clamp for preventing any steam or hot water from reaching the scalp.

3. In a hair waving apparatus, a hair clamp, a pair of parallel rods extending from said clamp, said rods being of unequal length, whereby both a wave and a curl may be given to said hair, a sleeve associated with at least one of said rods, and means associated with 20 said sleeve and its rod whereby said sleeve may be locked to said rod.

4. A scalp protective device adapted for use in connection with a hair waving and curling apparatus, the combination of a pair of 25 peripherally flanged complementary members, peripheral pivot means for pivoting said members together, two pairs of overlapping cam elements of unequal size associated with said members, and a peripheral clasp for 30 holding said members in fastened relation.

5. In a hair waving and hair curling apparatus, a combined hair waver and curler, a hair clamp associated therewith, a heater adapted to enclose said waver and said clamp, 35 and means associated with said heater for preventing the condensation drip in said heater from reaching the scalp.

6. A combined hair curling and hair waving apparatus comprising a hair clamp having a pair of rods of unequal length extending therefrom, said rods being adapted to have a lock of hair looped thereabout and wound into a spiral to provide a wave to said hair and a curl, means for preventing water 45 of condensation from reaching the scalp, and a casing positioned over said rods, said clamp, and in internal engagement with said last mentioned means.

7. In a device of the class described, a 50 clamp for clamping a lock of hair, a pair of rods of unequal length secured to said clamp and extending therefrom, and a sleeve associated with one of said rods, said sleeve being provided with means whereby said sleeve may 55 be rotated on said rod.

8. In a device of the class described including a hair clamp for clamping a lock of hair and means extending from said clamp whereby a wave may be given said lock of hair, 60 said clamp comprising a body, and plural means, pivoted to one end of said body, whereby said plural means may be swung about said body and said lock of hair clamped between a part of said plural means and said 65 body.

9. In a hair waving and hair curling apparatus, including means for waving and curling a lock of hair, the combination of a hair clamp, said clamp comprising a body, a flexible member pivoted to said body, a loop pivoted to said member, and an operating lever pivoted to said loop, said lock of hair being adapted to be positioned between said flexible member and said body, on one side thereof, and said lever swung to the other side of said body, said loop straddling one end of said body, whereby said lock of hair will be clamped between said flexible member and body.

10. In a device of the class described, including hair waving means, the combination of a clamp, said clamp comprising a body provided with a hair receiving depression on one side thereof, and hair clamping means, pivotally connected at one end of said body, 80 said means being adapted to be swung about the other end of said body and positioned upon both sides thereof, whereby said hair will be clamped within said depression.

In testimony whereof we have signed our 90 names to this specification.

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