

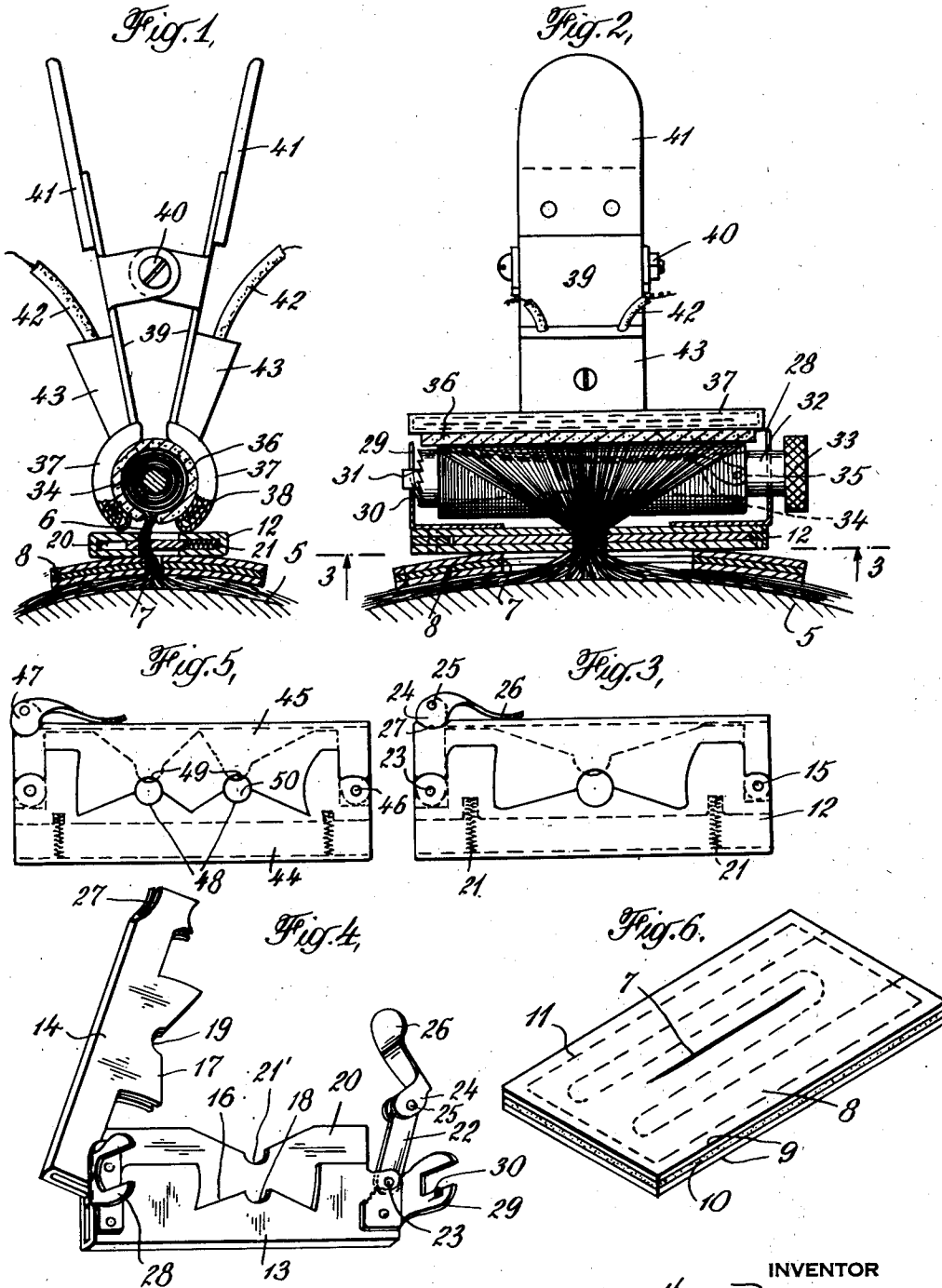
Aug. 8, 1933.

H. BONAT

1,921,802

METHOD OF WAVING HAIR

Filed Nov. 26, 1932



INVENTOR
Harry Bonat
BY
Rene Davis & Co. Attorneys

UNITED STATES PATENT OFFICE

1,921,802

METHOD OF WAVING HAIR

Harry Bonat, New York, N. Y.

Application November 26, 1932

Serial No. 644,416

2 Claims. (Cl. 132—36)

This invention relates to the art of waving hair upon the human head to produce so-called "permanent waves", and particularly to improvements in the "croquignole" method of producing such waves.

In the croquignole method as commonly practised heretofore, it has been considered essential to divide the hair on the head into a plurality of flat strands and to apply a clamp having elongated clamping surfaces to each strand. The hair is thus firmly held adjacent the scalp in the form of a flat strand of approximately the length of the roller upon which the strand is then wound spirally from its outer end. The flat strand as thus wound is then moistened with a suitable lotion, enclosed in a wrapper and subjected to heat by applying an enclosing heater which includes preferably electrical heating elements.

It has been found, however, that this procedure leads to numerous difficulties, among which are unevenness of winding and tendency of the hair to bunch toward the ends of the winding roller and to escape therefrom during the winding operation with resulting unsatisfactory results in the effect produced when the heating is completed. Another difficulty arises because of the impossibility of securing a steam and moisture-proof seal with a clamp having elongated clamping surfaces. Spaces are left between the co-operating surfaces of the clamp at the ends and along the width of the strand. The escape of steam and/or hot liquids through the clamps causes severe burns to the scalp of the person who is subjected to treatment. Hairdressers have been subjected to numerous damage suits because of such burns.

It is the object of the present invention to avoid the difficulties, and particularly those hereinbefore noted, which are inherent in the croquignole method as practised heretofore and to provide a simple, safe and effective method of waving hair on the human head to obtain the effective waves produced by spiral winding as contrasted with the curls resulting from the application of the helical or spindle winding method.

The object is accomplished by dividing the hair into a plurality of strands in which the hairs of each strand are bunched together in a round or rope form, the cross-section of each strand being generally circular. Each of these strands is secured by a clamp close to the scalp. The hair is not spread in the clamp, as required by earlier methods, but is securely held in the round or rope form. The clamp employed is so constructed as to afford no spaces on either side of the

strand through which steam and/or liquid can escape, and affords complete and satisfactory protection against burns.

When the strand in round or rope form has been securely fastened near the scalp, it is spread fanwise sufficiently to be received by the roller and is wound from its outer end on the roller. Since the hairs of each strand converge toward the limited area indicated by the cross-section of the strand in round or rope form, winding is accomplished more easily and the hair is prevented automatically from piling up near the ends of the roller. A more even winding results. When the hair has been moistened, wrapped and subjected to heat, the wave produced is found to be more uniform and satisfactory than that obtainable by the practice of the method as heretofore known.

Instead of a single strand, two or even three strands in round or rope form can be secured by one clamp. The strands thus secured can be spread fanwise and wound together on a single roller. The same uniformity in the resulting wave is secured, and the head is likewise protected because the clamp affords no spaces between the strands for the passage of steam and/or moisture.

As a further protection to the head of the person treated, a suitable shield or protector may be disposed beneath each clamp. Conveniently the shield may be of felt, flannel or other fabric or material. It may also be made of a plurality of layers of material, for example layers of felt or flannel with an intermediate layer of cork or other heat insulating material. A slit may be provided in the pad through which the strand of hair is drawn before the clamp is applied. The shield insulates the scalp and prevents contact of hot metal parts therewith.

The invention will be better understood by reference to the accompanying drawing, in which Fig. 1 is a vertical section through the assembled devices for imparting a wave to the hair;

Fig. 2 is a longitudinal section through the same assembly;

Fig. 3 is a sectional view on the line 3—3 of Fig. 2;

Fig. 4 is a view in perspective of a clamp adapted for use in carrying out the method;

Fig. 5 is a plan view of a similar clamp having a plurality of openings for the strands of hair; and

Fig. 6 is a view in perspective of a protector. Referring to the drawing, 5 indicates the head of an individual and 6 a strand of hair which is

drawn through a slit 7 in a protector 8 comprising preferably layers 9 of felt, flannel or other suitable material with an intermediate layer 10 of heat insulating material such as cork, the layers being connected by stitching 11 or otherwise.

The strand 6, in round or rope form, with a cross-section substantially circular, as indicated in Fig. 2, is held by a clamp 12. The clamp comprises members 13 and 14, preferably of metal and bent to a substantial U-section. The members are pivotally connected at 15 and are provided with co-operating jaws 16 and 17 with cut-out portions 18 and 19 of semi-circular form to engage a strand of hair. A plate 20 is slidably supported between the sides of the member 13 and is biased by springs 21 in the direction of the opposing member 14. The plate 20 has a cut-out portion 21' corresponding to the portions 18 and 19. A bar 22 is pivotally secured at 23 to the member 13 and is adapted to pass between the sides of the member 14. A cam 24, pivoted at 25 on the bar 22 and having an arm 26, is adapted to engage the cam surface 27 on the member 14, thus permitting the clamp to be locked in closed position. Any other suitable locking device may be employed.

It will be understood that when the strand of hair is placed in the cut-out portion 21' with the clamp in open position, and the member 14 there is then moved to closed position, the cut out portion 19 will also engage the strand of hair. The plate 20 will be forced backwardly against the springs 21 as the clamp is closed and locked and the strand will be resiliently and firmly secured. The overlapping joints, secured by engagement of the plate 20 between the sides of the member 14, will prevent the escape of steam and/or moisture through the clamp. The strand of hair is so tightly held that no steam and/or moisture can pass downwardly through the strand.

The member 13 of the clamp carries an up-standing yoke 28 at one end thereof and a similar yoke 29 at the other end thereof, the latter having a projecting ratchet tooth 30 which is adapted to engage with ratchet teeth 31 on a roller 32 which is adapted to be supported in the yokes and has a knurled head 33 at one end to facilitate the rolling of the hair. A clip 34 is pivoted at 35 on the roller 32 and is adapted to engage the end of the strand of hair.

As previously indicated, the strand is opened fanwise in the manner shown in Fig. 2 of the drawing, and is wound from its end upon the roller 32 until the roller is disposed closely adjacent to the clamp and is engaged by the yokes 28 and 29. By turning the knurled head 33, the strand of hair can be placed under suitable tension, reverse movement of the roller being prevented by co-operation of the ratchet teeth 30 and 31. The wound strand is then enclosed in a wrapper 36 of any suitable material which may be moistened with a lotion such as is commonly

used in the hair waving art, for example a water solution of borax. The strand of hair on the roller may be first moistened with this lotion. The wound and wrapped strand is then embraced by a heater comprising arcuate members 37 having heating elements 38 disposed therein. The arcuate members are supported on arms 39 pivotally connected at 40 and having insulating handles 41 to facilitate use thereof. Electrical conductors 42 are supported on the arms 39 by insulating blocks 43 and are connected to the heating elements 38 so that heat may be supplied to the wound strand of hair.

As previously indicated the hair may be divided into two or more strands, if desired, and in Fig. 5 of the drawing I have illustrated a clamp comprising members 44 and 45 pivoted at 46 and secured by a cam 47 or similar locking device. The member 44 is provided with two cut-out portions 48, and the member 45 with similar cut-out portions 49. A plate 50, similar to the plate 20 in Fig. 4, and resiliently biased by springs in the same manner, is provided to ensure the firm gripping of the strand of hair.

The essential feature of the method resides, as hereinbefore noted, in the gripping of one or more strands of hair in round or rope form adjacent the scalp of the wearer and the spreading of the strand or strands fanwise before winding the strand or strands upon the roller. This procedure is clearly shown in Fig. 2 of the drawing and results in the production of a wave of superior form and avoids the difficulties heretofore experienced in respect to the passage of steam and/or moisture to the scalp with resultant burns. These and other advantages may be obtained with variations in the procedure and in the apparatus employed, without departing from the invention or sacrificing any of the advantages thereof.

I claim:

1. The method of waving hair upon the human head which comprises dividing the hair into compact strands, the cross-section of each strand being generally circular, firmly securing each strand adjacent the scalp, spreading the hairs of each strand fanwise, winding the hair from its outer ends to a point adjacent the point where the strand is secured, moistening the hair and subjecting it while it is wound to heat sufficient to fix a wave in the hair.

2. The method of waving hair upon the human head which comprises dividing the hair into compact strands, the cross-section of each strand being generally circular, firmly securing a plurality of such strands in alignment adjacent the scalp, spreading the hairs of each strand fanwise, winding the hair from its outer ends to a point adjacent the point where the strands are secured, moistening the hair and subjecting it while it is wound to heat sufficient to fix a wave in the hair.

HARRY BONAT.