

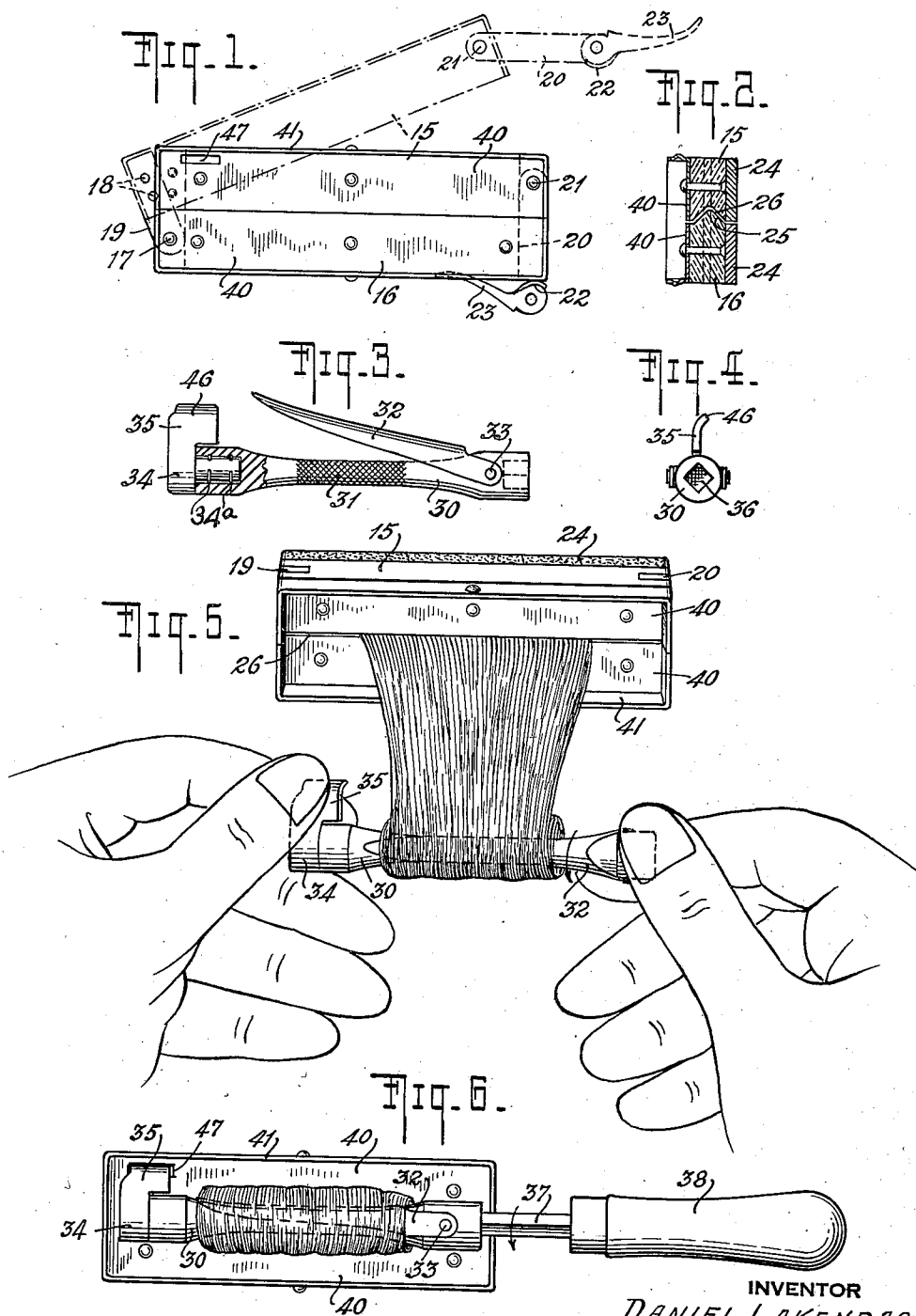
Dec. 1, 1936.

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2,062,893

APPARATUS FOR WAVING HAIR

Original Filed Dec. 14, 1932



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2,062,893

APPARATUS FOR WAVING HAIR

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Original application December 14, 1932, Serial No. 647,128. Divided and this application March 17, 1934, Serial No. 716,047. In Canada December 5, 1933

2 Claims. (Cl. 132—33)

The invention relates to apparatus used in the art of imparting a so-called "permanent wave" to human hair, and more particularly to mechanism designed to facilitate the winding of strands of hair to be waved upon a spindle or curling rod preparatory to the treatment of the hair by exposing it to the action of steam produced by an exothermic composition, for instance, a mixture of certain chemicals. The invention also contemplates the provision of apparatus whereby the heat treatment of the hair is accomplished more effectively than has been possible with devices of the prior art. The present application is a division of my application, Serial No. 647,128, filed December 14, 1932, issued as Patent No. 1,957,046, dated May 1, 1934.

Among the objects of the invention is the simplification and greater effectiveness of the methods used in permanent waving of hair by means of the improved apparatus and devices forming the subject-matter of this specification. The method of imparting permanent waves to the hair to which the present invention relates and which results in a more effective and positive action in the heating treatment of the hair by means of my novel apparatus is particularly designated in the art as the Croquignole method of permanent waving. Particular objects of the present invention are the following:

To facilitate the winding of the hair on the spindle or curling rod; to obtain a more even distribution and proper and even stretching of the hair in the course of its winding on the curling rod; to reduce the time required for the operator to prepare the hair for heat treatment; to reduce the necessity of care and expertness required in effecting the winding of the hair on the curling rod; to make more certain the proper winding of the hair on the curling rod for obtaining the best possible wave as a result of the heat treatment; to make possible the waving of hair practically throughout the length of the tress, including the portion thereof nearest the scalp; and to effect a tightening of the hair wound on the curling rod by a single operation while holding the curling rod in position.

In prior art devices employed in the Croquignole method of waving hair, the strands of hair are clamped at the end of the tress comprising the strands, such clamping being effective to secure the end of the tress firmly upon the curling rod, the curling rod being then held at the two ends thereof by the fingers of the operator and the hair wound on the curling rod by moving the curling rod, at the same time that it is rotated,

towards the scalp. I have found that in performing this operation, unless the operator is an expert and well skilled in performing the operation, the hair that is being wound on the curling rod will not be evenly distributed thereon and the stretching of the hair on the curling rod, an important condition in the determination of the final results, will not be so even as to yield a proper wave after heat treatment. This disadvantage of the devices of the prior art may be attributed to the fact that as the operator is required to manipulate the curling rod while revolving the same, and at the same time move it towards the scalp, by the use of both hands without the ability to hold at least one hand steady so as to guide the curling of the hair on the rod and simultaneously tighten the same on such rod, the hair will become loose along some portion of the rod.

A further disadvantage of the devices of the prior art is that as the curling rod, after the hair has been wound thereon, is supported upon the clamping bracket positioned adjacent to the scalp by means of supporting slides on either side of the clamping structure, the curling rod, when secured on the clamping bracket, is separated from the surface of such clamping bracket, and therefore, from the scalp, by a distance of anywhere from an eighth to a quarter of an inch. Thus, the very portion of the hair tress, i. e., that nearest the scalp, which requires the greatest amount of heat treatment in order to impart thereto a proper wave, is outside the ambit of the heat treating medium. By means of my novel device I am enabled to bring the curling rod in practically contact with the surface of the clamping bracket so that a wave by means of my device can be imparted to the hair to a point practically adjacent to the scalp.

The combined effect of my novel clamping device and my novel curling rod when the latter is secured and placed upon the former is that with a single manipulating operation the curling rod may be held in position at the same time that it is capable of an additional rotation, so as to tighten the hair wound thereon.

A particular embodiment of my invention is illustrated in the accompanying drawing forming part of this specification in which Fig. 1 is a plan view of my novel clamping device showing the same in the closed position of its parts and showing in dotted lines the manner of the separation of the component parts thereof; Fig. 2 is a side elevation, partly in section, of the clamp-

ing device; Fig. 3 is a plan view of the curling rod; Fig. 4 shows the end of the curling rod into which the handle for tightening the curling rod may be inserted; Fig. 5 illustrates the manner of winding the hair to be waved upon the curling rod with the hair clamped within the clamping device; and Fig. 6 shows the curling rod with the hair wound thereon in position upon the surface of the clamping device and the tightening handle inserted into the end of the curling rod to effect a tightening of the hair wound thereon.

Referring now more particularly to the drawing, in which similar reference characters identify similar parts in the several views, 15 designates one of the clamping elements of the clamping device embodying certain features of my invention, the other of said clamping portions, 16, being pivotally connected to the member 15 at 17 through pivots 18 by the link 19. A link 20 is pivotally connected at 21 to the member 15, said link being of a length sufficient to straddle the end of the member 16 when the clamping device is closed. An eccentrically mounted cam 22 is pivotally connected to link 20, said cam having a handle 23 whereby after the members 15 and 16 have been brought together, the handle 23 may be swung around to substantially the position shown in Fig. 1 so as to cause the clamping device to firmly grip the strands of hair making up the tress which is secured between such clamping members.

Each of the clamping members 15 and 16 is preferably provided with a pad of felt 24 on the surfaces thereof facing the scalp. One of the clamping members (16 in the particular embodiment illustrated) is provided with a wedged clamping surface 25 adapted to cooperate, when the clamping members are brought together, with the grooved surface 26 of the other clamping member (15 in the embodiment illustrated). The body of the clamping device is made of a material which is highly heat resistant, for instance, hard rubber or a condensation product, such as a phenolic resin. In applying the portion of the tress of hair to be waved to the clamping device, the portion thereof immediately adjacent the scalp is placed over the side of one of the clamping members and the other clamping member is then brought into position. When the link 20 has been brought to the position where it straddles the end of the clamping member 16 and the handle 23 swung to the position where it effects a tight closure of the two members of the clamping device, the clamping device will firmly grip the strands of hair by means of the wedge surface of one of the members engaging the cooperating groove in the other clamping member.

The curling rod of my apparatus comprises a rod 30 of a configuration illustrated in Fig. 3, the central portion of which is of reduced diameter and is provided with knurled surface 31. A tongue or gripping strip 32 is pivotally mounted at 33 on the rod 30, the other end of such rod being provided with a head 34 rotatable in only one direction by reason of the provision of the one-way spring clutch shown at 34a in Fig. 3 and having a holding member 35. The head 34 is attached to the rod 30 in such a manner that by gripping the member 35 and the end of the rod opposite that at which the head 34 is attached thereto, the curling rod 30 may be rotated in one direction without rotating the head 34 or the member 35. The end of the curling rod 30 opposite from that at which the head 34

is attached is provided with a preferably square aperture 36 into which may be inserted the operative portion 37 of a tightening handle 38 shown in Fig. 6.

The clamping members 15 and 16 are provided with surface lining 40 preferably of metal and having walls extending outwardly from said members throughout their peripheral edges with the exception of their meeting edges, so as to form a tray 41 completely bounding the clamping members when they are in their closed position. Within the confines of this tray is adapted to be positioned a cover member (not shown) which may have any desired configuration having sufficient height to accommodate a roll of a heating unit or an electrical heating element (not shown).

As will be noted from Figs. 3, 4, and 5, the gripping plate 35 of the curling rod has its free end bent slightly at 46 which bent end is adapted to be inserted into the slot 47 in the clamping member 15, when the curling rod has been brought to its position on the surface of such member. The anchoring of the plate 35 within the slot 47 permits the tightening of the hair wound upon the curling rod by giving an additional rotational movement to the rod.

The manner of using my novel hair waving apparatus is as follows:

A tress of hair to be waved is prepared in the usual manner by combing and the tress is clamped between the members 15 and 16 of the clamping device as clearly shown in Fig. 5. The end of the tress is then wound upon the reduced body portion of the curling rod and secured thereon by means of the tongue 32. The operator then grips the clamping rod with two fingers of one hand by means of the gripping plate 35 and imparts a rotation to the rod in the direction of the arrow shown in Fig. 5 with two fingers of the other hand in a manner clearly illustrated in such Fig. 5. The winding of the entire tress of hair upon the curling rod is thus accomplished while the rod is held steady by means of the gripping plate 35 of the head 34.

When substantially the entire tress has been wound upon the curling rod, the latter will be in close proximity to the surface of the clamping device, the end of the gripping plate 35 being inserted into the slot 47 provided in the surface of the clamping member 15, whereby one end of the curling rod is securely anchored upon such clamping member, as will be obvious from the showing in Fig. 6. When the curling rod and the hair wound thereon has thus been firmly secured in position, the operative end 37 of the tool 38 may be inserted into the square aperture 36 in the free end of the curling rod, the latter having imparted thereto an additional movement in order to tighten the winding of the hair thereon.

The hair tress having been thus wound upon the rod and secured upon the protector, is ready for the steaming process.

It will be noted that the clamping member 15 is of slightly greater width than the clamping member 16 in order that the curling rod be centrally located upon the clamping device when it has been anchored thereon in the manner indicated.

While I have described a specific embodiment of my invention, it is to be understood that various modifications therein, particularly in the arrangement and configuration of the several parts

thereof, may be made without departing from my invention.

I claim:

5 1. In a hair waving device, a curling rod, the central portion of which is of reduced diameter, a gripping strip pivotally mounted on said rod near one end thereof and a separately formed head mounted at the other end of said rod and serving as a bearing therefor, the rod relatively
10 to said bearing being rotatable in only one direction during the winding of hair upon said rod, and a holding member, whereby the head may be grasped while rotating the rod.

2. In a hair waving appliance, the combination of a clamping device, a curling rod, a gripping strip pivotally mounted on said rod near one end thereof, a separately formed head mounted at the other end of said rod constituting a bearing member forming a unitary structure removable with said rod, and within which said rod is rotatable in only one direction during the winding of hair upon said rod, said head having also a holding member for anchoring the
10 same upon the clamping device.

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