This Invention relates to an improved apparatus for waving hair. It is an object of the invention to provide an improved apparatus for waving hair which offers a maximum degree of safety in that any risk of a person under treatment being burned is eliminated. It is a further object of the invention to provide an improved apparatus for waving hair which may be carried out at any time and at any place and which is not dependent on the availability of a source of electric power. It is a further object to provide an apparatus which does not require the use of spoons, casettes or sachets. It is another object to avoid the inconvenience and discomfort caused to a person under treatment by having heaters attached to or suspended from a supporting stand. It is a still further object of the invention to provide apparatus for carrying out the above method which is of simple construction, of low cost in manufacture and which enables a tress of hair of any length, for example from 2½" to 25" long, to be waved with equal ease. It is a still further object of the invention to provide apparatus which may be easily and simply applied to, or removed from, the head and which, when in use, allows of complete freedom of movement on the part of the person under treatment. It is a still further object of the invention to provide apparatus for waving hair which allows of the inspection of the hair under treatment to be easily effected at any time during the operation.

With the above and other objects in view, the invention resides in a method of waving hair comprising helically winding the hair on a former, arranging an insulating shield between the head of the person under treatment and the adjacent end of the said former, the said shield including a base and upstanding side portions and said base having an aperture therein into which said hair is passed, whereby the said shield is freely supported on said hair, preheating a heating element, then applying to the said former said heating element, so that said element lies against said shield, and impregnating said hair with a waving lotion at any stage of the process. The invention further resides in the provision of apparatus for carrying out the above method.

In carrying out the invention, a tress of hair may be helically wound on the former either from the point towards the root or vice versa although the invention is particularly advantageous when used in connection with the latter mode which is usually known as the root-wind method.

The heating element gripping members, which are made of any suitable material, preferably of a light character such as aluminium, may be urged towards one another by means of two strips of metal, one secured to each of the said gripping members, held together by means of a surrounding spring strip, similar to the well known spring clip.

The protective guard or shield is preferably formed of sheet metal and is insulated on the side adapted to bear against the face or scalp of the user with a covering of cork and/or asbestos or other suitable material and with spaced strips of 15 cork, asbestos or other insulating material on the inner side or face to prevent the heating element from contacting therewith and imparting heat thereto.

If desired a loop of tapes may be passed around: the root of a collected tress of hair, i.e., under the shield and passed to the opposite side of the head; the person under treatment may then pull on the free end of the tape so relieving the tress of hair of the weight of the shield and gripping elements attached thereto.

In order that the invention may be well understood, I will now describe some forms of apparatus by way of examples and with reference to the accompanying drawing, in which:—

Figure 1 is a side elevation of one form of heating element.

Figure 2 is a section on the line A—A of Figure 1, looking in the direction of the arrow.

Figure 3 is a perspective view of a protective guard or shield.

Figure 4 is an end view thereof.

Figure 5 is an end elevation, showing the parts in position in use, and

Figure 6 is a side elevation of a modified form of gripping element.

Referring to Figures 1 and 2, the heating element comprises two substantially rectangular metal blocks 1, 1, having grooves or channels 2, 2, formed along one edge thereof and forming gripping members for the hair former. These metal blocks, 1, 1, have flat bases or lower edges but are made inclined on their upper faces. To each of these inclined upper faces is secured, by means of bolts and nuts 3, 3, an upstanding metal strip 4, having central handle portions 5, 5, and side portions 6, 6, adapted to be held together by means of surrounding spring strips 7, 7. Balls 8, 8, may be provided between the portions 6, 6.
to give an easy bearing or rotating surface to the said ends 5, 5.

Referring now to Figures 3 and 4, the protective shield comprises a base 8 of sheet metal, formed near one end thereof with a hook-like slot 10 and having upstanding flanges 11, 11, extending over rather more than half the length thereof. The upper part of the outside face of the strip 9 is covered with asbestos 12, and the lower part is covered with cork 13 the inner faces of said base and flanges being provided with spaced strips of asbestos to prevent the gripping blocks 1, 1, from contacting with the metal base 9 when the latter is in position on the head, as shown in Figure 5.

In carrying out the method the strands of hair 15 to be curled or waved are first clamped, then helically wound in accordance with the root wind method around the former 14 and then again wetted with the waving or setting lotion. Greaseproof paper 16 is now wound around the treated hair to at least four thicknesses the end nearest the root of the hair being left open. The hair is not wound on to the former 14 right up to the head; sufficient room being left for the insertion of a pair of rubber discs or washers, for instance a crepe rubber disc 17 and a disc of rubber 18, formed with diagonal slots 19, as shown in Figure 5, to enable them to be passed over the strands of hair 15 and to bear against the scalp of the user. The said rubber discs are preferably stuck together so that they may be simultaneously applied or removed.

A further damping may, if desired, be effected, before the application of the grease-proof paper, by winding a moistened strip of suitable material such as lint (not shown) around the hair. This is particularly advantageous in the case of white hair as it prevents it from becoming discoloured during the waving operation.

The slotted shield 9 is then hooked on to the root of the coiled strand of hair so as to lie between the aforesaid rubber discs 17 and 18 and the former 14. The gripping blocks 1, 1, of the heating element, which is suitably preheated by any suitable or available means, such as a gas flame, an electric hot plate or a fire, are now applied to the former 14 so as to surround it and impart its heat to the strands of hair. The heating element, due to its weight which, though as light as possible, is necessarily appreciable, falls against the face of the shield 9, taking up the position, relative to the said shield 9, shown in Figure 5. The dampness of the hair produces steaming, which continues for some three to five minutes until the moisture has evaporated, by which time the temperature of the heating element blocks 1, 1, will have dropped sufficiently to prevent any scorching of the hair.

In the modification of the invention, shown in Figure 6 instead of the base of the gripping members 1, 1, of the heating element bearing against the shield 9 when in operative position, one end of one of the members 1 is caused to rest thereagainst. For this purpose, the said member 1 is elongated as indicated at 20 and the shield 9 is consequently made less wide than in the form shown in Figure 5 as it has to accommodate the said elongated end 20 only.

In a further modification of the invention, the heating element blocks may be arranged in a manner similar to that shown in Figures 1, 2, and 5 but the handles 5, 5, instead of being upstanding in the positions shown in the drawing may be bent through an angle of 90° or less.

I claim:

1. Hair waving apparatus comprising a former of substantially cylindrical shape, a preheatable heating element of the spring clip type but provided with a flat base, and a channeled shield having a flat base adapted to contact with the flat base of said heating element and a hook-like aperture adapted to be passed over the root of the tress of the hair to be treated.

2. Hair waving apparatus comprising a former upon which the hair to be treated is wound from the root towards the end, a preheatable spring-actuated heating member including a pair of jaws adapted to grip the coiled hair, said jaws having flat bases, and a shield having a flat base adapted to contact with the flat-based heating elements, side walls to prevent said element slipping from said shield, and a hook-like aperture adapted to be passed over the root of the tress of the hair to be treated.

3. In hair waving apparatus of the type described, a shield having a flat base, upstanding side walls, and a hook-like slot at one end for attaching said shield to the tress of hair to be treated.

4. In hair waving apparatus of the type described, a shield having a flat base, upstanding side walls, insulating material applied to said base and side walls, and a hook-like aperture provided in the base of said shield at a point near one end thereof.

5. Hair waving apparatus comprising a former of substantially cylindrical shape, a heating element comprising preheatable blocks adapted to grip the hair to be treated and provided with flat bases, and a shield having a flat base and side walls serving to support said heating element.

6. Hair waving apparatus comprising a former of substantially cylindrical shape, a heating element comprising a pair of spring actuated preheatable blocks adapted to grip the hair to be treated and provided with flat bases, and a shield having a flat base and side walls serving to support said heating element and former in a position parallel with said base of said shield.

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