C. NESSLER.

APPARATUS FOR WAVING NATURAL HAIR ON THE HEAD.

APPLICATION FILED AUG. 6, 1909.

1,052,166. Patented Feb. 4, 1913.
To all whom it may concern:

Be it known that I, CHARLES NESSLER, trading as C. Nestlé & Co., of 245 Oxford Street Circus, London, W., England, have invented a new or Improved Apparatus for Waving Natural Hair on the Head, of which the following is a specification.

My invention relates to improvements in apparatus designed for carrying out processes for waving natural hair on the head, such for example as the process specified in the specification accompanying my divisional application filed December 31st, 1909, Serial No. 535,594, or such for example as the known process mentioned therein.

My invention is illustrated in the accompanying drawings in which,

Figure 1 is an elevation showing the apparatus in use. Fig. 2 is a detail view of one of the guiding hooks. Fig. 3 is a sectional plan on the line a—b of Fig. 1. Fig. 4 is a section illustrating my improvements in the heater. Fig. 5 is a section similar to Fig. 4 but having the hair curler with the hair applied thereto inserted in the heater.

My invention embraces a special form of electric heater and means for suspending it in any desired position in relation to the position of the head of the subject.

In order that my invention may be readily understood I shall describe it as applied in carrying out the process of hair waving specified in the specification accompanying my application for Letters Patent hereinbefore referred to. In this process a curler 13 shown in dotted lines in Fig. 5 of the ordinary kind is tied to a portion 14 of the hair about as thick as the curler by a ligature 17. The hair is then curled around the curler and its end tied down to the curler by another ligature 16 and a strip 15 of flannel or other similar absorbing material moistened with water is wrapped helically over the hair on the curler so as to completely cover the said hair. A tube 18 (of compressed paper, asbestos or other suitable material) closed at one end 20 (for example by tying as shown) is then taken and a quantity of suitable lotion is poured thereinto and allowed to collect in the closed end thereof. The tube is then placed over the hair on the curler so as to cover the same and the open end 22 is tied down on to the hair. A heating iron is then applied.

My improved form of heater is shown separately in section in Fig. 4. The electrical details of this form as part of my invention and no attempt has been made to illustrate these.

My invention consists in part in providing an orifice 12 in the handle end of the heater for the purpose of allowing the steam and gases to escape when the heater is in use as illustrated in Fig. 1. The steam and gases pass out of the open end of the compressed paper or like tube which incloses the hair on the curler and then pass between the outer surface of the tube and the inner surface of the heater until they reach the orifice 12. In some cases the steam and gases may pass through the material of the tube or through the tied-up end 20. Such an orifice as 12 has not been provided in heaters of this kind hitherto and the steam and gases having their only exit from the orifice next to the subject's head have been apt to cause burns on the scalp.

Another feature of my heater is the tapered shape of the end 21. Heaters have hitherto been made with flat ends and unless such heaters are held with the end quite flush with the head the hair will not be completely embraced by the heater. This is a disadvantage as it is frequently more convenient to hold the heater in a position inclined with respect to the head in which position, with the known flat ended heater, the end cannot be flush with the head and consequently the hair on the curler is not completely embraced by the heater. My form of heater however can be held in any convenient position inclined with respect to the head while still completely embracing the hair on the curler right up to the head. The inner ends of the heater and the tube are the ends which lie adjacent the head when the apparatus is applied to the hair on the head.

My heater is suspended by a cord 2 and counter-balanced by a weight 3 (see Fig. 1). In order that the heater may be suspended in any desired position, I employ a bracket 4 depending let us say from the ceiling and provided with arms 5 pivoted at 6 so that they can move angularly in a horizontal plane. These arms are shown in two posi-
tions in plan, Fig. 3, in one position in full lines and in another position in dotted lines. The said arms are preferably formed of hollow tubes and provided with holes 7 of "keyhole" form as shown in Fig. 1, so that a hook 8 of the form shown in Fig. 2 may be easily and rapidly attached at any position along the arms. By means of the apparatus described it will be seen that the heater may be suspended in any desired position relatively to the head of the subject. Thus it may be raised or lowered, it may be suspended at different distances from the center of the bracket by placing the guiding hook in different holes and placing the suspending cord in the hook (see the dotted line 2' in Fig. 1) and it may be moved backward or forward by rotating the arm about its pivot. Thus assuming the subject to be seated beneath the bracket the heater can be suspended at any desired position relatively to the head so that when in use it is quite unnecessary for an operator to hold it and further no strain is thrown upon the head or hair of the subject. I usually prefer to employ two suspended heaters one on each side of the bracket and more may be employed if desired.

The electrical connection with the heater is made by means of a twin flexible conductor 9 provided with a contact plug or adapter 10 which is adapted to engage a socket 11 attached to the bracket.

Instead of the removable guide hook 8 and the series of holes 7, fixed hooks may be provided at intervals along the arms 5.

Having thus described my invention what I claim and desire to secure by Letters Patent is:

1. In apparatus for waving hair, a curler to which the hair of the head of the subject is applied, a heater adapted to receive the curler with the hair thereon and provided at its outer end with a handle for manipulating the heater, and a counter-balance connected with said heater at a point between the handle and the end which is adjacent the head to relieve the hair from strain.

2. In apparatus for waving hair, the combination of a curler, a tube adapted to receive the curler with the hair thereon and cover the same, and a heater provided with a handle and having its outer end closed and provided near such end with an orifice and having its inner end which receives the curler and tube tapered upon its exterior, whereby the heater may be inclined with respect to the head of the subject while embracing the hair on the curler close up to the head.

3. In apparatus for waving hair, the combination of a curler, a tubular heater, a tube closed at one end for receiving said curler with the hair thereon and adapted to be inserted in said heater with the closed end outermost, the said heater being provided at its outer end with a vent for the gases issuing from the inner end of said curler receiving tube, substantially as described.

4. In apparatus for waving hair, the combination of a curler, an absorbent material for enveloping the curler with the hair thereon, a tube closed at one end and adapted to receive the curler with the hair and absorbent material and cover the same, and a heater within which said tube with its contents may be inserted.

5. In apparatus for waving hair, the combination of a curler, a tube closed at its outer end and adapted to receive the curler with the hair thereon, means for binding said tube at or near its open end around the curled hair, and a heater within which said tube with its contents may be inserted.

6. In apparatus for waving hair, the combination of a curler, a tubular heater, a tube closed at one end for receiving said curler with the hair thereon and adapted to be inserted in said heater with the closed end outermost, means for loosely binding the open end of said tube about the hair, the said heater being provided at its outer end with a vent for the gases issuing from the inner end of said curler receiving tube, substantially as described.

In witness whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES NESSLER.

Witnesses:
B. SPARKS,
G. ALDWORTH.