Sept. 12, 1933. W. S. LEWIS 1,927,001

SOCKET FOR PERMANENTLY WAVING HAIR

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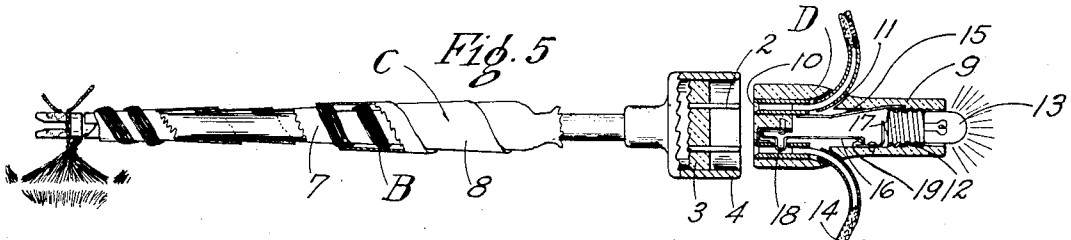


Fig. 5

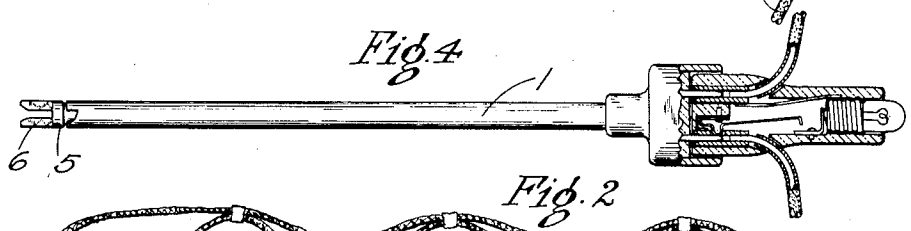


Fig. 4

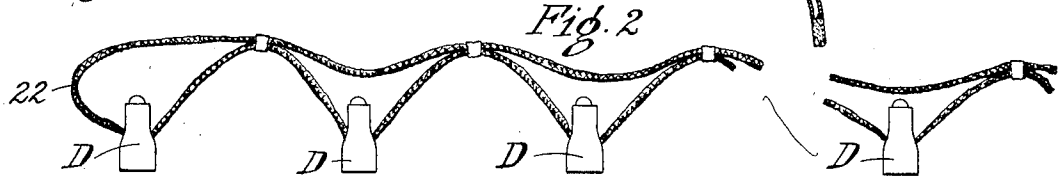


Fig. 2

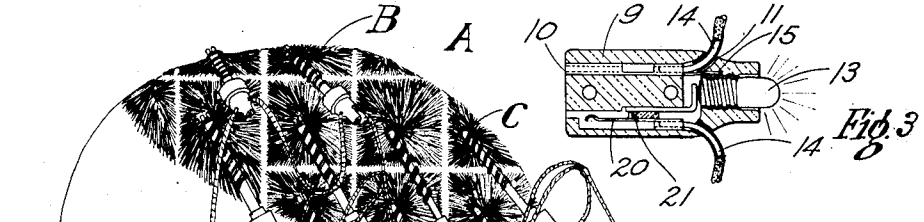


Fig. 3

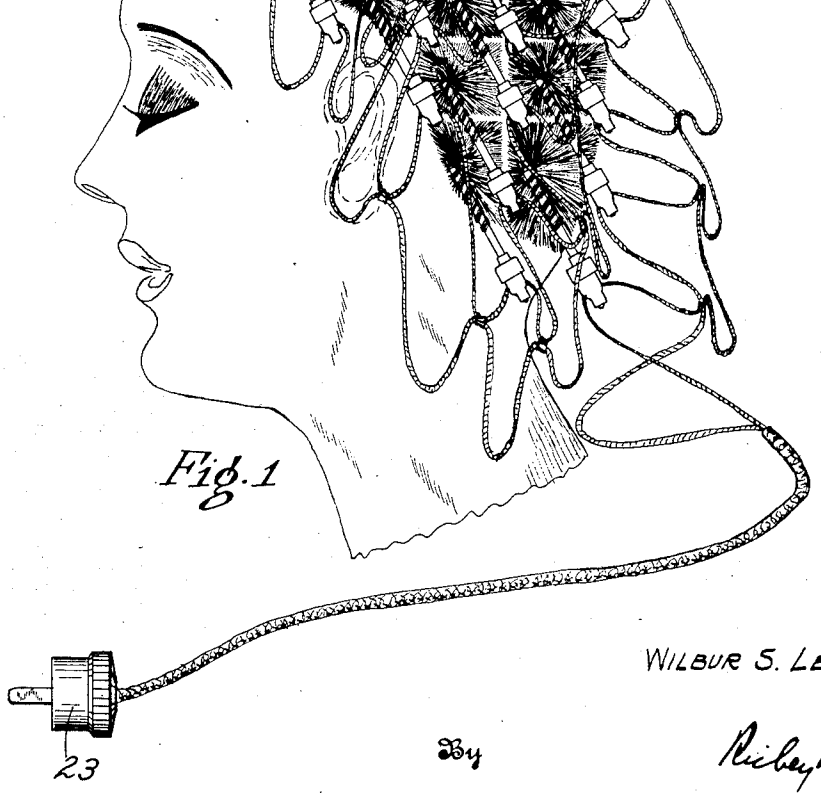


Fig. 1

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SOCKET FOR PERMANENTLY WAVING HAIR

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Serial No. 394,203

3 Claims. (Cl. 219—24)

This invention relates to the art of hair waving and particularly involves the provision of apparatus for hooking up a plurality of curling units in series.

The proposition of operating the heating or curling units at a certain definite temperature is one of primary importance in this art in view of the liability of damage or injury to the hair and head of a person if excessively high temperatures are set up. This factor dictates that any circuit connecting a variable number of heating units in series must have a constant resistance regardless of the number of curlers used at any one time.

This invention contemplates the provision of equipment including a circuit comprising a certain definite number of electrical resistance elements together with means for introducing one or more curling units into the circuit in place of a corresponding number of the resistance elements which are cut out of the circuit as the heaters are brought in.

More specifically, I propose to connect in series a suitable number of electric light bulbs, each of which has the same resistance as the heating element of a curling unit. With each of the lights is associated a plug device for plugging in a curler at the light and at the same time cutting out the latter. An important feature of the invention resides in this particular device as it is highly desirable to simplify as much as possible the operations of plugging in and disconnecting the curling units.

These and other more detailed objects and advantages will in part become apparent and in part be hereinafter stated as the description of the invention proceeds. For a full and more complete understanding thereof, reference may be had to the following description and accompanying drawing, wherein

Figure 1 is a side view of the head of a person with a group of waving units applied thereto in accordance with this invention.

Figure 2 is a showing, somewhat diagrammatic, of the manner of hooking up the light bulbs in a series circuit.

Figure 3 is a sectional illustration bringing out the construction of one form of plug being employed in conjunction with each light.

Figure 4 is a side view, partly in elevation and partly in section of a waving unit showing the connection of the latter with one of the light plug-in assemblies, and

Figure 5 is a showing of a waving unit with hair wound thereon and prior to the plugging in of the former. In this view the connecting device between the heater and light plug are shown in section.

Referring now to the drawing and particularly Figure 1, the head of a person whose hair is being permanently waved is shown and designated A, with the hair referred to as B. In the waving of the hair B a tuft or bunch of the latter is wound on one of the waving units C and affected by the latter in a manner to be hereinafter more fully set out. The units C are connected together and with a current supply by the equipment hereof to provide the heat necessary to the waving operations.

The heating units C may be of any preferred construction providing terminals for plugging in to the circuit. In the present instance one of these units C comprises a tubular member 1 which houses an electric resistance heating element (not shown). The extremities of the latter take the form of, or are connected to terminals 2 which are mounted in an insulating block 3 in a socket member 4 which is carried by the tubular member 1. The other end of the latter is provided with the construction shown at 5 for tightening the hair on the curling rod 1. This construction includes wrench engaging means 6 which are gripped by a tool as the member 1 is turned to tightly wind the hair B.

Before the hair is wound on the rod 1 a layer of treated fabric such as flannel impregnated with proper chemicals is first wrapped about the rod. This fabric is usually dipped in water just before it is wrapped. In Figure 5 this layer of material is shown and designated 7. The hair is wound on the rod over the layer 7 and a casing 8, preferably of aluminum or other metallic foil is then placed over the wound hair. This casing serves to hold in the heat and steam generated by the heat to properly affect the hair.

The various waving units C which are employed at any one time are connected to the current supply by plugging into the circuit comprising the connected lights D. Obvious variations in the construction of these parts is apparent if the device provided is operable to automatically cut out the light as the unit C is plugged in and connect the light as the unit C is disconnected.

One form of the member D is shown in Figures 4 and 5 and comprises a main body member 9 of hollow construction having a closed end with openings 10 therein. The walls of the member 9 are provided with openings 11 which align with the openings 10 in the end portion. The open end of the body member 9 is provided with a

screw threaded socket which receives a light bulb 13.

Conductors 14 of tubular construction extend through the openings 10 and 11 and have their extremities anchored in the end portion of the member 9. These conductors are designed to receive the terminals 2 to set up an electrical connection between the heating element and the current supplied by the circuit. A conductor 15 extends from the socket 12 to one of the conductors 14 while a contact switch 16 connects the other conductor 14 with the center contact 17 of the light bulb. The switch 16 includes a cam projection 18 which is engaged by one of the terminals 2 coincident with plugging in. This action affects the switch to break the circuit at 19.

The operation of the above construction is briefly described by noting that when the waving unit is disconnected and the circuit connected with a current supply the current passes through one of the conductors 14 by the medium of switch 16 and contact 17 to the light bulb 13. The current's passage through the bulb 13 illuminates the latter. The circuit is completed by the socket 12 and conductor 15 which extends back to the other conductor 14. When a waving unit C is plugged in the engagement of one of the terminals 2 breaks the circuit to the light bulb and the current then passes through the conductors 14 and heating element of the waving unit. When the latter is withdrawn the switch 16 again puts the bulb 13 in circuit.

A slightly modified form of switch is shown in Figure 3. In this embodiment the terminal 2 engages the switch element 20 to break the circuit to the bulb at 21. The switch member 20 then acts as a conductor between the terminal 2 and the tubular conductor 14.

The conductors 14 are connected to properly insulated wires 22 which hook up the various light bulb assemblies and connect them in series with a conventional current supply through the medium of plug 23.

It is obvious that regardless of the number of waving units C actually employed at any one time, the resistance offered by the circuit is constant as each bulb 13 counterbalances the resistance of one of the heating elements.

While a preferred specific embodiment of the invention is above set forth, it is to be understood that I am not to be limited to the exact constructions illustrated and described because various modifications of these details may be made in putting the invention into practice within the purview of the appended claims.

What I claim is:

1. In hair waving apparatus the combination with a waving unit having an electrical heating element, of a light bulb, a light bulb socket assembly, means for connecting said assembly in an electric circuit, a switch in said assembly connecting the light bulb in the circuit when in one position, said switch having cam operating means, and a terminal associated with the heating element, adapted to engage the cam means to operate the switch and disconnect the light bulb from the circuit and connect the heating element therewith.

2. In hair waving apparatus, the combination with a waving unit having an electrical heating element, of a light bulb, a light bulb socket assembly, means for connecting said assembly in an electric circuit, means for connecting the heating element to the socket assembly and simultaneously cutting the light bulb out of said circuit, said means including terminals on the heating element and tubular members in the socket assembly, and conductive connections between said tubular members and the light bulb.

3. In hair waving apparatus the combination of an electric circuit including a light bulb, a socket member for said bulb adapted to receive an electric heating element, and means within said socket for cutting said electric light bulb out of said circuit when a heating element is connected to said socket member and connecting said bulb into said circuit when said heating element is removed from said socket.

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