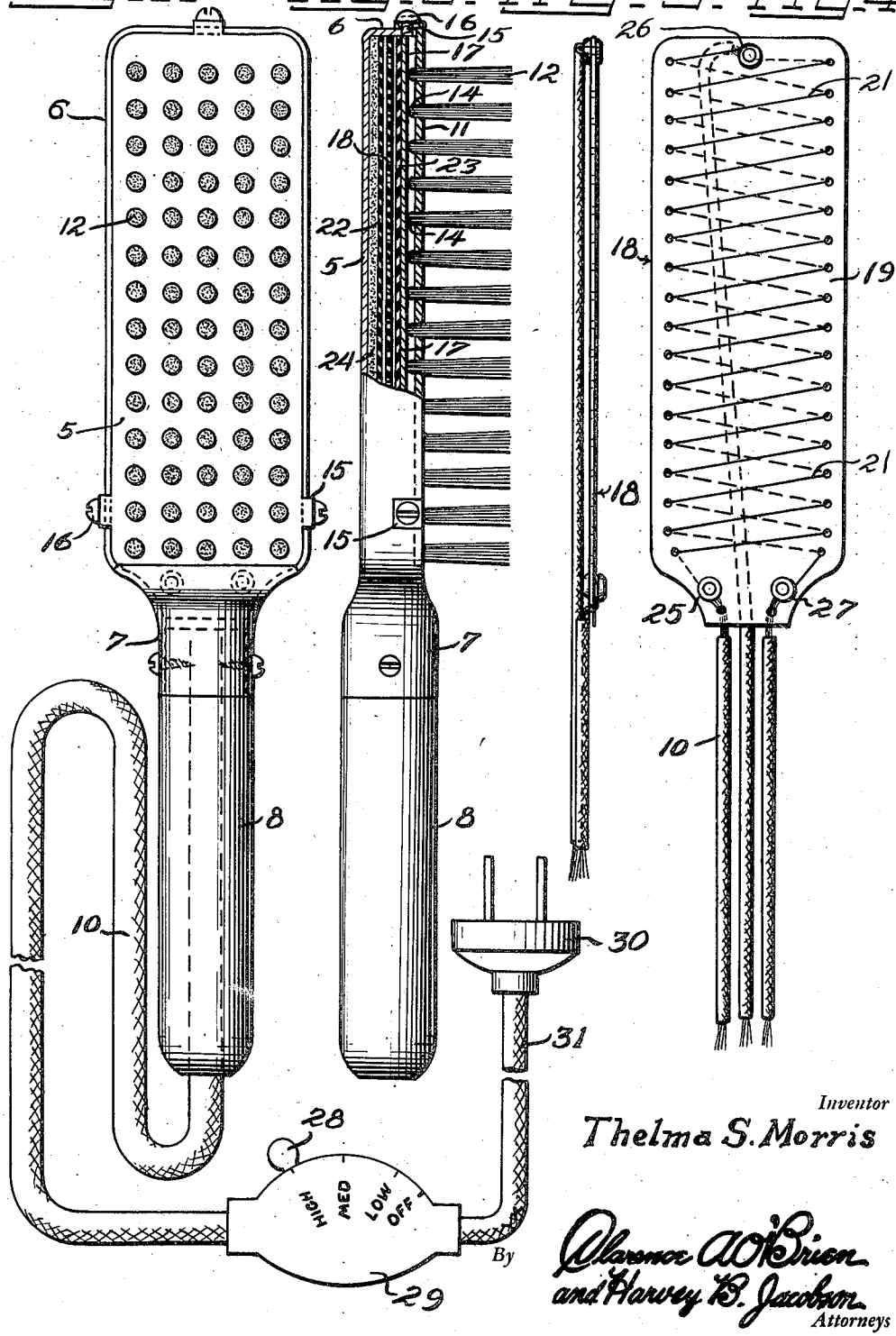
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ELECTRIC HAIRBRUSH

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Fig. 1. Fig. 2. Fig. 3. Fig. 4.



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ELECTRIC HAIRBRUSH

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2 Claims. (Cl. 219—21)

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This invention has for its object to provide electrically heated hairbrushes of simple and effective design which may be used for the professional treatment of hair or for individual use.

To carry the invention into effect, a tray or trough-like brush holder provided with a handle is used which houses the entire equipment. This equipment consists in a metal plate from which tufts of metallic bristles project forwardly, while the closed ends of the tufts of metallic bristles project on the other side of the plate for a short distance. A second metal plate is applied against the closed projecting ends of the tufts and this metal plate is heated by means of an electric heater arranged in the flat space behind the metal plate in the brush holder. The bristles on the front are thus heated by heat transmission from behind and their temperature is equalized by the metal plates.

The invention will be more readily understood from the following specific description, referring to the drawing which shows one embodiment thereof. It is, however, to be understood that this embodiment merely is intended to show an example serving as a base for the explanation of the invention.

The invention is illustrated in the accompanying drawing in which—

Figure 1 is an elevational front view of the brush when viewed from the under side carrying the bristles,

Figure 2 is an elevational side view, and

Figures 3 and 4 are a front view and a side view, respectively, of the heater.

The brush comprises the brush holder 5 which preferably has the form of a trough or tray with upturned side flanges 6, as shown in Figure 2. This brush holder may be made of insulating material or of metal. One of its smaller sides tapers off into a sleeve 7 into which the wooden handle 8 is inserted. The handle is hollow and through its central opening the cables 10 for the heater may pass.

While the brush holder forms the back of the brush, the front side is formed by a front metal plate 11, preferably of aluminum, which carries rows of tufts 12 of bristles. The number of tufts in each row and the number of rows is selected according to the size and to the desired density of the bristles 12, the number shown being merely an example.

The bristles are made of very fine bronze or brass wire and the closed ends 14 of the tufts are closely behind the metal plate 11 in which they are fastened in the conventional way.

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The front plate 11 is provided with ears 15 which may be screwed to the upturned flanges 6 by means of small screws 16.

Behind the front plate 11 carrying the tufts 12 of bronze wire bristles, another aluminum plate 17 is arranged which bears on the tufts and is in close contact with them to transmit heat to them.

A heater 18 consisting of a sheet of mica 19 with resistance wire 21 wound across it is inserted into the hollow space between the trough-shaped holder 5 and the aluminum plate 17. To insulate the parts against electrical contact, mica sheets 22, 23 are arranged above and below the heater, insulating the front and back plates from contact with current carrying parts. It is also preferable to insert an asbestos sheet 24 on the back of the heater to insulate the brush holder 5 against heat transmission.

The heater 18 may be provided with three terminal posts 25, 26, 27, as shown, connected with three cables 10 which are passing through the hollow handle 8 to the outside and are connected with the switch 29 which, by means of a handle 28, permits cutting in or out part of the resistance wire 21 and to connect the parts either in parallel or in series. The cable 31 leading from the switch is connected with the usual wall plug 30.

In operation, when the heater is switched in, the heat is transmitted to the aluminum plate 17 and from there to the ends 14 of the bristles 12. The bristles are therefore heated. The aluminum plate 11 will equalize the temperature so that all the tufts have about the same temperature regardless of their contact with plate 17. Moreover, the aluminum plate will contribute to the effect by radiation.

The heated bristles are used for hair treatments of all kinds, for grooming unruly hair, and the like.

Changes of the structural details do not in any way involve a departure from the invention.

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

1. A hairbrush comprising a metal plate, tufts of metallic bristles held in said plate with their closed ends projecting therefrom, a metallic heat transmission plate applied against and in operative heat transmission contact with the said projecting closed ends of the metallic bristle tufts, an electric resistance wire heater, mica sheets on both sides thereof, one of said sheets being in direct contact with the metallic heat

transmission plate, and means to supply said heater with electric current.

2. A hairbrush comprising a metal plate, tufts of metallic bristles held in said plate with their closed ends projecting therefrom, a metallic heat transmission plate applied against and in operative heat transmission contact with the said projecting closed ends of the metallic bristle tufts, an electric resistance wire heater, mica sheets on both sides thereof, one of said sheets being in direct contact with the metallic heat transmission plate, a tray-shaped brush holder provided with a handle holding the entire aforesaid installation, and means to supply said heater with electric current.

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