

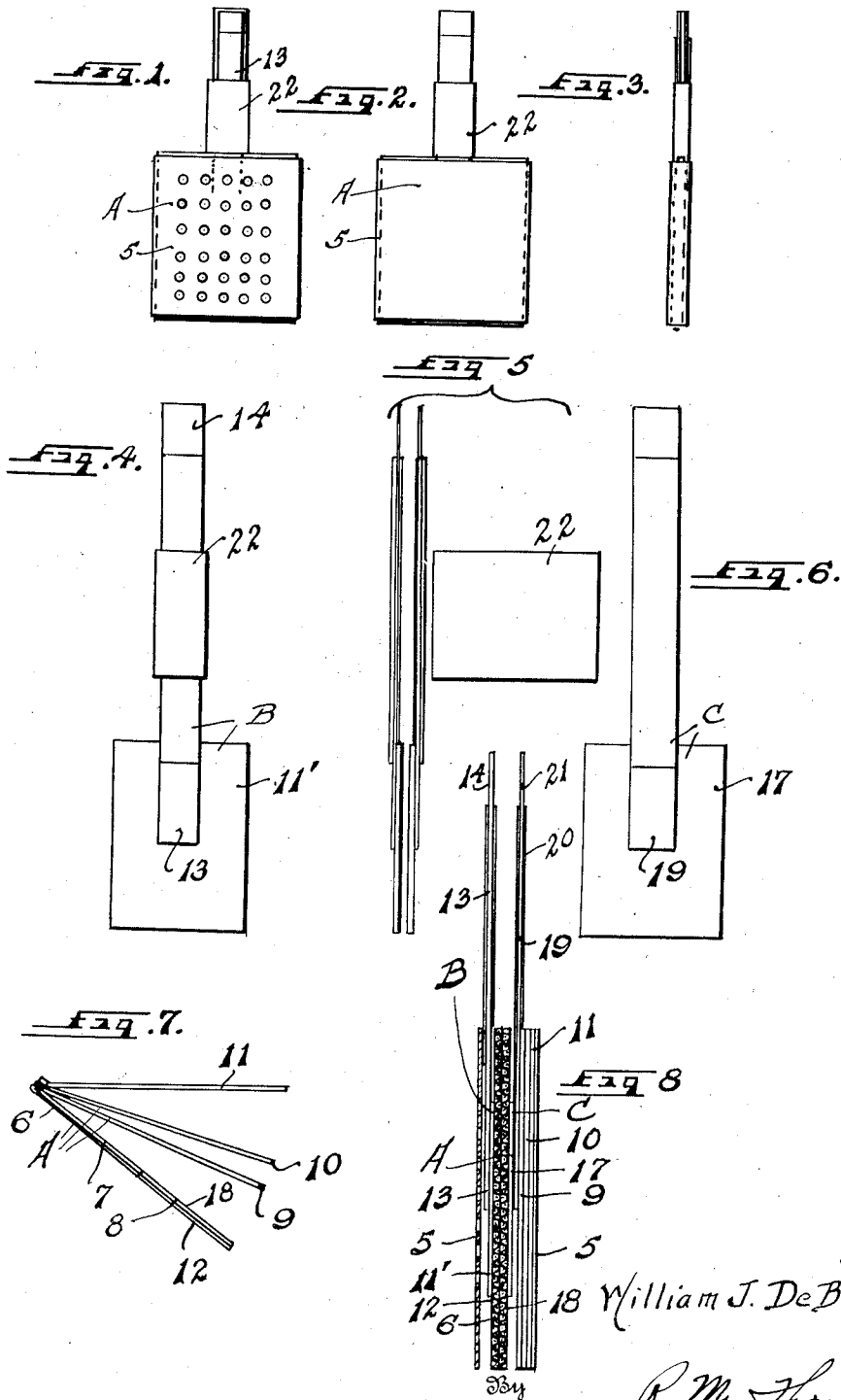
April 13, 1943.

W. J. DE BRY, JR

2,316,505

HEATER PAD

Filed Aug. 14, 1941



Inventor.

William J. DeBry Jr.

R. M. Thomas

Attorney

UNITED STATES PATENT OFFICE

2,316,505

HEATER PAD

William J. De Bry, Jr., Salt Lake City, Utah

Application August 14, 1941, Serial No. 406,825

2 Claims. (Cl. 219—24)

My invention relates to heater pads for timing machines utilized for controlling the period of time for giving permanent waves in the human hair and has for its object to provide a pad having various thicknesses of fabric, paper and metal foil, with separate insulated connector strips of foil connected to the metal foil so that a timing machine connected to the strips of foil will be shut off when the pad has reached a degree of dryness which will break any electrical circuit through the metal foil contacts in the pad.

A further object is to provide a heater control pad which is made of fabric sewed to moisture-holding and separated metal foil contacts secured in the pads with insulated foil connector strips connecting each foil with a permanent waving control machine, the action of the machine being controlled by the amount of moisture in the pad carrying sufficient electrical current to control the machine, the voltage being too low to be felt by the human hand or body.

These objects I accomplish with the device illustrated in the accompanying drawing in which similar numerals and letters of reference indicate like parts throughout the several views and as described in the specification forming a part of this application and pointed out in the appended claims.

In the drawing:

Figure 1 is a plan view of one side of the pad.

Figure 2 is a view of the reverse side of the pad.

Figure 3 is an edge view of the pad.

Figure 4 is an enlarged view of the contacts removed from the pad.

Figure 5 is an exploded edge view of the contacts of Figure 4.

Figure 6 is a view of the reverse side contact to that shown in Figure 4.

Figure 7 is an end view of the pad with the contacts removed therefrom the degree of thickness of the individual pieces of fabric and other material in the pad being exaggerated for clearness.

Figure 8 is an enlarged vertical section through the pad foil contacts and foil connector strips to show their relative positions.

In the drawing I have shown the pad as A, being completely enclosed in a waxed paper 5. The pad itself consists of a sheet of fabric 6 bent medially and sewed together in seams 7 and 8 forming two faces 12 and 13 to make the pad close fitting but with sufficient thickness to take the necessary curling solution. Two single

sheets of waxed paper 9 and 10 and a sheet of metal foil 11 all the same size as the half cloth are secured to the pad by sewing them to the medial fold of the fabric before it is folded and sewed in the longitudinal seams 7 and 8.

The contacts are made as B and C and the contact B consists of a rectangular sheet of metal foil 11' adhered to the inner sheet 9 of the waxed paper on one flat surface and the abutting face 12 of the fabric 6. A narrow strip of connector foil 13 is adhered to the side of the sheet 11' and extends beyond the top or end of the entire pad A. The area of this connector foil 13 beyond the top of the pad is completely enclosed by a coating of non-conductor material with the end 14 left bare. The other contact C is made of a sheet of metal foil 17 similar in size and form to that of the sheet 11 and this foil 17 is adhered to the outside face 13 side of the fabric 6, with the outer surface of the foil 17 adhered to the waxed paper 9. The pad is formed and the sheet 5 is placed around it with the ends adhered together. The contact connector strip 19 is adhered to the foil 17 extending parallel to the connector strip 13 and this strip 19 is also covered with insulation covering 20 leaving the end 21 exposed or bare. These two exposed ends 14 and 21 are left to attach the clips connecting the waving machine with the strips. Thus the strips and their foil ends provide the means for controlling the machine. The two strips are held together by a band 22 of non-conducting material to hold the strips properly placed for use but prevent their causing a short circuit in the system. The stitches of the seams 7 and 8 provided means for the solution to pass through the pads freely so that the contact foils will be properly connected when the solution is in the pad to make the proper electrical connection. The circuit passing through the pad is so slight that there is never any danger to the client receiving the wave. These pads are what is called master pads and only one is used at a time to control the machine the balance of the pads are of the usual form for permanent waves.

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

1. A solution control pad for permanent waving machines comprising a single sheet of fabric bent back upon itself to form two thicknesses and sewed together to form a unitary sheet having thread openings therethrough to permit quick absorption and passage of electrolyte and waving solution therethrough; separate sheets of metal

foil carried one on each side of said fabric; narrow metal foil contacts extending from without the pad in one end into fixed electrical contact with said sheets of metal foil, said narrow contacts being insulated from each other but held 5 firmly adjacent each other over their greater portion of length; a sheet of waxed paper adjacent one side of said unitary fabric sheet covering the contact on that side; and an outside sheet of metal foil covering the entire outside 10

area of said waxed paper and the entire area of one side of said pad said outside foil to be encircled by the heating element of the waving machine to evenly distribute the heat over the entire area of the pad.

2. A device as set out in claim 1 including a complete encircling of the pad by a sheet of wax paper perforate on that side adjacent the hair.

WILLIAM J. DE BRY, JR.