

May 3, 1932.

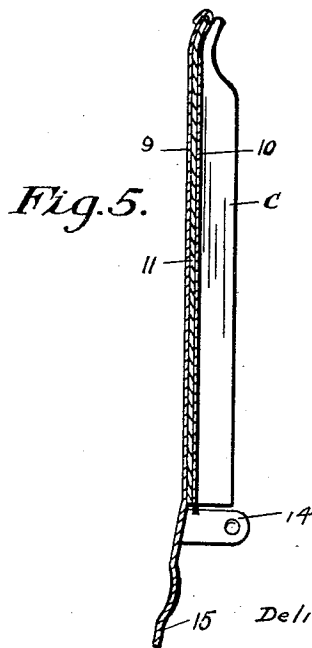
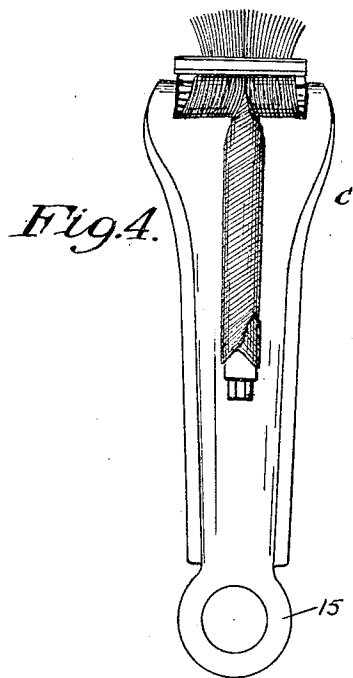
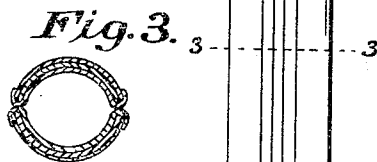
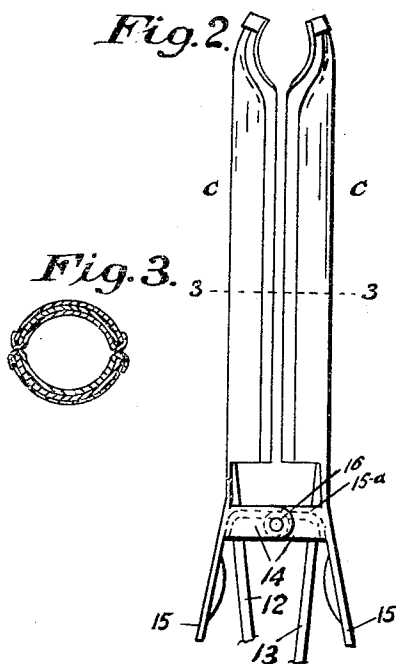
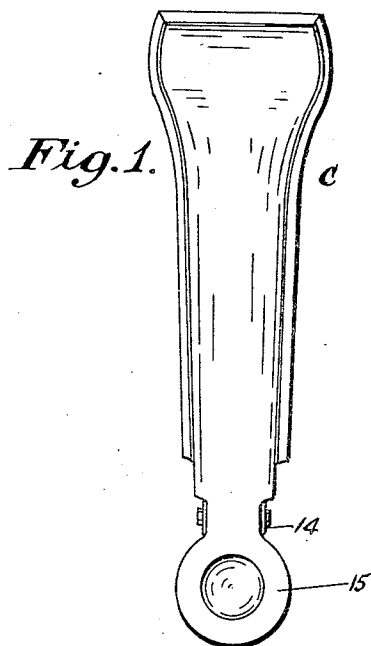
D. F. MCGINNIS

1,856,494

HAIR WAVING DEVICE

Filed Oct. 15, 1930

3 Sheets-Sheet 1



Inventor

Delia F. McGinnis

By

R. M. Thomas

Attorney

May 3, 1932.

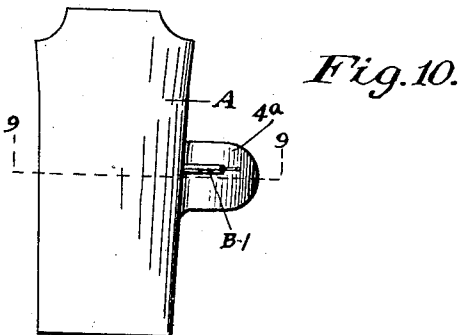
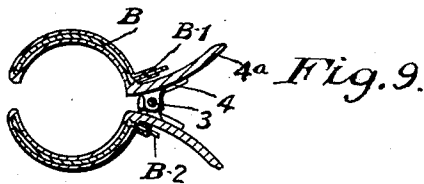
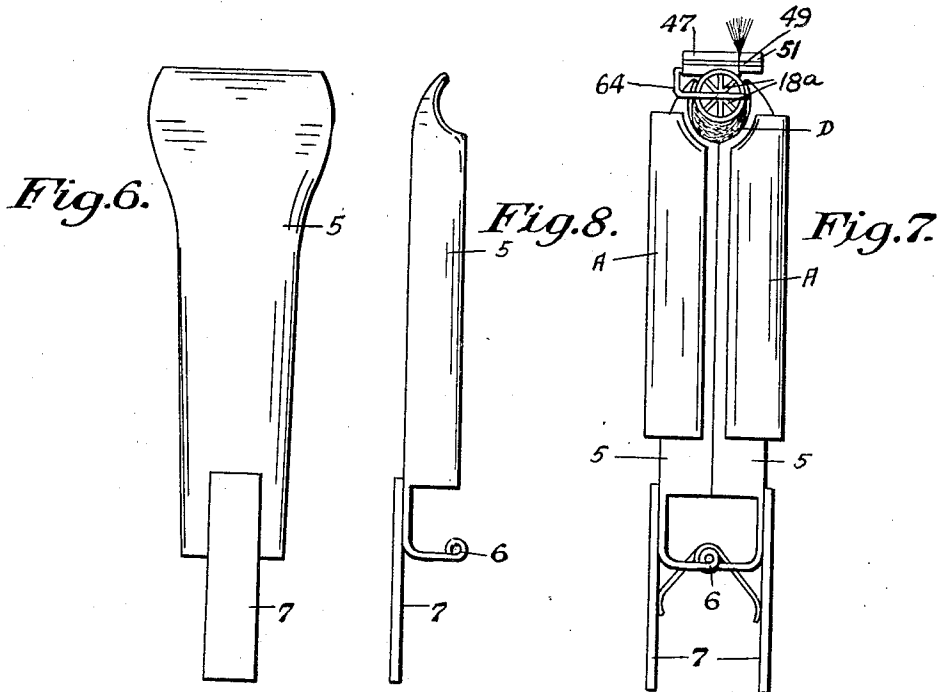
D. F. MCGINNIS

1,856,494

HAIR WAVING DEVICE

Filed Oct. 15, 1930

3 Sheets-Sheet 2



Inventor
Delia F. McGinnis

By

R. M. Thomas
Attorney

May 3, 1932.

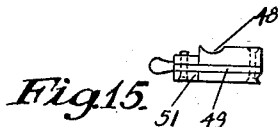
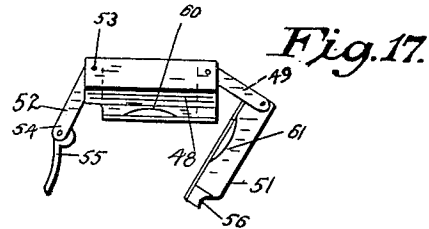
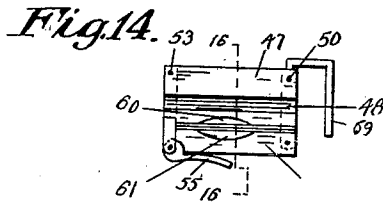
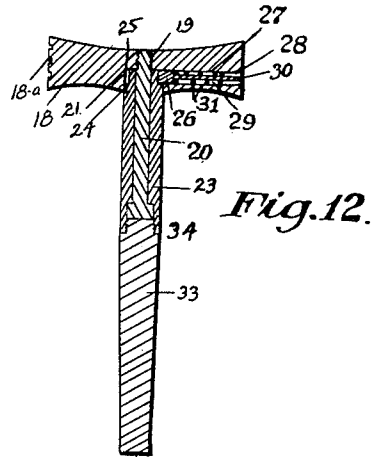
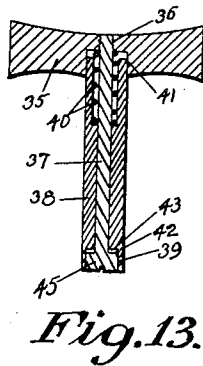
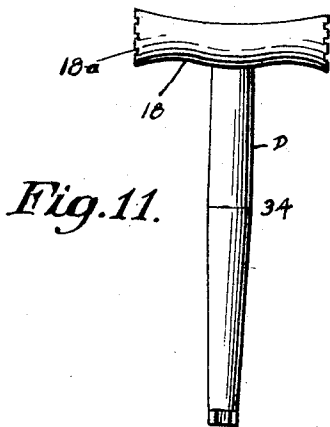
D. F. MCGINNIS

1,856,494

HAIR WAVING DEVICE

Filed Oct. 15, 1930

3 Sheets-Sheet 3



Inventor
Delia F. McGinnis

By

R. M. Thomas
Attorney

UNITED STATES PATENT OFFICE

DELIA F. MCGINNIS, OF BIG PINEY, WYOMING

HAIR WAVING DEVICE

Application filed October 15, 1930. Serial No. 488,882.

My invention relates to curling hair and has for its object to provide a new and efficient device for curling the hair in a permanent wave.

5 A further object is to provide a permanent waving machine which will place a wave in the hair which is more natural than the usual wave and which wave will hold the curl in the hair longer and more permanently than any wave heretofore used.

10 A still further object is to provide a permanent wave which when placed in the hair will not need to be set by water waving or other similar means but which wave will remain in the hair until the hair has grown out and is cut off.

15 A still further object is to provide a wind for the hair on a new shaped pin to provide a curl for the ends of the hair which will be more natural and which end curl will stay in the hair as long as desired.

20 These objects I accomplish with the device illustrated in the accompanying drawings 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.

25 In the drawings in which I have shown the best and most preferred manner of building my invention Figure 1 is a plan view of the heater element. Figure 2 is a side elevation thereof. Figure 3 is a section on line 3—3 of Figure 2. Figure 4 is a section of the heating elements with the hair shown wound on the pin and with the hair pin and protector shown in elevation. Figure 5 is a section on line 4—4 of Figure 1, sectioning only one heater. Figure 6 is a plan view of a heat transmitter used around the pin when separate heatings are used. Figure 7 is a side elevation of the separate heaters used on the heat transmitter with the pin, hair and protector shown used therewith. Figure 8 is a side elevation of the heat transmitter. Figure 9 is a section on line 9—9 of Figure 10. Figure 10 is a plan view of the heaters. Figure 11 is a plan view of the hair winding pin. Figure 12 is a vertical section of the pins. Figure 13 is a section of a modified form of

constructing the pins. Figure 14 is a plan view of the protector used with the device. Figure 15 is an end view thereof. Figure 16 is a section on line 16—16 of Figure 14. Figure 17 is a plan view of the protector shown partially opened.

In the drawings I have shown the two types of heating elements, one of which uses the transmitter and the other uses the heater made in the form of transmitter and heater combined. In the form used as a transmitter the heater A is made in two hingedly connected members 1 and 2, hinged together by a hinge, and held normally closed by the spring, with handles 4a to open and close the elements. The inner face of the two heaters 1 and 2 is curved to fit the outer surface of a heat transmitting member 5. Each heater is provided with a heating electrical element B formed therein and connected with a source of electrical energy by wires B1 and B2. The transmitters 5 are formed of two curved sheets of metal formed as shown in the drawings with a cross area and a leg area joined together by a curved area. The two transmitters 5 are hingedly connected together by the hinge 6 and handles are extended back from the outer sides of each heater by which they may be opened when placing them on the hair. The other type of heaters designated as C are made of two pieces of sheet metal 9 and 10 secured together by crimping the inner face 10 around the edges of the sheet 9. Insulation is placed within the space between the two sheets of metal and a heating element 11 is carried therein to heat the heaters. Wires 12 and 13 connect the elements with a source of electrical energy. A hinge 14 connects the two heaters together and handles 15 extended from the sheets of metal 9 provide means of opening the heaters to allow them to be placed around the hair. A spring 15 holds the two heaters normally closed. The said spring is wound around the pivot pin 16 of the hinge 14. The pin on which the hair is wound is designated as D and is made in a T-shape having the top or cross 18 of the T formed with the walls thereof concave or curved inwardly toward

the medial portion and a bore 19 is formed medially of the cross 18 in which a holding bolt 20 is secured. A larger bore 21 is formed in the top 18 around the bolt 20, and the leg 23 of the pin is carried around the bolt with one end inserted into said bore 21. The end 24 of the leg 23 is formed with teeth 25 there-around adapted to be engaged by a dog 26 which dog is carried in a hole 27 said hole being bored from one end of the top 18 into the bore 21. The outer end of the bore 27 is threaded to receive a centrally perforated plug 28 and the dog 26 is formed with a spring guiding shaft 29 formed on the back side thereof with the extreme end of the shaft extending into the central perforation 30 of the plug 28. A spring 31 is carried around the shaft 29 between the end of the dog and the plug to normally hold the dog in engagement with the teeth of the leg 23. The dog 26 and the teeth are formed so that the leg may be rotated in only one direction. The end of the leg 23 is formed with a larger hole to allow the head of the bolt 20 to be retained therein and the outer end of the hole is threaded to receive a tapered extension leg 33 said leg having the outer diameter of the large end the same diameter as the end of the leg 23. The leg 33 is tapered toward the lower end and the extreme end is formed either hexagonal or square to allow a wrench to be placed thereon so that the entire combination leg 25 may be rotated by turning the end of the leg 33. The combination leg 34 is composed of the two legs 23 and 33 when secured together. The ends of the bar 18 are slotted at 18a to provide means to lock the pins vertical. The modified form of pin shown in Figure 13 is made with the cross top 33 bored with a medial two diametered hole 36 with a bolt 37 screwed into the smaller bore and with one end of a leg 38 carried in the larger bore 41. The leg 28 is centrally bored to surround the bolt 37 and the outer end of the bore is enlarged to form a hole 39 in which the head of the bolt 37 is carried. The central bore of the leg is made larger near the end which is inserted into the top 35 and a spring 40 is carried therein to normally hold the leg spaced from the end of the larger bore 41. The end of the bore or hole 39 is formed as teeth 42 and the under side of the head 45 of the bolt 37 is formed into teeth 43 with the teeth 42 to engage the teeth 43 and adapted to allow the leg 38 to be rotated therearound in one direction and prevent rotation in the opposite direction. The end of the leg may be formed hexagonal to allow a wrench to be placed thereon to rotate the leg or it may be made as shown in the drawings with the end of the hole 39 formed hexagonal therein so that an insert tool might be placed therein to rotate the handle or leg 38.

The reason for making the legs of the pins

rotatable is to provide means for tightening the hair on the pin by rotation thereby giving the necessary stretch to the hair to provide for curling thereof when the hair is subjected to heat.

The head protector used in conjunction with my device is formed of a bar 47 of some non-conducting material such as bakelite and is slotted on the ends to allow for hinge bars to be inserted therein. The top side of the bar 47 is cut away to form a longitudinal groove 48 therealong adjacent one edge thereof in which the hair and pin may rest when in use. A hinge bar 9 is pivoted in one end of the bar 47 by a pin 50 and the other end is pivoted in a slot in one end of another smaller and narrower bar of similar material 51. A locking bar 52 is pivoted in the opposite end of the bar 47 by a pin 53 and the free end of the bar is bifurcated to receive a locking lever or toggle 55 which toggle is adapted to be engaged over the free end of the smaller bar 51 engaging in a curved hole 56 and locking the two bars parallel to each other. The inner faces of both bars are slotted at 57 and 58 to receive strips of rubber 59 and the adjacent faces of each bar are cut away at 60 to allow space for hair to be passed therebetween. The rubber will give sufficiently to allow the hair to be passed therebetween but will have sufficient force to prevent any steam from escaping through onto the scalp of the person being treated. U-shaped locking bars 64 are inserted into the ends of the bar 47 to lock the pins in vertical position by engaging in the slots 18a.

The operation of my invention is as follows:—

The hair is wound around the top of the pin and then down around the leg and is secured thereon by the usual method of winding wool therearound. The protector is clamped around the hair between the head and the pin and the leg of the pin is then rotated to stretch the hair wound therearound and on the pin. When sufficient stretch has been given the hair the usual protector pads and solution is placed on the hair and the heaters are clamped thereover.

In using the heaters separate from the transmitter the transmitters are placed on the hair and the heaters clamped thereover.

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

1. In a device of the class described the combination of a T-shaped pin on which the hair is wound having the leg adapted to be rotated in the cross bar; means to allow said leg to rotate in one direction and prevent rotation in the opposite direction; means to rotate said leg; a guard to protect the head of the person using the device; hingedly connected heaters adapted to engage the hair and pin to transmit sufficient heat to the hair for steaming a curl therein.

2. In a hair curling device the combination of two hingedly connected heat transmitters; spring held heaters adapted to encompass the outer surface of said transmitters from one side thereof to transmit heat through said heaters to the hair thereunder; a T-shaped pin on which the hair is wound; means to rotate the leg of the pin to stretch the hair wound thereon; means to lock said leg from rotation; a guard to protect the head; and means to lock said pin in a vertical position from said guard.

3. In a hair curling device the combination of a hingedly connected head guard formed of two bars hingedly connected together having strips of rubber carried in each bar adapted to be brought into contact with the hair when passed therethrough; a curved groove in the top side of said guard; a T-shaped pin on which the hair is wound adapted to fit into said groove when the hair has been wound thereon; hingedly connected heat transmitters to encompass said hair and pin; heaters to engage said transmitters to provide heat for curling the hair; and means in the leg of said T-shaped pin by which the leg may be rotated to stretch the hair when it is wound thereon.

In testimony whereof I have affixed my signature.

DELIA F. MCGINNIS.