

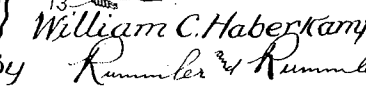
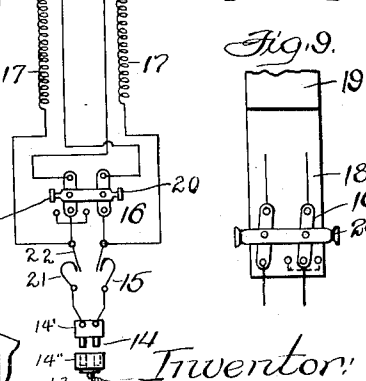
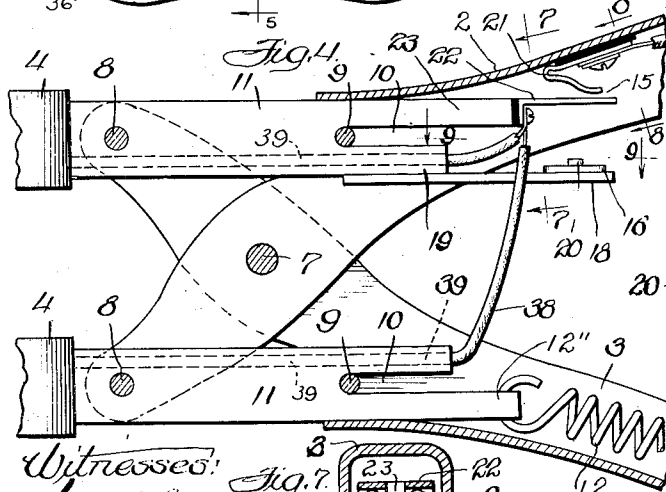
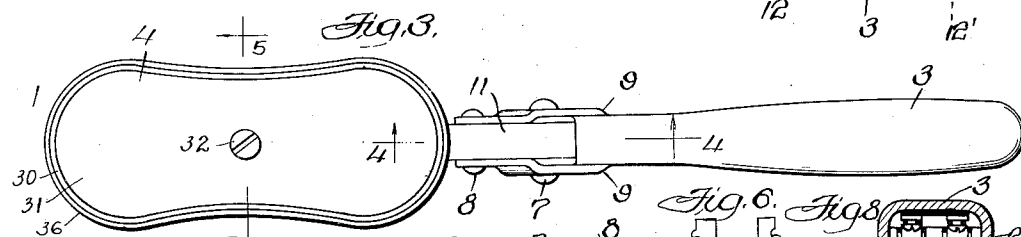
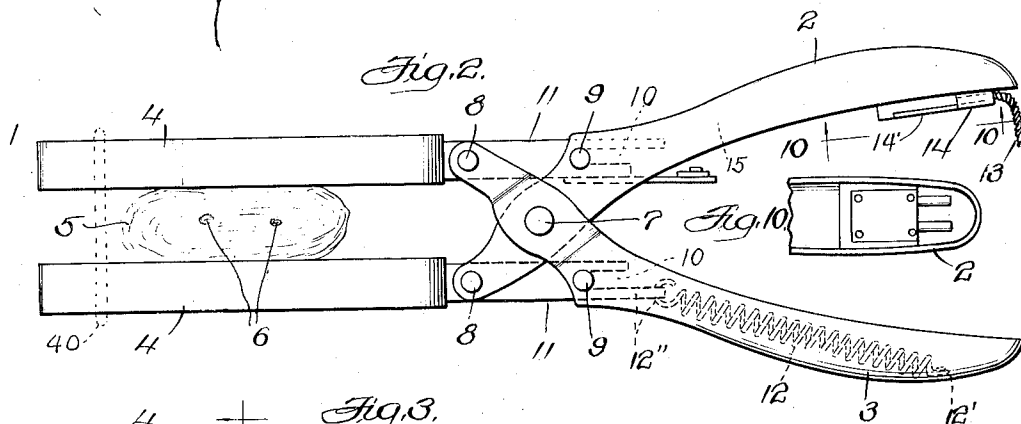
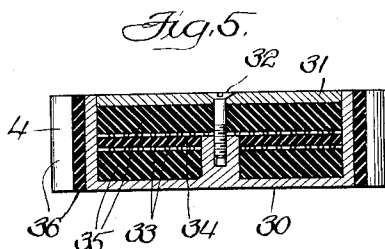
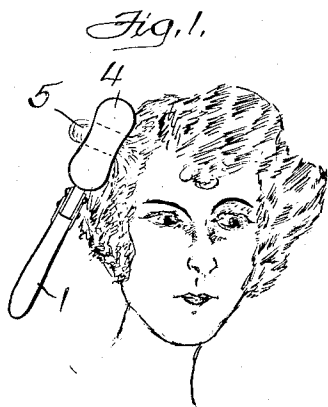
Oct. 30, 1923.

1,472,561

W. C. HABERKAMP

HAIR WAVER

Filed March 4, 1922



Witnesses:
W. C. Olson
Fred M. Davis

Inventor:
William C. Haberkamp,
By Rummel & Rummel.

UNITED STATES PATENT OFFICE.

WILLIAM C. HABERKAMP, OF CHICAGO, ILLINOIS.

HAIR WAVER.

Application filed March 4, 1922. Serial No. 540,959.

To all whom it may concern:

Be it known that I, WILLIAM C. HABERKAMP, a citizen of the United States of America, and a resident of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Hair Wavers, of which the following is a specification.

This invention relates to hair dressing devices and especially to that class known as hair curlers, wavers and the like. Heretofore it has been customary to use curling irons and wavers formed of bar members or the like arranged crosswise to operate after the manner of tongs, shears, and such pivotally connected devices, and the effective members in such devices have been made substantially straight and usually include a pair of relatively movable jaws having curved faces arranged to coact concentrically when brought together so as to embrace the hair and apply heat thereto while held between the jaws.

The main objects of this invention are to provide a hair treating implement having an effective heat supplying part formed or curved to correspond substantially with the curvature of the head; to provide such a device adapted to prevent burning the head of the person whose hair is being treated; to provide a device of the character described having a pair of parallelly disposed effective members connected and provided with operative means to open and close the device with said members always in parallel relation; to provide such members of substantially flat shape; to provide means for heating one or preferably both of the effective members; to provide adjustable manually controlled electric means to produce the necessary heat; to provide a waver of the character described adapted to receive successively a series of hair rolls formed by winding wisps of hair upon or around hairpins or ordinary hair curlers; and to provide such a device adapted for use either by a hair dresser or for treating one's own hair to produce a perfect hair wave.

An illustrative embodiment of this invention is shown in the accompanying drawings, in which—

Figure 1 shows the waver as applied to the hair.

Fig. 2 is a sidewise view of the device.

Fig. 3 is a plan of the device.

Fig. 4 is an enlarged view in section on the line 4—4 of Fig. 3.

Fig. 5 is a cross section on the line 5—5 of Fig. 3.

Fig. 6 is a conventional circuit diagram.

Fig. 7 is a section at 7—7 on Fig. 4.

Fig. 8 is a section at 8—8 on Fig. 4.

Fig. 9 is a plan of the heat control switch as viewed on the line 9—9 of Fig. 4.

Fig. 10 is a view of the plug switch on the line 10—10 of Fig. 2.

In the construction shown in the drawings, the hair waver 1 comprises mainly a pair of handles 2 and 3 operatively connected to a pair of heat supplying pressure jaws 4 adapted and arranged to receive a lock of hair 5 wound upon any suitable support or curler, as for instance a hairpin 6. The said handles are preferably similar in general shape and design, and are pivotally joined at 7 adjacent to but spaced somewhat from one end, as shown in Figure 2. Each handle is connected to the adjacent ends of both jaws 4 on the opposite sides of pivot 7 respectively, one connection being by means of a non-sliding pivot 8 and the other being by means of a slidably mounted pivot 9. In this instance the pivot 8 is at the inner tip of the handle and the pivot 9 is secured to said handle on the opposite side of pivot 7 and is arranged to slide in the longitudinal slot 10 of the corresponding jaw 4. For this purpose each of said jaws is provided with a rearwardly extending projection or arm 11 and each arm contains one of the said slots 10.

As thus constructed the angular operation of the handles moves the jaws toward and away from each other always in a parallel position. In order that the device may have a positive tendency to remain open a spring 12 is mounted in one of the handles and is arranged to urge the handles apart, as also the jaws. For this purpose a helical tension spring 12 is used, one end being secured to the handle 3 near its outer end as at 12', and the opposite end being connected to the rearward end of the adjacent arm 11 as at 12".

Electric current is supplied to the device through a two conductor cord 13 connected to a plug switch 14 as will be understood and as indicated by Figures 2 and 6. From

the stationary part 14' of this switch the circuit leads to an automatic control switch 15 which is actuated by the opening and closing of the device in such manner as to open the circuit when the device is not in use. In order to enable the user to regulate the heat, a manual switch 16 is provided, which is so connected as to enable the operator to move it to one position for parallel connection of the two heater elements 17, and to another position for series connection as will be more fully explained. Said switch 16 is mounted on a rearwardly projecting plate 18 secured to the inner projection 19 at the rear end of arm 11, adjacent to the handle member 2 whereon the plug switch is mounted. The said reversing switch 16 is provided with laterally projecting rods or push buttons 20 adapted and arranged for ready actuation by the hand of the user, one button being disposed on each side for alternate use as may be required from time to time.

The automatic switch 15 comprises a pair of contact members 21 and 22, the former being mounted on the handle 2, and the latter being secured to the rear end of the outer branch 23 of arm 11 adjacent to said handle. In closing the device said handle 2 and arm 11 swing toward alinement with each other and in so doing carry the contacts 21 and 22 into electrical connection with each other. When the device is released the reverse action occurs and the switch 15 is opened.

Each jaw 4 comprises a housing frame or casing 30, a removable cover 31 secured in place by a screw 32, a heater element or wire 33 wound on a support 34, insulating material 35 disposed on both sides of the heater element and a heat insulating rim or band 36 disposed around the edge of the jaw to protect the head of the user from possible burns.

Although it is preferable to wire the device in accordance with the diagram of Figure 6, it may be used without the manual switch 16, and for simplifying the wiring on Figure 4 it is so shown on said figure, that is to say, the wiring goes past switch 16 without including it. In this instance the wiring 38 is shown leading to the heater element through a passageway 39 in arm 11. Said arm may contain two passageways 39, one for each wire or a single larger passageway for both wires.

The operation of the device is as follows: When not in use the flexible cord 13 is removed by withdrawing the plug 14" from switch 14, but when the device is to be used the plug is then attached. The switch 16 is then placed in the position shown in Figure 6 whereby the elements 17 are placed in parallel so that when the device is closed by gripping the handles and the circuit completed through the

switch 15, a maximum heat will be generated. If in use the device gets too hot the switch 16 is reversed by pressing on the corresponding button 19. If desired the device may be held closed while warming up to working temperature by a link 40 slipped on over the jaws.

Although but one specific embodiment of this invention has been herein shown and described it will be understood that numerous details of the construction shown may be altered or omitted without departing from the spirit of this invention as defined by the following claims.

I claim:

1. A hair waver comprising a pair of parallelly disposed oblong jaw members adapted to be positioned edgewise closely adjacent to the head and having smooth flattish faces to receive a rolled wisp of hair between, means to supply heat thereto, and manual means adapted and arranged to vary the spacing of said members and to force the same convergently, said jaws having heat insulated concave edges to fit and protect the head in use.

2. A hair waver comprising a pair of similar oblong insulation edged flattish jaw members, handles provided therefor arranged and connected to hold and force said members in variably spaced parallel relation, said device having heat supplying means in each jaw, and means adapted for manual control to regulate simultaneously the supply of heat to both of said jaws.

3. A device of the character described including a pair of handle members pivotally connected and arranged for convergent movement by hand pressure and having resilient means urging said members apart, electrical means and connections carried by said device including a main switch adapted and arranged to automatically close and open the circuit by corresponding movements of the handle members, a pair of heater elements and a reversible switch adapted and arranged for independent manual control to throw said elements into series or parallel connection with the circuit at the will of the operator whereby control of the heat may be effected.

4. A device of the character described comprising a pair of electric heater members and a pair of handles pivotally connected to each other and to said members and arranged for parallel movement of said members each of which is provided with a pivot and a longitudinal slot, each handle having pivotal connection with one of said members and sliding slot and shoulder relation with the other, one of said members having a rearwardly projecting part having convergent and divergent movement with respect to the adjacent handle in operating the device, and electrical switch con-

tacts operatively mounted on said handle and rearwardly projecting part for opening and closing the heater circuit.

5. A hair waver comprising a pair of parallelly disposed jaws, electrical means to supply heat thereto, a switch therefor and manual means adapted and arranged to vary the spacing of said members and to force the same convergently, said switch being arranged to be closed and opened by the closure and opening of the waver respectively.

6. A hair waver comprising a pair of oblong flattish heater jaws having heat insulated edges, handles provided therefor arranged and connected to hold said members in variably spaced parallel relation, said device having electric heat supplying means in said jaws and switching means being provided adapted for manual control to regulate the supply of heat.

Signed at Chicago this 28 day of Feb., 1922.

WILLIAM C. HABERKAMP.