Nov. 8, 1927. 1,648,740

T. O'MALLEY

MARCEL WAVING DEVICE

Filed May 12, 1925

Fig. 1

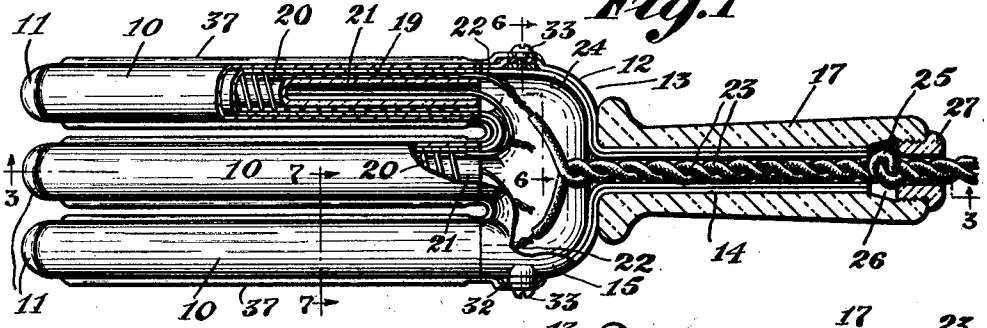

Fig. 2

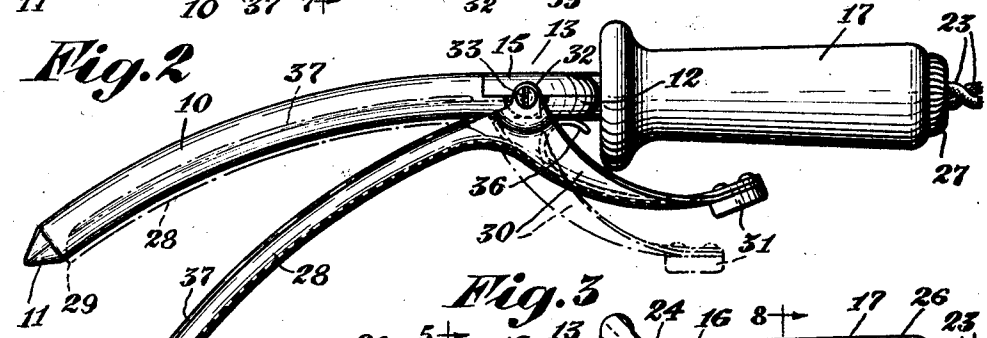

Fig. 3

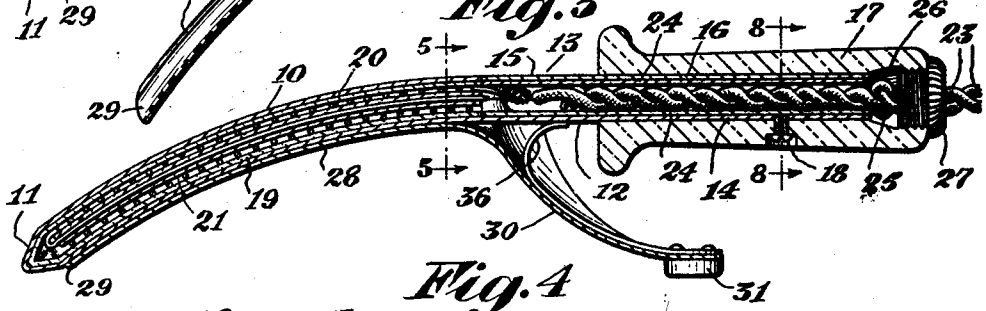

Fig. 4

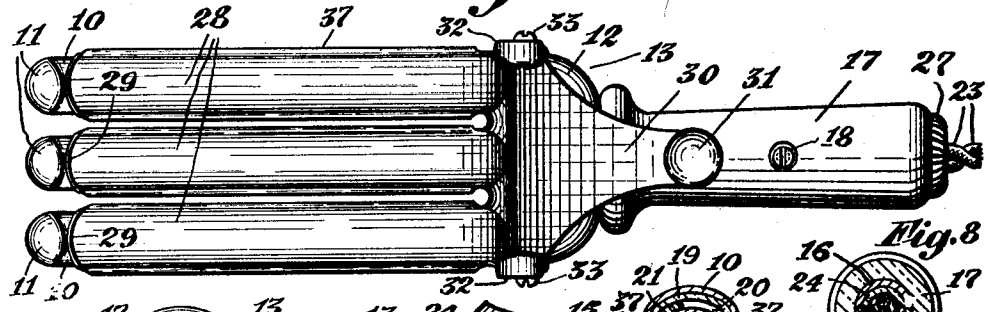

Fig. 5

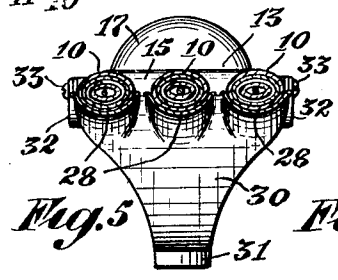

Fig. 6

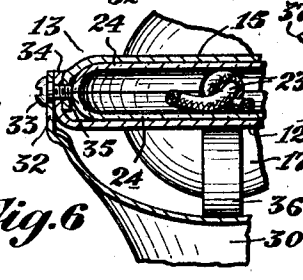

Fig. 7

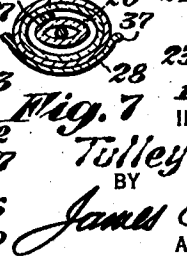

Fig. 8

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UNITED STATES PATENT OFFICE.

TULLEY O'MALLEY, OF CORDOVA, TERRITORY OF ALASKA.

MARCEL-WAVING DEVICE.

Application filed May 12, 1925. Serial No. 29,678.

The primary aim and fundamental object of this invention is the provision of a Marcel waving device of longitudinally curved formation designed to substantially conform to the curvilinear contour of the head of the user thereof, whereby such user may wave her own hair in a uniform and symmetrical manner without the aid of an operator, as has obtained heretofore in the use of devices of this type.

With these ends in view the invention essentially resides in the provision of a Marcel waving device embodying a series of interconnected heated members of longitudinally curved and transversely elliptic tubular formation; a series of interconnected and manually operable presser members of longitudinally curved and transversely concaved or semi-elliptical formation pivotally mounted upon said interconnected heated members and co-acting or co-operating therewith, and a resilient or spring member interposed therebetween designed to maintain the said concaved presser members in normally abutting relation with the correlated heated elements thereof.

The invention further resides in the provision of a Marcel waving device, wherein the assembly of the several parts thereof may be expeditiously and rapidly effected, and wherein the dismantling of such parts for renewals or repairs may be similarly effected and performed.

The invention still further resides in the provision of a Marcel waving device of simple, durable and economical construction, that is positive, efficient and reliable in use and operation, that will not readily get out of order, and that may be manufactured at a comparatively low cost.

The invention still further resides in the novel construction, combination, adaptation and arrangement of parts, as will hereinafter be more fully described and succinctly defined in the claims appended hereto.

Referring now to the accompanying drawings, wherein is illustrated the invention in the specific form, as at present preferred:

Figure 1 is a top plan view of a Marcel waving device fabricated in accordance with the invention, certain parts thereof being shown in section, certain other parts omitted and certain other parts broken away for clarity of illustration.

Fig. 2 is a side elevation thereof, with the presser members of the same illustrated in an open position in full lines and in a closed position in dot and dash lines.

Fig. 3 is a longitudinal medial section taken through 3—3 of Fig. 1.

Fig. 4 is an inverted plan view of the device.

Fig. 5 is a transverse vertical section taken through 5—5 of Fig. 3.

Fig. 6 is a similar section taken through 6—6 of Fig. 1.

Fig. 7 is a similar section taken through 7—7 of Fig. 1, and

Fig. 8 is a similar section taken through 8—8 of Fig. 3.

In the accompanying drawings and in the following description I have elected to illustrate and describe the invention, as embodied in a structure having three longitudinally curved and heated members with the correlated manually operable and spring pressed presser members therefor, but, manifestly the features of the invention may be embodied in a structure having any number of heated members and correlative presser members, without departing from the spirit thereof or the benefits derivable therefrom, the present showing being merely by way of illustration.

In the drawings and in the following description similar reference symbols or characters designate similar parts throughout the several views.

The numeral 10 designates a series of longitudinally and downwardly curved spaced parallel tubular members, preferably elliptical or oval in cross-section, having the outer closed ends thereof provided with rounded wedge-shaped terminal portions 11, and having the inner open ends thereof interconnected in fixed relation to form and constitute thereat the lower section or half 12 of a curvilinear sectional casing 13 extending inwardly therefrom in prolongation thereto, said section 12 having an integral semi-cylindrical shank portion 14 extending inwardly from the inner end thereof in axial alignment therewith.

Superposed upon the lower or fixed section 12 of the sectional casing 13 in vertically aligned relation therewith is a complemental upper removable section or half 15 having an integral semi-cylindrical shank portion 16 extending inwardly therefrom in axial alignment therewith designed to be normally superposed upon the shank 14 of the section 12, and in conjunction therewith

to form and provide thereat a hollow cylindrical shank for the sectional casing 13 upon which is sleeved a tubular handle 17, preferably of heat insulating material. The tubular handle 17 serves to maintain the semi-cylindrical shank portions 14 and 16 respectively, in abutting and aligned relation, as will be noted by referring to Fig. 8 and is adapted to be rigidly secured thereon against axial dislodgment therefrom, as by a screw 18.

The tubular members 10 are provided with liners 19, of asbestos or other suitable insulating material, within which are disposed resistance coils or heating elements 20 wound upon hollow insulating cores 21. The coils 20 are preferably interconnected in series, as shown, so that should one coil burn out the device would be rendered inoperative, and the user's or operator's attention would thus be positively and promptly directed thereto.

The resistance coils 20 are connected to a source of electrical energy, not shown, and for this purpose the free terminals 22 of the outer coils are connected, at a convenient point within the curvilinear casing 13, to the inner terminals of insulated twisted conductor wires 23, which lead outwardly from said casing 13 through the cylindrical shank thereof, as shown more clearly in Fig. 1, and at the outer terminals thereof are connected in any well known manner to said source of electrical energy.

The lower and upper sections 12 and 15, respectively, of the curvilinear casing 13, with the correlated semi-cylindrical shank portions 14 and 16 thereof, are each provided with liners or layers 24, of insulating material, to thereby positively insure against and obviate short circuiting of the coil terminals 22 or correlated conductor wires 23 within the metallic casing 13 and the cylindrical shank thereof, as will be obvious and apparent by referring to Fig. 1.

The insulated and twisted conductor wires 23 are retained against longitudinal movement or dislodgment from within the tubular handle 17 and from disengagement with the correlated terminals 22, of the coils 20, by forming a knot 25 upon said conductor wires 23, which knot 25 is disposed or seated within a recess 26 formed in the outer end of the tubular handle 17, wherein it is normally interposed between the outer end of the cylindrical shank of the curvilinear casing 13 and the inner end of a knurled sleeve 27 threadably engaged within the outer end of the recess 26, as shown in Fig. 1.

The numeral 28 designates a series of longitudinally and downwardly curved spaced parallel presser members, preferably of semi-elliptical or semi-oval cross-section, within which the tubular members 10 are designed to interfit and co-act therewith, said presser members having the outer ends thereof provided with rounded terminal portions 29 and having the inner ends thereof interconnected in fixed relation, to form and provide thereat an inwardly and downwardly extending curvilinear portion 30 having a thumb engaging button 31 secured upon the outer face of the terminal thereof.

Formed upon the upper edges of the portion 30 adjacent the inner ends of the correlated presser members 28 thereof are upwardly extending ears or lugs 32, which are pivotally connected; as by pivot pins or pintles 33 to similarly extending ears 34 formed upon the lower section 12, of the curvilinear casing 13, and to downwardly extending ears 35 formed upon the upper or removable section 15, of said casing 13, as more clearly shown in Fig. 6, wherein it will be observed that the pivot pins 33 also serve to rigidly secure the forward ends of the said lower and upper sections in closed or abutting relation.

A flat spring 36 rigidly secured at the outer end thereof to the inner face of the terminal, of the curvilinear portion 30, extends inwardly therefrom and at the inner or opposite end is curved or bent backwardly to abut the underside of the curvilinear casing 13, substantially as shown in Fig. 3, to thereby normally maintain the tubular members 10 in interfitting and coacting relation with the correlated presser members 28 thereof.

The longitudinal or side edges of the semi-elliptical presser members 28 are preferably curved or bent outwardly and downwardly, as shown more clearly, at 37, in Fig. 7, whereby smooth curvilinear surfaces are presented to the hair and stretching, breaking, mashing or shearing of the hair thereat is positively eliminated and prevented, when said hair is pressed between the interfitting and co-acting tubular members 10 and presser members 28 during the waving or treating of the same.

It will be observed by referring to the accompanying drawings and to the foregoing description, that by fabricating the present structure in the manner herein disclosed and described, that the assembly of the several parts thereof may be expeditiously and rapidly effected, and when necessary the dismantling of the structure may be similarly performed by removing the screw 18, sliding the tubular handle 17 outwardly upon the insulated twisted conductor wires 23, and removing the pivot pins 33 to detach the upper section 15 and the presser members 28 from the structure, whereupon the coils 20 and correlated connections thereof are rendered readily accessible.

In practical operation, the tubular members 10 of the device are first heated, whereupon the presser members 28 are opened, by

the operator exerting pressure upon the correlated thumb button 31, and the curved outer terminals 29 thereof inserted into the hair to interpose a suitable quantity of hair between the tubular members 10 and presser members 28, following which said presser members 28 are closed upon the hair and upon said tubular members 10 to press said hair between the co-acting and interfitting faces of said members. When this occurs the hair is held rigidly in position therebetween and is allowed to remain until the waving or crimping of the same is effected, following which the presser members are again opened and the operation is repeated upon another portion of the hair.

By forming the tubular members 10 and presser members 28 in the longitudinally curved manner shown and described, the device will more readily conform to the curvilinear contour of the head, whereby a more uniform and symmetrical Marcel wave is secured for the hair, and such device is particularly advantageous in cases where the hair is extremely short, for the reason that due to the curved formation thereof and the fact that the presser members 28 are disposed adjacent the scalp, said device may be used with greater advantage and safety much closer to the scalp than the devices heretofore in general use. Further by fabricating the outer terminals 11 of the tubular members 10 in the rounded wedge-shaped formation shown and described and the outer terminals 29, of the presser members 28, in the manner herein disclosed, the tendency of such terminals to catch or stick in the hair during Marcel or waving operations is substantially eliminated and prevented. Again by fabricating the tubular members 10 in the elliptical or oval formation disclosed, and the co-acting presser members 28 thereof in the semi-elliptical manner herein set forth substantially the maximum area of abutting or contacting surface therebetween is obtained and secured, as will be obvious and apparent by referring to Fig. 7.

While I have herein shown and described my invention with sufficient detail to enable those skilled in the art to understand the mode of construction and the principles involved, it is to be understood that there is no intentional limitation herein to the specific form and precise details of construction of the invention shown and described, except as expressly defined by the appended claims, and that various modifications of said construction may be resorted to without departing from the invention or benefits derivable therefrom. I also desire to have it understood that certain features of the invention herein shown and described may be employed in other combinations than those herein shown.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:—

1. In combination with a Marcel waving device, of a longitudinally curved tubular member substantially elliptic in cross-section, and a spring-pressed longitudinally curved presser member substantially semi-elliptic in cross-section and pivotally mounted upon said tubular member to receive and co-act with the inner longitudinally curved side thereof.

2. In combination with a Marcel waving device, of a plurality of longitudinally curved tubular members interconnected in spaced parallel relation at the inner ends thereof, and an individual similarly curved semi-tubular presser member for each of said tubular members having the side edges thereof flared upwardly, said presser members being interconnected in spaced parallel relation at the inner ends thereof and pivotally mounted thereat upon said tubular members to receive and co-act with the inner longitudinally curved sides thereof.

3. In a Marcel waving device, in combination, a longitudinally curved tubular member, a resistance coil insertible therein, a handle for said tubular member, and a spring-pressed longitudinally curved semi-tubular presser member having flaring side edges, said presser member being pivotally mounted upon said tubular member to receive and co-act with the inner longitudinally curved side thereof.

4. In a Marcel waving device, in combination, a longitudinally curved tubular member the inner longitudinally curved side of which constitutes a hair abutting surface, a resistance coil insertable within said tubular member, a removable handle sleeved upon said tubular member, and a spring-pressed longitudinally curved semi-tubular presser member pivotally mounted upon said tubular member adjacent the handle thereof to receive and co-act with said hair abutting surface and having a curvilinear thumb engaging portion projecting therefrom to extend over the inner end of said handle in close proximity and symmetrical relation thereto.

5. In a Marcel waving device, in combination, a plurality of longitudinally curved tubular members closed at the outer wedge-shaped ends and interconnected in spaced parallel relation at the inner open ends thereof and provided thereat with a semi-cylindrical shank portion extending in axial prolongation therefrom, resistance elements insertible within said tubular members, a removable closure for the inner open ends of said tubular members having a semi-cylindrical shank portion extending therefrom complemental to said first named shank portion, a tubular handle sleeved upon said semi-cylindrical shank portions, a plurality

of longitudinally curved semi-tubular presser members having flared side edges, said presser members being interconnected in spaced parallel relation at the inner ends thereof and pivotally mounted thereat upon said interconnected tubular members to receive and co-act with the inner longitudinally curved sides thereof, and a spring interposed between said tubular and presser members to maintain the same in abutting and co-acting relation.

In testimony whereof I affix my signature.

TULLEY O'MALLEY.