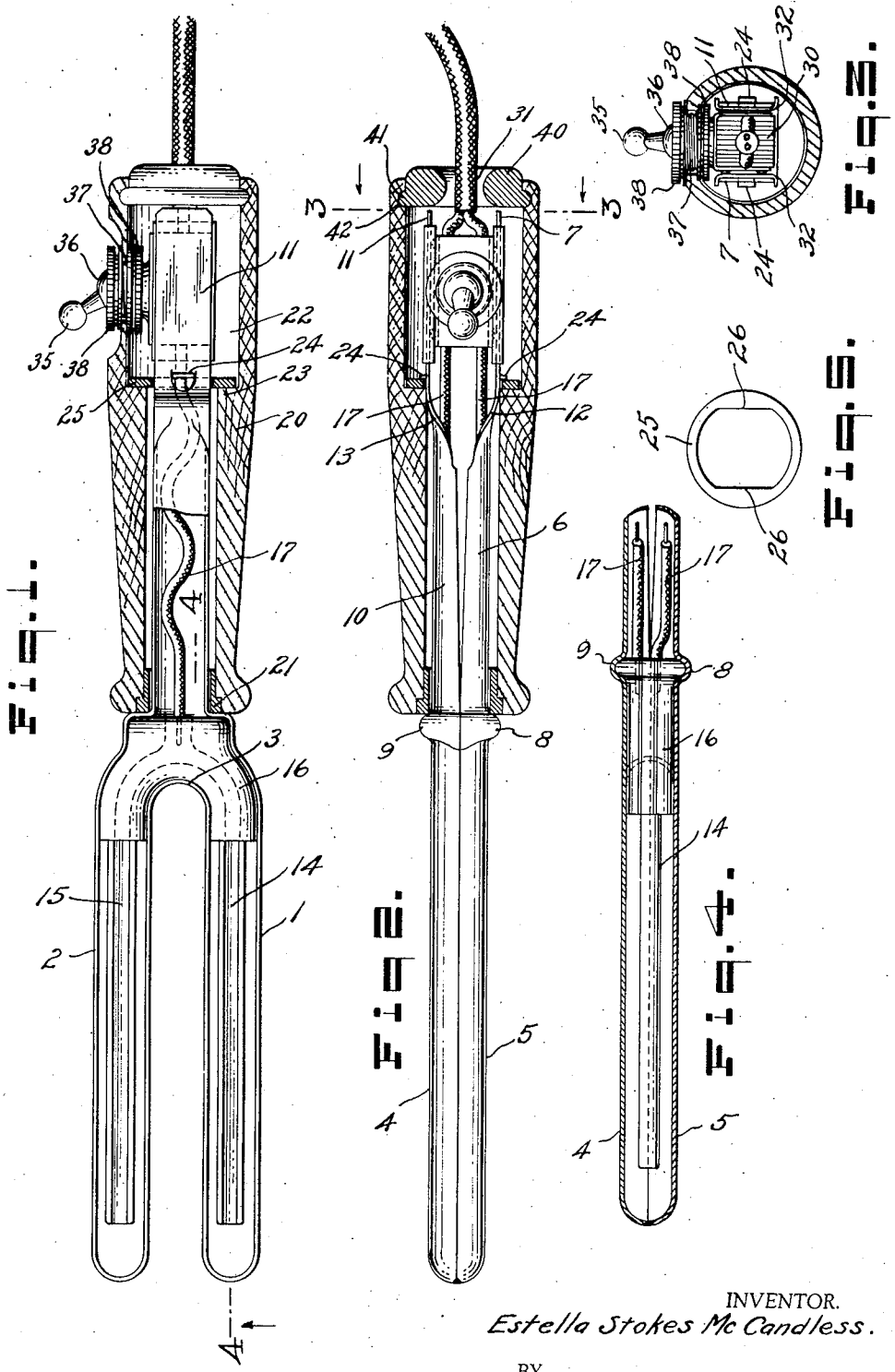
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CURLING IRON

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INVENTOR.
Estella Stokes Mc Candless.

BY
Barnes, Kisselle & Laughlin
ATTORNEYS.

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CURLING IRON

Estella Stokes McCandless, Highland Park, Mich.

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6 Claims. (Cl. 219—24)

This invention relates to a curling iron and has to do particularly with a curling iron advantageously electrically heated and designed primarily for use by the individual, although, obviously, it may be used in shops or the like.

The object of the invention is to provide an improved and simplified curling iron structure embodying heated elements, and a handle portion for manipulation of the same, assembled together in such manner as to provide for quick and easy attachment one to the other, yet providing a secure connection. A novel feature of the invention is the construction of the heated elements which may and preferably are provided by matched halves suitably united to form a hollow interior, and such matched halves may be constructed of metal stampings, die castings, or the like. The securing means between the heated section and the handle may be constituted at least in part by integral portions of the heated parts, or on integral portions or extensions thereof which are disposed within the handle.

The invention also aims to provide a curling iron embodying preferably two heating elements of prong or tine form, and these are given dimensions and so spaced with respect to each other to produce a wave of desired and lasting quality.

In the accompanying drawing:

Fig. 1 is a sectional view taken through the curling iron constructed in accordance with the invention showing the structural features thereof.

Fig. 2 is a view taken at right angles to Fig. 1 illustrating the handle in cross section and showing a heated element in side elevation.

Fig. 3 is a sectional view taken substantially on line 3—3 of Fig. 2.

Fig. 4 is a sectional view taken through a heated element on line 4—4 of Fig. 1.

Fig. 5 is a detail in plan of a securing device.

The curling elements proper, or the heated elements, as they may be termed, may comprise a pair of spaced prongs 1 and 2. They may be constructed by two matching halves, one of the matching halves may consist of an integral piece of metal, say a stamping, fashioned to provide a prong half for the leg 1 substantially semi-circular in cross section, and a similar hollow or semi-circular in cross section portion for the leg 2. The leg portions may meet in the form of a bight portion, as at 3, and this matched half, as shown in Fig. 2, is identified by the character 4. The other matched half is shown by the character 5. The half 5 may be provided with a projecting or bead like formation 8, and an extending portion 6 projects therefrom and is adapted to fit within the handle, and the extreme end portion as at 7, may be substantially of flat form. The portion 4 may have a raised or bead portion 9, an extending portion 10 and an end portion 11. These two halves are to be matched together, as illustrated in Fig. 2, with their edges in abutting relation, particularly those edges defining the tines and the inner and outer portions of the bight portion as well as the bead portions 5 and 9. The edges of the portions 6 and 10 may fall away from each other as shown, and as illustrated at 12 and 13 the metal may fall away rapidly to the flat portions 7 and 11. The two halves may now be united as by means of securing the abutting edges, one to the other, by welding or by molten sealing metal preferably of fusing point high enough to withstand the heat to which the iron is subjected in use. Such molten sealing metal may be copper. The manner in which two metallic parts may be welded together under a reducing or non-oxidizing environment is known to those skilled in the art and need not be gone further into.

It should be pointed out, however, that before the two matched halves are secured together the heating elements may be located therein, such heating elements being shown at 14 and 15 and may be carried by a supporting block 16 disposed in the bight portion and through which electrical conductors 17 extend. It is within the invention to so shape the heated elements that the matched halves may first be united and then the heating elements located.

The handle is shown at 20, and it is hollow and preferably designed to be slipped over the spaced ends of the matched halves, and it may be provided with an insulating washer 21. The conductors 17 extend through the hollow handle, and the hollow formation may be enlarged at one end, as shown at 22, thus to form a shoulder 23. For uniting the handle to the heated elements the material of the heated elements may be formed with integral struck-out lips 24, and a washer 25 may be slipped into the handle and forced over the lips 24 against the seat 23. The lips 24 spring outwardly in this action and engage over the washer. The washer as shown in Fig. 5 may have internal flat portions 26 for location underneath the lips 24.

A suitable switch body such as a snap switch now available upon the market, may be inserted between the flat portions 7 and 11. The switch body is shown at 30 into which conductors 31 lead, and the switch body may have insulation

material 32 on each side thereof for fitting over the flat portions 7 and 11, as illustrated in Fig. 3. The interior structure of the switch need not be gone into; suffice to say, the switch may carry an arm 35 having a ball portion 36 located in a socket arranged to snap over from one side to the other for making and breaking the circuit. This arm may be carried by the switch prior to its insertion into the handle, and by disposing the switch at an appropriate angle it may be inserted into the enlarged hollow portion 22 until the arm 35 is so located that it may be caused to project out through an aperture 37 in the handle. A suitable washer 38 may then be screw threaded onto the portion of the switch socketing the handle for tightly engaging the handle on one side while a washer or the like 38 engages it on the inside.

A closure disk may now be located and the same is shown at 40, and it advantageously is in the form of a piece of rubber apertured for the passage therethrough of the electrical conductor and having an annular rib 41 for seating into an annular internal groove 42 in the handle. The closure disk 40 is preferably sufficiently flexible to permit it to be compressed for location whereupon the same expands so that the rib 41 seats in the internal channel.

In using the curling iron a strand of hair may be taken and wrapped over the prongs in figure eight fashion. This gives a rather desirable flat wave. The end of the strand may then advantageously be wrapped around one prong; this gives the end of the strand a rather round wave.

I claim:

1. A curling iron comprising a pair of matched sections each having a pair of leg portions semicircular in cross section with curved end walls and with the leg portions connected by a bight portion, said sections being disposed in matching relation with their edges abutting and secured together to form spaced hollow legs with closed ends, a supporting device fitted into the hollow bight portion, and an electrical heating element projecting from the supporting device into each hollow leg.

2. A curling iron comprising a pair of stampings each having a pair of substantially semicircular leg portions connected by a bight portion and a part projecting therefrom, said sections being matched together edge to edge and united around their edges to form hollow closed leg portions and a hollow connecting bight portion, an electrical heating element disposed in each hollow leg, and a handle over the said projecting parts and secured thereto, said projecting parts having struck-out integral lips, an interior shoulder in the handle, and a washer disposed upon the shoulder and engaged upon its opposite side by the lips for maintaining the handle assembled to said parts.

3. A curling iron comprising a pair of spaced heated elements, a pair of spaced elements projecting therefrom capable of springing toward each other, a handle over said spaced parts and having an interior shoulder, outwardly projecting lips carried by the spaced parts, and a washer element adapted to be forced over the lips thus springing the parts together and engaged between the shoulder and lips.

4. A curling iron comprising a pair of spaced heated elements, a pair of spaced elements projecting therefrom capable of springing toward each other, a handle over said spaced parts and having an interior shoulder, outwardly projecting lips carried by the spaced parts, and a washer element adapted to be forced over the lips thus springing the parts together and engaged between the shoulder and lips, and an electric switch having a body disposed between the said spaced parts for preventing the same from springing toward each other.

5. In an electric curling iron, a pair of spaced heated elements having parts projecting therefrom and disposed in spaced relation, struck out lips in the parts, a handle fitted over the parts, a washer disposed over the parts and engaged by the lips for holding the handle assembled on said parts, and an electric switch having a body portion substantially fitting between the spaced parts for keeping the lips locked over the washer.

6. In an electric curling iron, a pair of spaced heated elements having parts projecting therefrom and disposed in spaced relation, struck out lips in the parts, a handle fitted over the parts, a washer disposed over the parts and engaged by the lips for holding the handle assembled on said parts, and an electric switch having a body portion substantially fitting between the spaced parts for keeping the lips locked over the washer, said handle having an aperture in its side, and a control element on the switch body projecting through the aperture and operable for controlling the switch.

ESTELLA STOKES McCANDLESS.