Feb. 27, 1923. 1,446,653

M. MURPHY

ELECTRIC CURLING IRON

Filed Ma[illegible]. 30, 1922

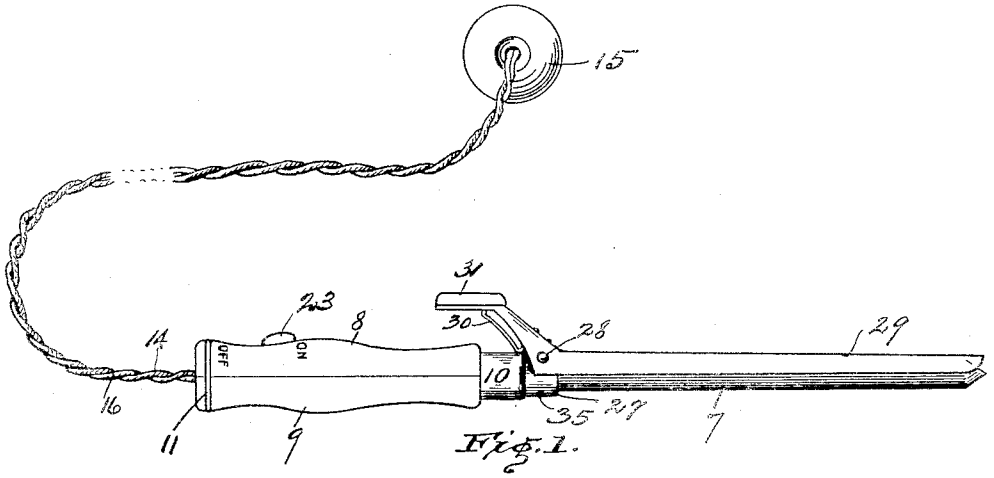


Fig. 1.

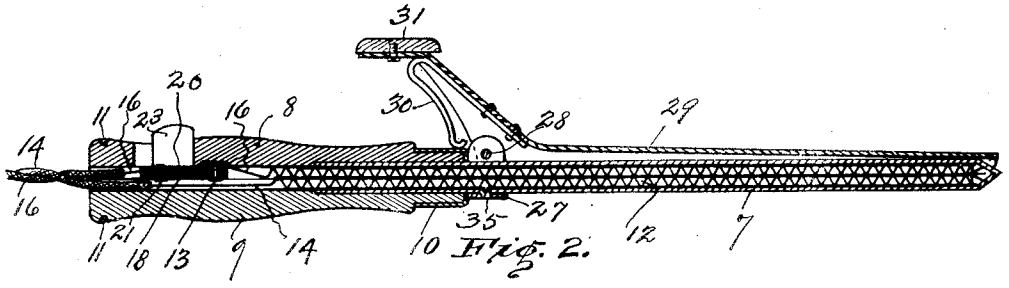


Fig. 2.

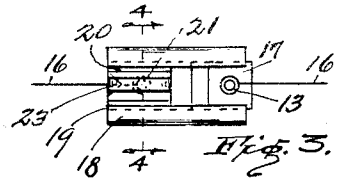


Fig. 3.

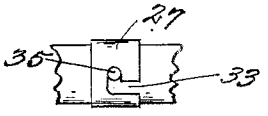


Fig. 5.

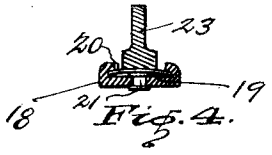


Fig. 4.

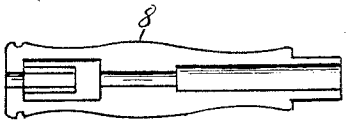


Fig. 6.

Inventor,
Morton Murphy,
By Joseph A. Minturn,
Attorney.

Patented Feb. 27, 1923. 1,446,653

UNITED STATES PATENT OFFICE.

MORTON MURPHY, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-FOURTH TO MORTON MURPHY, ONE-FOURTH TO EDMUND L. BROWN, ONE-FOURTH TO PHILIP J. COX, AND ONE-FOURTH TO WILLIAM J. HUNGATE, PARTNERS, ALL OF INDIANAPOLIS, INDIANA, DOING BUSINESS AS ALL RITE COMPANY, OF INDIANAPOLIS, INDIANA.

ELECTRIC CURLING IRON.

Application filed March 30, 1922. Serial No. 548,041.

To all whom it may concern:

Be it known that I, MORTON MURPHY, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented new and useful Improvements in Electric Curling Irons, of which the following is a specification.

Electrically heated curling irons are in use with a switch in the circuit at the plug end of the conductor requiring the user to go to the plug and often strain herself in reaching the switch to turn off the current because the iron is getting hot enough to burn the hair before she is through using the iron.

The object of this invention is to provide a curling iron which is heated by an electric heating element, the current for which is supplied through a handle provided with a switch that may be closed to heat the iron and opened to cool it, and which regulation may all be accomplished by a slight movement of the operator's finger of her hand holding the handle.

A further object is to simplify and cheapen the construction so a durable article can be sold at a reasonable price.

I accomplish the above and other objects which will hereinafter appear, by the mechanism illustrated in the accompanying drawings, in which—

Fig. 1 is a view in side elevation of a curling iron embodying my improvements. Fig. 2 is a longitudinal section of the iron on a somewhat larger scale. Fig. 3 is a top plan view of the switch mechanism removed from the handle. Fig. 4 is a section on the line 4—4 of Fig. 3. Fig. 5 is a detail in underside view of the bayonet joint removably connecting the half-round pivoted member, and Fig. 6, is a view of the inside of one member of the two-part handle.

Like characters of reference indicate like parts in the several views of the drawing.

The member 7 is the one to be heated and upon which the hair to be curled is wrapped. It is in the form of a round tube, here shown as closed at its end remote from the handle. A handle, preferably of wood, is in two pieces, split centrally and longitudinally. These assembled members 8 and 9, have a longitudinal central hole through them, into one end of which the tubular member 7 is inserted, as is clearly shown in Fig. 2. A ferrule 10 surrounds the inner ends of the two-part handle to hold them together, and in a circumferential channel at the outer end of the handle is a wire ring 11 which binds the ends together there.

Assembled in the hollow member 7 is a resistance coil 12, of usual construction, one of the wires 14, to which coil leads through a suitable length, properly insulated, to a plug 15, of usual and suitable construction, inserted in any suitable socket (not shown). The other wire 16, from the coil, also extends to the plug 15, and is insulated as shown after it leaves the handle, but within the handle this wire is cut in two and the end next to member 7 is electrically connected with the binding post 13 of a terminal plate 17, mounted on a block 18 of insulating material seated in a suitably formed recess in the handle. The outer side of block 18 has a longitudinal channel 19 with inwardly beveled sides which slidingly retain a metal plate 20. The latter contacts a binding-post 21 in block 18 to which the other end of the divided wire 16 is attached. Electrical connection is established at all times between the plate 20 and post 21 and wire, and it is made with the plate 17 when the plate 20 is moved into contact with plate 17, as shown in Fig. 2. This contact is broken by moving plate 20 away from plate 17, as shown in Fig. 3. Movement of plate 20 to make and break the circuit is accomplished manually through a lug 23 fastened to plate 20 and extending through a slot in the handle as shown in Fig. 2, into reach of the operator's finger holding the handle.

The binding posts 21 and 13 are here shown as metal eyelets but that is not an essential feature of my construction.

Located near the ferrule 10 is a U-shaped metal strap 27, the ears of which are perforated and receive a pin 28 to which the mating half-round member 29 of the curling iron is pivoted. This is normally forced into contact with the member 7 by a spring 30, and a pushplate 31 is for thumb pressure in swinging the member 29 away from member 7. The strap 27 has an L-shaped slot 33 which receives a lug 35 pressed out of the

metal of member 7. A bayonet joint is thus provided for the ready removal of member 29.

Having thus fully described my invention, what I claim as new and wish to secure by Letters Patent, is—

1. The combination, with a curling iron having a handle and a hollow member on which the hair is wrapped, of an electric heating element in the hollow member, electric conductors in circuit with the heating element and passing through the handle, a sliding make and break switch located inside of the handle in said circuit, and means comprising a lug extending through an opening in the handle for manipulating the switch by a hand on the handle.

2. The combination, with a curling iron having a handle and a hollow member on which the hair is wrapped, of an electric heating element in the hollow member, electric conductors in circuit with the heating element and passing through said handle, an insulating block assembled in the handle, a fixed terminal on the block, a second terminal movable into and out of contact with the fixed terminal, and a lug connected with the second terminal and extending through an opening in the handle for manipulating the switch by a hand on the handle.

3. The combination, with a curling iron having a handle and a hollow member on which the hair is wrapped, of an electric heating element in the hollow member, electric conductors in circuit with the heating element and passing through said handle, an insulating block assembled in the handle, a fixed terminal on the block, a conducting plate in the circuit slidable on the block into and out of contact with the fixed terminal, and a lug on the plate extending through an opening in the handle for manipulation by a hand on the handle.

4. The combination, with a curling iron having a handle and a hollow member on which the hair is wrapped, of an electric heating element in the hollow member, electric conductors in circuit with the heating element and passing through said handle, a block of insulating material assembled in the handle having a dovetailed groove, a fixed terminal at one end of the groove, a conducting plate sliding in the groove to contact with the fixed terminal said plate being in the circuit and an extension from the sliding plate to the outside of the handle.

5. The combination, of a handle in two longitudinally separable parts, a hollow member on which the hair is wrapped seated in the handle, an electric heating element in the hollow member, electric conductors in circuit with the heating element and passing through the handle, a block of insulating material in the handle having a slideway, a conducting plate sliding in said slideway and forming a part of the conductors, means extending outside of the handle for manually sliding the plate and a fixed terminal plate in the circuit with which the sliding plate is contacted and from which it is moved to break the contact.

Signed at Indianapolis, Indiana, this the 23rd day of March, 1922.

MORTON MURPHY.