

A. M. WENTWORTH.

ELECTRIC HEATER.

APPLICATION FILED JULY 15, 1909.

1,011,879.

Patented Dec. 12, 1911.

Fig. 1.

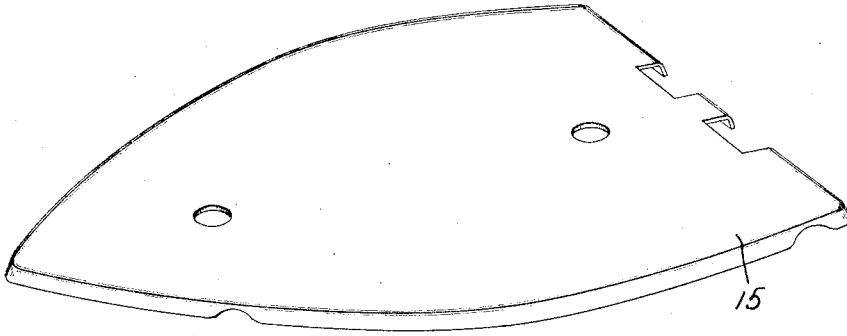
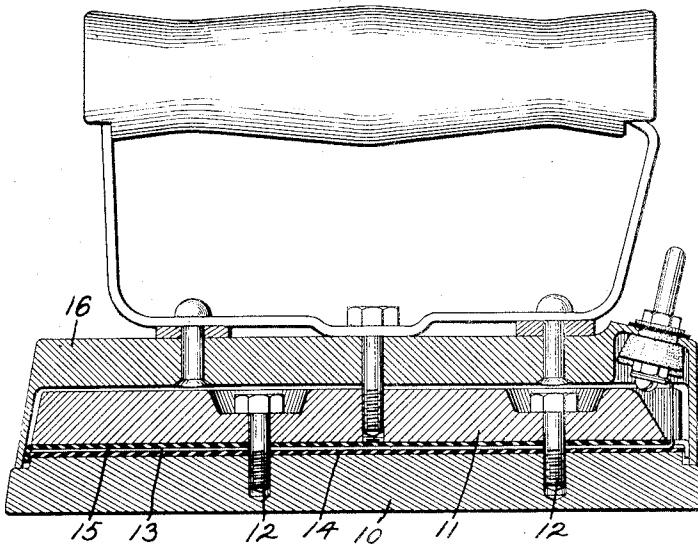


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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ELECTRIC HEATER.

1,011,879.

Specification of Letters Patent.

Patented Dec. 12, 1911.

Application filed July 15, 1909. Serial No. 507,790.

To all whom it may concern:

Be it known that I, ARTHUR M. WENTWORTH, a citizen of the United States, residing at Pittsfield, county of Berkshire, State of Massachusetts, have invented certain new and useful Improvements in Electric Heaters, of which the following is a specification.

This invention relates to electric heaters and has for its object the provision of a device of this character in which the heating element is sufficiently insulated and fixed in place so as to prevent grounding of the unit.

My invention relates more particularly to flat irons and the like in which a thin flat heating unit is employed. In devices of this character it has been the practice to employ two sheets of mica of the same size, one on each side of the flat unit, the three parts being clamped to the body of the iron. With this arrangement it is difficult to secure the unit and be sure that the mica sheet would not be displaced and cause a ground. In carrying out my invention, I employ two mica sheets, one of which is larger than the other and also larger than the unit itself, so that it can be bent over the unit and sheet. The one sheet while being larger than the other is of the same shape, and is pressed into place when the iron is assembled.

In the accompanying drawing, in which I have shown my invention embodied in concrete form, Figure 1 represents a perspective view of the mica sheet which is bent in the desired form; and Fig. 2 represents a sectional view of the completed iron.

Referring to the drawings, 10 represents the lower member, and 11 the upper member constituting the body of the iron. These two members are clamped together by screws 12, with the heating element between them. This heating element consists of a thin unit 13 made of sheet resistance material in any desired way, as, for instance, in the manner shown in the application of Parkhurst, Serial No. 466,612. This unit is arranged between two sheets of refractory insulating material such as mica. The lower one of these sheets 14 is substantially the same shape and size as the heating unit, while the upper sheet 15 is of similar shape but larger. The parts are clamped in place and the cover 16 applied to the upper mica

sheet 15 downward through the unit and over the under sheet, as shown in Fig. 2. This prevents the unit from slipping, and centers the unit, thereby preventing a ground between the unit and the cover 16. In its final shape, the sheet is in the form shown in Fig. 1 and, if desired, may be given this shape before assembling. I have found this to be a very effective and simple method of overcoming the difficulties incident to the use of the flat unit in a flat iron.

While I have described my invention as embodied in concrete form for purposes of illustration, it should be understood that I do not limit my invention thereto, since various modifications thereof will suggest themselves to those skilled in the art without departing from the spirit of my invention, the scope of which is set forth in the annexed claims.

What I claim as new and desire to secure by Letters Patent of the United States, is:—

1. An electric flat iron comprising a body portion, a flat heating unit mounted thereon and insulated therefrom, a sheet of refractory insulating material mounted upon said unit and having its edges bent to inclose the same and a metallic plate secured to the base and clamping the parts together.

2. An electric flat iron comprising a body portion, a flat heating unit mounted thereon, a sheet of mica on each side of said unit, one of said sheets being larger than the unit and the other sheet and having its edges bent to inclose their edges.

3. An electric flat iron containing a heating unit inclosed between mica sheets, one sheet being cupped and overlapping the other sheet to completely inclose the unit.

4. An electric flatiron, comprising a body portion, a flat heating unit mounted thereon, a sheet of mica between the body and said unit, a second sheet of mica, larger than the unit and said first sheet, above the unit, and a cover arranged to force the edge of the larger sheet over the edges of the smaller sheet and unit.

In witness whereof, I have hereunto set my hand this 10th day of July, 1909.

ARTHUR M. WENTWORTH.

Witnesses:

LAURENCE H. WHITNEY,
JAMES S. SMYSER.