Dec. 14, 1948. H. LEE 2,456,201

HEATING ELEMENT

Filed Nov. 3, 1944 2 Sheets-Sheet 1

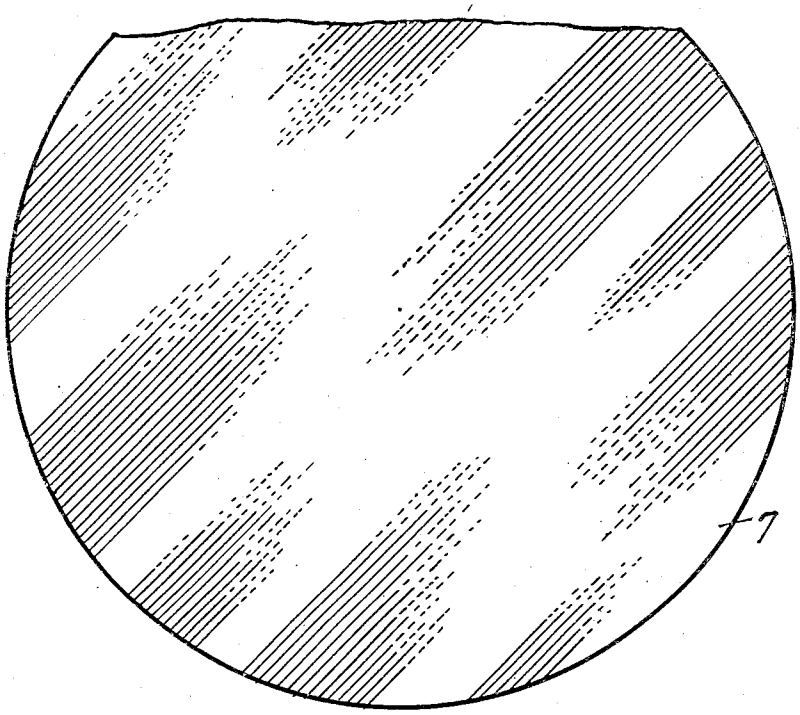

Fig. 1

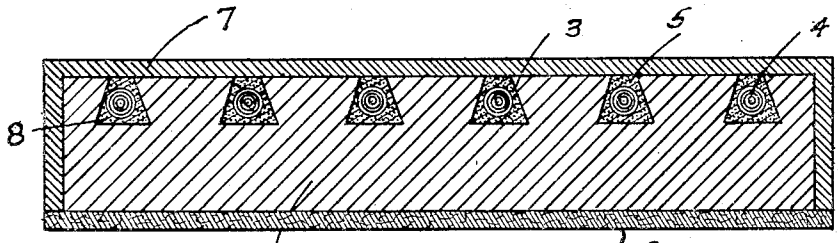

Fig. 2

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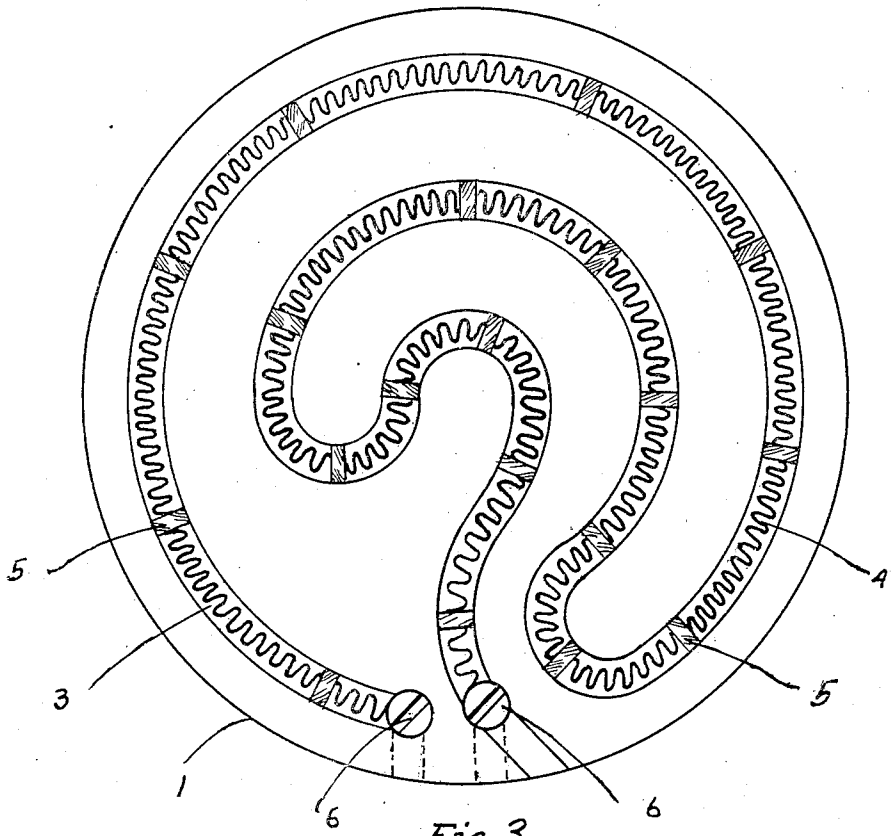

Fig. 3

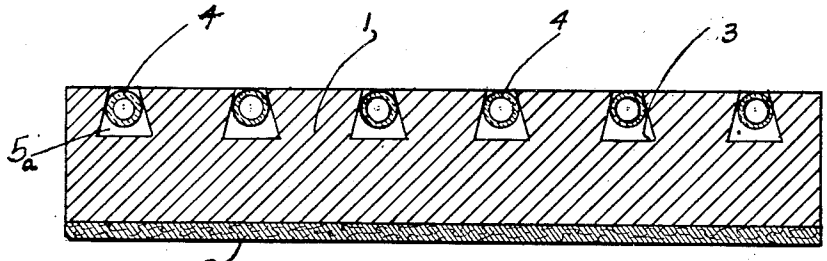

Fig. 4

Fig. 5.

Fig. 6.

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Patented Dec. 14, 1948

2,456,201

UNITED STATES PATENT OFFICE

2,456,201

HEATING ELEMENT

Hoard Lee, Houston, Tex.

Application November 3, 1944, Serial No. 561,740

1 Claim. (Cl. 219—37)

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This invention relates to a heating element.

An object of the invention is to provide a heating element which has been specially designed for the efficient use of electricity as a source of heat and is particularly useful for cooking purposes.

The device may be designed for slow heating, as is desirable in certain kinds of cooking or for quick heating when that is desired.

Another object of the invention is to provide a heating element of the character described in which the resistance coil, or heating element, is mounted in a novel manner.

With the above and other objects in view the invention has particular relation to certain novel features of construction, arrangement of parts and use, examples of which are given in this specification and illustrated in the accompanying drawings wherein:

Figure 1 shows a plan view of a form of the heating element.

Figure 2 shows a cross, sectional view thereof.

Figure 3 shows a top plan view wherein the cover of quick heating metal has been dispensed with.

Figure 4 shows a cross, sectional view thereof; and

Figures 5 and 6 show forms of anchors employed.

Referring now more particularly to the drawings wherein like numerals of reference designate the same parts in each of the figures, the numeral 1 designates the body of the heating element which, as shown, is circular in form but which may be made of any selected shape. It is formed of a suitable metal and is preferably mounted on an asbestos pad 2. This body is provided, in its upper surface, with a sinuous groove 3 which extends approximately throughout the area thereof and which is dovetailed in cross section. It is provided to contain the resistor 4 which is shown in Figure 3 as being formed of a suitable conductor coil.

This resistor is supported in place by the anchors 5 preferably formed of porcelain and dovetailed in shape so as to be readily fitted into the groove 3.

It will be noted that one end of the groove 3 extends to the margin of the body 1, as shown in Figure 3, and in installing the resistor the required number of anchors 5 may be slipped over the coil or resistor 4 and the resistor may then be inserted endwise into the groove 3 and the anchors successively fitted into and moved along the groove until the resistor is completely installed in the groove and the anchors may then be adjusted the required distance apart as shown in

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Figure 3 so as to support the resistor in place. The ends of the resistor may then be secured in place by the terminals 6, 6 which form contacts for the plug of an electrical conductor.

If desired the resistor may be surrounded, throughout the length of groove 3, by suitable insulating material as 8, as shown in Figure 2, which is flush with the upper surface of the body 1. The heat from the resistor will thereby be quickly carried to the cooking surface. The heat will also be distributed throughout the body 1 and when said body becomes thoroughly heated the current can be lowered and the heat stored up in the body 1 of slow heating metal can then be utilized resulting in a saving of electrical current.

In the form shown in Figure 4 the anchors 5a are first inserted into the groove 3 and spaced the required distance apart and the resistor 4 is then mounted on said anchors 5a and suitably secured thereto. In this form the insulation 8 may be dispensed with.

The body 1 may be enclosed on top and around its sides with a jacket 7 of a suitable material. This jacket is not indispensable but it is preferable in the form shown in Figure 2, but for quick heating purposes the jacket may be dispensed with, as indicated in Figure 4.

The drawings and description are illustrative merely while the broad principle of the invention will be defined by the appended claim.

What I claim is:

A heating element comprising a metallic body having a sinuous dovetailed groove in one face thereof, dovetailed anchors formed of insulating material spaced apart along said groove, a resistor extending approximately from end to end of the groove and anchored in place by said anchors, a jacket into which the body is fitted said jacket including a plate in contact with the grooved face, and an asbestos coating or covering, securely fastened to the side of unit opposite the grooved side.

HOARD LEE.

REFERENCES CITED

The following references are of record in the file of this patent:

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