Oct. 8, 1946. L. R. BOLTE 2,408,750

TEMPERATURE INDICATING ELECTRIC IRON

Filed March 6, 1943

Fig. 1.

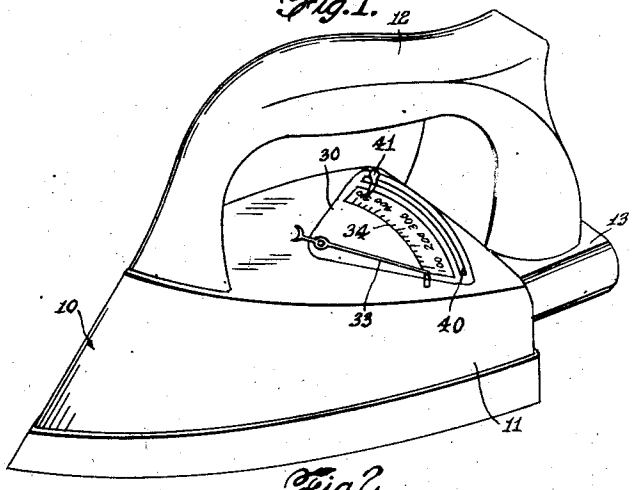


Fig. 2.

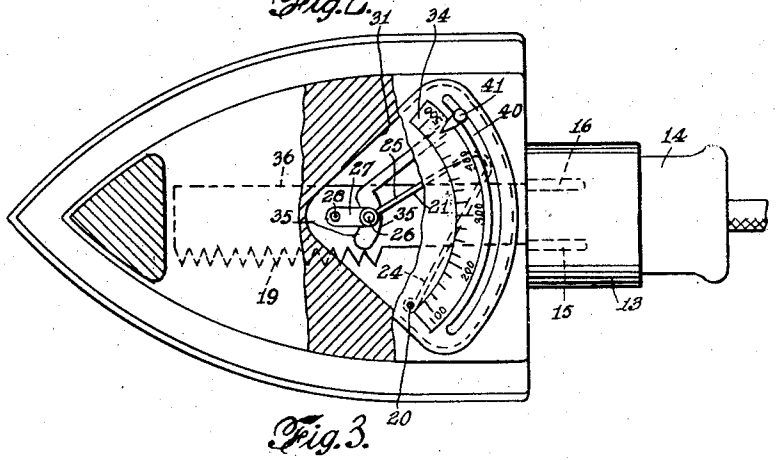
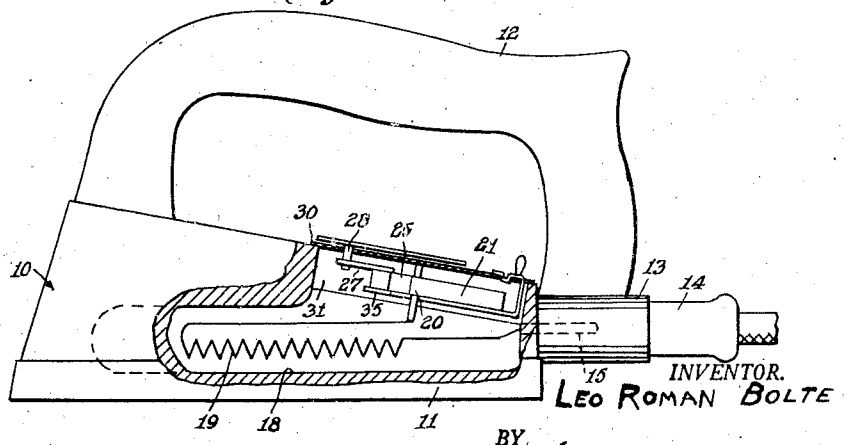


Fig. 3.



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TEMPERATURE INDICATING ELECTRIC IRON

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Application March 6, 1943, Serial No. 478,223

1 Claim. (Cl. 219—25)

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This invention relates to electric sadirons with temperature gauges.

An object of this invention is to provide a sadiron of the character described having an electric heating element, and a temperature gauge to indicate the temperature of the iron.

Another object of this invention is to provide an iron of the character described having means to automatically switch off the heating element when the temperature of the iron reaches a predetermined temperature, and means to manually adjust such predetermined temperatures. Thus the user may regulate the temperature above which the iron will not heat so that the iron can be used for different materials with safety.

Still another object of this invention is to provide a strong durable and compact iron of the character described which shall be relatively inexpensive to manufacture, easy to manipulate and adjust, and which shall yet be practical and efficient to a high degree in use.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

The invention accordingly consists in the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the construction hereinafter described, and of which the scope of application will be indicated in the following claim.

In the accompanying drawing, in which is shown one of the various possible illustrative embodiments of this invention,

Fig. 1 is a perspective view of an iron embodying the invention;

Fig. 2 is a top plan view of said iron with parts broken away and in cross-section; and

Fig. 3 is a side-elevational view of the iron with parts broken away.

Referring now in detail to the drawing, 10 designates a sadiron embodying the invention. Said iron comprises a body 11 and a handle 12. At the back of the body 11 is a socket 13, to receive one end 14 of an electric cord connector. In the socket 13 are a pair of prongs 15, 16 to be received in the connector 14.

In the body is a cavity 18. Therein is an electric resistance coil 19 connected at one end to prong 15. The other end of coil 19 is connected to one end 20 of a thermostatic element 21. Said element 21 is of the bi-metal type. One end thereof is pivoted at 20 to a vertical pin fixed to cover plate 30. Said element 21 has an arm 24 from which there extends an arm 25 at an angle thereto. Arm 25 has a free end 26 pivoted to an arm 27 fixed to a vertical shaft 28 journalled

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in a cover plate 30 covering a cavity 31 at the top of the iron. Shaft 28 passes through cover plate 30. Fixed to the upper end thereof is a pointer 33. On cover plate 30 is a dial 34 calibrated for temperature.

Beneath arm 27 and contacting the same is a terminal 35 connected by wire 36 to the other prong 16. When arm 27 contacts terminal 35, the circuit is complete through coil 19 to heat the same. At the same time element 21 is also heated and it then opens up causing the free end 26 to move and swing arm 27, to thereby also move pointer 33 over dial 34 to indicate the temperature. When the temperature is such that arm 27 moves beyond and off terminal 35, the circuit is broken. As the element cools arm 27 swings back to element 35. Cover plate 30 has a curved slot 40. Slidably mounted on cover plate 30 and passing through slot 40 is a member 41 attached to terminal 35. By sliding member 41 in slot 40, the position of terminal 35 can be adjusted. The user may thus set the maximum temperature for the iron.

It will thus be seen that there is provided a device in which the several objects of this invention are achieved, and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiment above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawing is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

A temperature indicating device for an electrically heated appliance, said appliance including a body portion having a cavity with electrical heating means in said cavity and a cover plate on said body portion over said cavity, said device comprising a dial having a curved slot fixed to said cover plate, a substantially U-shaped thermoresponsive element in said cavity, said element having one leg of the U pivoted to the cover plate, a vertical shaft journalled in the cover plate, a short arm fixed to said shaft below the plate, the other leg of the U-shaped element pivoted at its end to said short arm, a pointer fixed to said vertical shaft, a member slidable in the slot of said dial, said slidable member having a terminal in said body cavity connected to said heating means, said terminal adapted to contact said short arm.

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