Jan. 4, 1955 B. A. SIMMONS 2,698,617

ELECTRICALLY HEATED MASSAGE DEVICE

Filed Oct. 5, 1953

Fig. 1

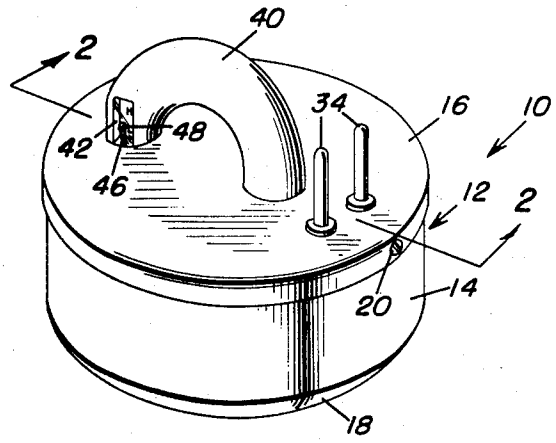


Fig. 2

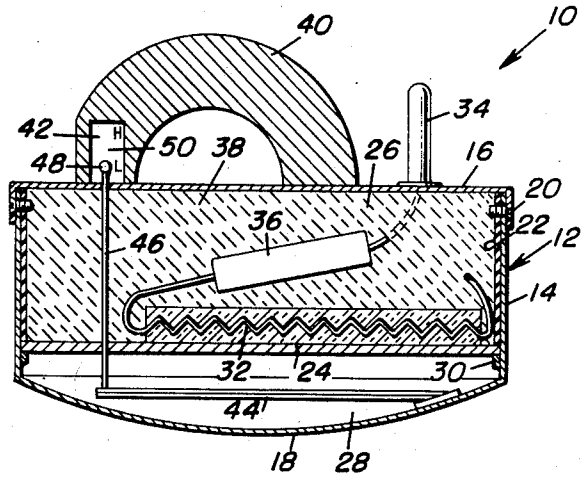
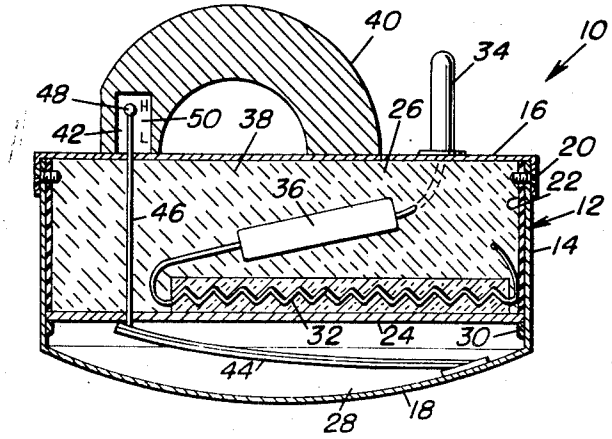


Fig. 3



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ELECTRICALLY HEATED MASSAGE DEVICE

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3 Claims. (Cl. 128—24.1)

This invention relates to new and useful improvements and structural refinements in massaging devices, and the principal object of the invention is to provide a device of the character herein described, which is electrically heated, so that facial cream, and the like, may be properly liquified and massaged in a gentle manner into the pores of the skin to safeguard against the formation of wrinkles, and the like.

An important feature of the invention resides in the provision of thermally responsive means for indicating the operating heat of the device, said means including a heat indicator which is conveniently housed in the handle with which the device is equipped.

Some of the advantages of the invention reside in its simplicity of construction, in its efficient and dependable operation and in its adaptability to economical manufacture.

With the above more important objects and feature in view, and such other objects and features as may become apparent as this specification proceeds, the invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the invention;

Figure 2 is a vertical sectional view, taken substantially in the plane of the line 2—2 in Figure 1 and illustrating the heat indicating means at its "low heat" position; and

Figure 3 is a sectional view, similar to that shown in Figure 2, but illustrating the heat indicating means at its "high heat" position.

Like characters of reference are employed to designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings in detail, the massaging device is designated generally by the reference character **10** and embodies in its construction a substantially circular disk-shaped housing **12** having a side wall **14**, a removable, flanged cover **16** and a convex bottom **18**, as will be clearly apparent.

The cover **16** is removably secured to the side wall **14** of the housing **12** by suitable screws **20** and a layer of insulating material **22** is provided at the inside of the side wall **14**, as shown.

A horizontal partition of mica or similar material **24** separates the main body portion from the bottom portion of the housing, whereby to divide the interior of the housing into a relatively large upper chamber **26** and a relatively small bottom chamber **28**. The mica sheet or partition **24** is sustained in position in the housing by an annular bead or ring **30** with which the side wall **14** of the housing is equipped, and it will be observed that the upper chamber **26** of the housing contains a suitable electric heating element **32** which is electrically connected

to a pair of terminals **34** provided on the housing cover **16**. A thermostatic cut-out switch **36** is connected in series with the heating element **32** so as to prevent the element from generating excessive heat, and it will be also observed that the entire upper chamber **26** of the housing is filled with insulating material **38**.

A substantially semi-circular handle **40** is suitably secured to the top of the cover **16** and is provided at one side thereof with a recess **42**. A thermally responsive, bi-metallic strip **44** is secured at one end thereof to the bottom **18** of the housing, and is disposed within the lower chamber **28**. The other end of the bi-metallic strip **44** is operatively connected to or otherwise engages the lower end of a vertically extending rod **46** which is slidable through the housing and has the upper end portion thereof disposed in the recess **42**. The upper extremity of the rod **46** is provided with an indicating element **48** which is movable vertically over a heat indicating scale **50** with which the recess **42** is inscribed.

Thus, responding to the bending or flexing of the bi-metallic strip **44** under the influence of heat, the rod **46** will be slid upwardly or downwardly as the case may be, and the element **48** will indicate on the scale **50** either a high degree or a low degree of heat.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed as new is as follows:

1. An electrically heated massage device comprising: a housing having a substantially convex bottom, a handle provided on the top of said housing, an electric heating element disposed in said housing, and means for delivering electric current to said element, said handle being provided with a recess having a heat indicating scale inscribed therein, a thermally responsive bi-metallic strip disposed in said housing and secured at one end thereof to said bottom, an upwardly extending rod slidable through said housing and having its upper end portion projecting into said recess, and an indicator element provided at the upper end of said rod and movable over said scale.

2. A massage device comprising a housing, means for heating said housing, a handle mounted on the housing and having a recess therein, a temperature indicating member slidable in the housing and operable in the recess, and temperature responsive means in the housing operatively connected to said member.

3. A massage device comprising a circular housing including a flat top and a convex bottom, electric heating means in the housing, an arcuate handle having its ends in abutting engagement with the top and fixed thereon, said handle having a recess in one end portion, a temperature indicating rod slidable in the housing and operable in the recess, and means in the housing for actuating said rod.

References Cited in the file of this patent

UNITED STATES PATENTS

1,905,750	Robinson	Apr. 25, 1933
2,445,596	Benton et al.	July 20, 1948