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HEATING ATTACHMENT FOR ELECTRIC LIGHT BULB

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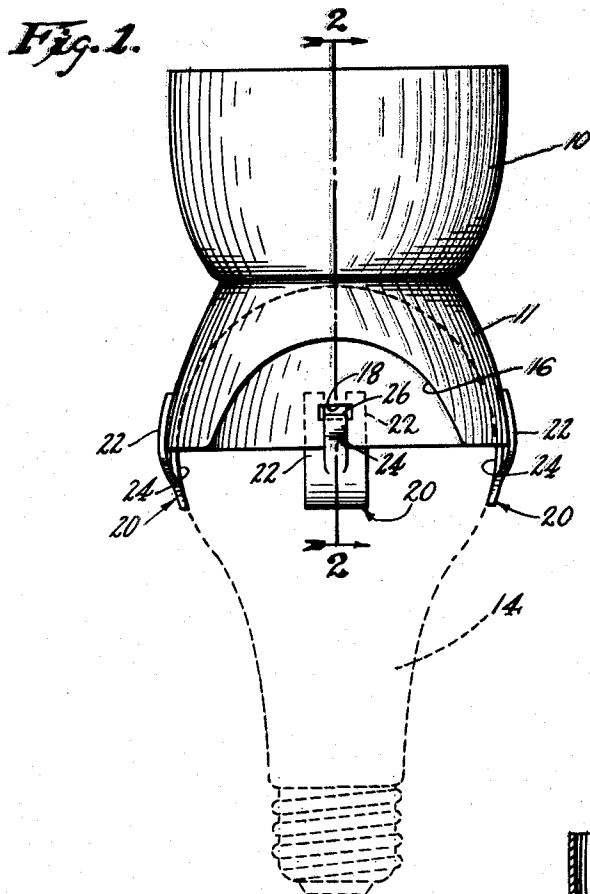


Fig. 2.

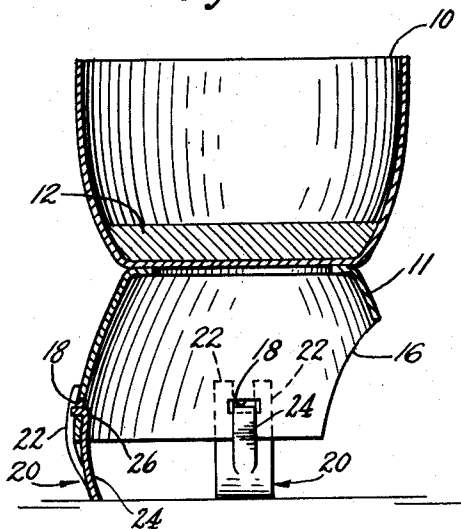
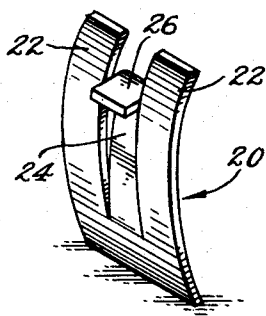


Fig. 3.



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3,151,233 HEATING ATTACHMENT FOR ELECTRIC LIGHT BULB

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This invention relates to a heating device, and more particularly to a heating device use in association with an electric light bulb.

It is an object of my invention to provide a heating device which can be mounted in an upright position on an electric light bulb when said bulb is in either an upright or horizontal orientation, which will have a substantial surface area in heating-conducting contact with said bulb, which can be supported in an upright position on a generally planar supporting surface, and which can be supported on said surface while hot without substantially raising the temperature thereof.

In accordance with the preferred form of my invention, there is provided a first cup for holding a material to be heated, and rigidly connected to a second cup having a generally circular cross-section. The two cups are connected together at their bases and the sidewalls of said second cup being curved for reception on an electric light bulb for mounting the device in an upright position in heat-transfer contact with said bulb. Said sidewalls have an arcuate recess found in their lower edge whereby said second cup is receivable on a bulb for mounting the device in an upright position when said bulb is disposed in either an upright or horizontal orientation.

A plurality of semi-resilient legs are releasably mounted on the sidewalls of the second cup and project outwardly therefrom for gripping the bulb to releasably retain the device in a fixed position thereon. The lower ends of said legs are disposed in coplanar relationship for supporting the device in an upright position upon a generally planar supporting surface with said first and second cups out of heat-conductive contact with said surface.

Other objects and features of my invention will become apparent from the more detailed description which follows and from the accompanying drawing, in which:

FIG. 1 is a front elevation of a heating device embodying my invention and showing the same mounted on an electric light bulb indicated in dotted lines;

FIG. 2 is a vertical section taken on the line 2--2 of FIG. 1, but showing my device resting on a planar surface; and

FIG. 3 is an enlarged perspective view of one of the legs shown in FIG. 1.

My invention comprises a heating device mountable on a conventional electric light bulb for conducting the heat from said bulb to a material which is to be heated. Such material may be, for example, a liquid which is to be vaporized, a wax depilatory which is to be melted, etc.

As shown in FIG. 1, my heating device comprises a pair of cups 10 and 11 rigidly joined together at their bases and preferably formed from a heat-conductive material, such as aluminum. The cup 10 is normally disposed in an upright position and is adapted to hold the material 12 which is to be heated. The cup 11 has a generally circular cross-section with its sidewalls being curved to abut the outer faces of an electric light bulb 14. The configuration of the cup 11 is such that its sidewalls abut the bulb 14 over substantially their entire extent to thus provide a substantial surface area for conducting the heat away from said bulb to the material 12 carried in the cup 10.

My device is shown in FIG. 1 as being mounted on a bulb 14 orientated in an upright position. However, it frequently occurs that such light bulbs are mounted in a

horizontal orientation, and to permit my device to be mounted on such horizontally orientated bulb, I form an arcuate recess 16 in the lower edge of the sidewalls of the cup 11. Thus, with a bulb disposed in a horizontal orientation, the edge of the recess 16 will rest upon said bulb and the cup 10 will be disposed in an upright position to retain the material 12 therein.

A plurality of circumferentially spaced openings 18 are formed in the sidewalls of the cup 11 adjacent the lower ends thereof for mounting a plurality of inwardly curved legs 20 on said cup. Conveniently, each of the legs 20 is formed as a sheet-metal stamping and comprises a pair of laterally spaced fingers 22 integrally connected at their lower ends. A tongue 24 is interposed between the fingers 22 and is provided at its upper end with an outwardly directed offset 26 spring-stressed by the inherent resiliency of the leg into one of the openings 18; the upper ends of the fingers 22 bearing against the outer face of the cup sidewalls on opposite sides of said opening. The legs 20 have a radius of curvature slightly smaller than the radius of curvature of the sidewalls of the cup 11 and, because of their inherent resiliency, said legs will bindingly grip the bulb 14 for releasably retaining the heating device in a fixed position on said bulb.

The lower ends of the legs are disposed in a coplanar relationship for supporting the device in an upright position on a generally planar surface when it is removed from the bulb. The area of contact of the legs with such a supporting surface is relatively small so that the device may be placed on a supporting surface while it is hot without conducting a substantial amount of heat to such surface. With the legs 20 supporting the cups 10 and 11 in an elevated position above such a surface, there is a freedom of air movement between said cups and the supporting surface which is further enhanced by the recess 16 to thus provide an effective insulating barrier of air between the cups and said supporting surface.

The lower edge of the cup 11 also lies in a single plane to support the device in an upright position on a supporting surface when the legs 20 are removed. To remove the legs, the offsets 26 are merely sprung inwardly to clear the openings 18, and the legs are thus free to be detached from the device.

I claim:

1. A heating device for use in association with an electric light bulb, comprising

- (a) a first cup for holding a material to be heated,
- (b) a second cup rigidly connected to said first cup and having a generally circular cross-section,
- (c) said cups being formed from a heat-conductive material and being rigidly connected at their bases,
- (d) the sidewalls of said second cup having a plurality of circumferentially spaced openings formed therein and being curved to abut an electric light bulb over substantially their entire extent for supporting said second cup thereon,
- (e) said sidewalls having an arcuate recess formed in their lower edge between a pair of said openings whereby said second cup is mountable on said bulb to mount said device thereon in an upright orientation when the said bulb is in an upright orientation and said recess is receivable over an arcuate segment of said bulb to mount said device thereon in an upright orientation when said bulb is in a horizontal orientation, and
- (f) a plurality of curved legs having a radius of curvature less than that of said sidewalls and having one of their ends releasably lockingly received in said openings for mounting said legs on said sidewalls, said legs projecting beyond said sidewalls at

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points spaced circumferentially therearound for gripping engagement with said bulb when said device is mounted on said bulb and supporting said device in an upright position when said device is disposed on a planar supporting surface.

2. A heating device for use in association with an electric light bulb, comprising

- (a) a first cup for holding a material to be heated,
- (b) a second cup rigidly connected to said first cup and having a generally circular cross-section,
- (c) said cups being formed from a heat-conductive material and being rigidly connected at their bases,
- (d) the sidewalls of said second cup having a plurality of circumferentially spaced openings formed therein and being curved to abut an electric light bulb over substantially their entire extent for supporting said second cup thereon,
- (e) said sidewalls having an arcuate recess formed in their lower edge between a pair of said openings whereby said second cup is mountable on said bulb to mount said device thereon in upright orientation when said bulb is in an upright orientation and said recess is receivable over an arcuate segment of said bulb to mount said device thereon in an upright orientation when said bulb is in a horizontal orientation, and

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- (f) a plurality of legs removably mounted in said openings and each comprising a pair of interconnected fingers disposed on opposite sides of one of said openings against the outer face of said sidewalls with a resilient tongue interposed between said pair of fingers and having one of its ends connected thereto and its opposite end having an outwardly directed offset receivable in said opening for releasably mounting the leg on said second cup,
- (g) said legs projecting beyond said sidewalls for gripping engagement with said bulb when said device is mounted on said bulb and supporting said device in an upright position when the device is disposed on a planar supporting surface.

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