HEAT REDUCING ATTACHMENT FOR LIGHT FIXTURES, INCLUDING SPACED UPPER AND LOWER HEAT RESTRICTORS

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This invention relates to new and useful improvements in light fixtures and the primary object of the present invention is to provide an attachment for the light fixture disclosed in my co-pending application Serial No. 75,756, filed February 11, 1949, now U. S. Patent No. 2,512,948, that will considerably reduce the heat prevalent in a light fixture outlet box when a bulb mounted in the light fixture is energized.

Another important object of the present invention is to provide a heat reducing attachment that is quickly and readily applied to or removed from a light fixture in a convenient manner and which will permit the convenient and safe handling of a light fixture.

A further object of the present invention is to provide an attachment of the aforementioned character that is extremely small and compact in structure and which will add very little weight to the fixture on which the same is applied.

A still further aim of the present invention is to provide a heat reducing attachment for light fixtures that is simple and practical in construction, strong and reliable in use, neat and attractive in appearance, relatively inexpensive to manufacture, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is an elevational view of a light fixture and showing the present invention applied thereto;

Figure 2 is an enlarged vertical sectional view taken substantially on the plane of section line 2—2 of Figure 1; and

Figure 3 is a group perspective view of the present invention separated from a light fixture to which the same is to be applied.

Referring now to the drawings in detail, whereinafter the purpose of illustration, there is disclosed a preferred embodiment of the present invention, the numeral 10 represents the base portion of the light fixture that is preferably stamped or formed from a single sheet of bendable material.

The base portion 10 comprises a flat or outer endless channel member 12, preferably annular in configuration, that includes an inner flange portion 14 and an outer flange portion 16. The outer flange portion 16 is flared outwardly to provide a continuous skirt or shield 18 and terminates in an upstanding flange or scalloped edge (not shown) that is spaced above the upper edge of the inner leg portion 14.

The numeral 22 represents an inverted inner endless channel member the flange portion 24 of which is integrally formed with the inner flange portion 14 of the channel member 12. The leg portion 24 is also flush with the leg portion 14.

The inner leg portion 26 of the channel member 22 is integrally formed with a closure plate 28 that lies in a plane spaced parallel to the webs of the channel members 12 and 22.

A suitable angle bracket 32 supporting a lamp receiving socket 34 is secured to the closure plate 28.

A plurality of circumferentially spaced set screws or fasteners 40 are threaded in apertures 30 in the leg portions 14 and 40 of the channel members 12 and 22, respectively, in order to reduce the heat normally prevalent during the use of the base 10.

In order to accommodate the instant attachment, the closure plate 28 is formed with a central opening 56 that receives the lower reduced portion 58 of a cylindrical member 60 having an enlarged upper portion 62. A heat-resistant disk preferably of asbestos material, 64 is fitted in the lower reduced portion 58 of the member 60 and a further heat-resistant disk, preferably of asbestos material, 66 is fitted in the upper enlarged portion 62 of the member 60. The member 60 is provided with a shouldered portion 58 that bears against the upper face of the closure plate 28.

The members 64 and 66 are spaced parallel to each other and the walls of the member 60, between the heat resisting elements 64 and 66, are provided with a plurality of circumferentially spaced openings 70 to permit the passage of air therethrough.

A further heat-resisting member, of preferably asbestos material, 72 rests upon the upper face of the member 66. The member 72 is of a diameter greater than the diameter of the member 66 but of a diameter less than the diameter of the inner endless channel member 22. A metallic plate 74 is secured by fasteners or the like 76 to the outer surface of the member 72 and includes an up-
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standing flanged portion 78 that loosely embraces the circumference of the member 72.

Fasteners or bolts 80 extend through the member 72 and are secured to the closure plate 28 in order to retain the entire attachment 82 to the base 10.

Connectors 84 enter a downwardly tapered opening 86 in the member 72, pass through a selected one of the openings 70 and are connected to the socket 34.

It should be noted that the entire weight of the attachment 82 is relatively light since the cylindrical member 60 and ring 74 are constructed of a suitable light weight metal, also the members 64, 66 and 72, being of asbestos or such other suitable light weight fire and heat-resistant material will add very little weight to the entire attachment 82.

In practical use of the present invention, the attachment 82, being secured to the base 10 as aforementioned, is secured to the underside of a wall structure so that the upper face of member 72 bears against the under surface of the wall. As a lamp bulb, carried by the socket 34, is energized the heat radiated from the light bulb will tend to be absorbed or reflected by the members 64, 66 and 72. There is also provided a passage for air due to the openings 70 and further openings or slots 55 in the leg or flange portion 14 of the channel member 12.

It has been found that with the use of the instant attachment a large amount of heat normally retained within the outlet box above the globe 45 will be reduced to such an extent that the heat in the outlet box is no longer considered hazardous.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the construction, operation and advantages of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. For use with a lamp fixture having an upper horizontal wall with an opening therein, a heat reducer comprising a hollow member having upper and lower portions, a lower heat resistor mounted in the lower portion of said member, and an upper heat resistor mounted in the upper portion of said member, said member having openings in its wall disposed between the upper and lower heat resistors, the lower portion of said member extending downwardly through the opening in said upper wall, said member having a shouldered portion supported on said upper wall.

2. The combination of claim 1, wherein said upper heat resistor includes an asbestos ring overhanging the member, and fasteners carried by and depending from said ring and securing said attachment to said upper wall.

3. In a lamp fixture including a base portion having a horizontal wall with an enlarged central opening therein, a heat reducer comprising a cylindrical member having a reduced lower portion extending downwardly through the opening, said member having a shouldered portion supported on said horizontal wall, said member also including an enlarged upper portion, a lower heat-resistant disk received in the lower portion of said member, an upper heat resistant disk received in the upper portion of said member and spaced parallel to the lower disk, said member having openings in its wall between said upper and lower disks, and means securing the member to the horizontal wall.

4. In a lamp fixture including a base portion having a horizontal wall with an enlarged central opening therein, a heat reducer comprising a cylindrical member having a reduced lower portion extending downwardly through the opening, said member having a shouldered portion supported on said horizontal wall, said member also including an enlarged upper portion, a lower heat-resistant disk received in the lower portion of said member, an upper heat resistant disk received in the upper portion of said member and spaced parallel to the lower disk, said member having openings in its wall between said upper and lower disks, another heat-resistant disk overlying and supported on said upper disk and including a portion overhanging the upper end of said member, and bolts extending downwardly through said portion and through said horizontal wall and securing said member to said base.

ISAAC LEVY.

References Cited in the file of this patent

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,224,162</td>
<td>Griswold</td>
<td>May 1, 1917</td>
</tr>
<tr>
<td>1,249,841</td>
<td>Smith</td>
<td>Dec. 11, 1917</td>
</tr>
<tr>
<td>1,351,255</td>
<td>Lazerson</td>
<td>Aug. 31, 1920</td>
</tr>
<tr>
<td>1,366,911</td>
<td>Holloway et al.</td>
<td>Feb. 1, 1921</td>
</tr>
<tr>
<td>1,748,352</td>
<td>Knapp</td>
<td>Feb 25, 1930</td>
</tr>
<tr>
<td>1,793,200</td>
<td>Waithers</td>
<td>Feb. 17, 1931</td>
</tr>
</tbody>
</table>