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GLOBE SUPPORT

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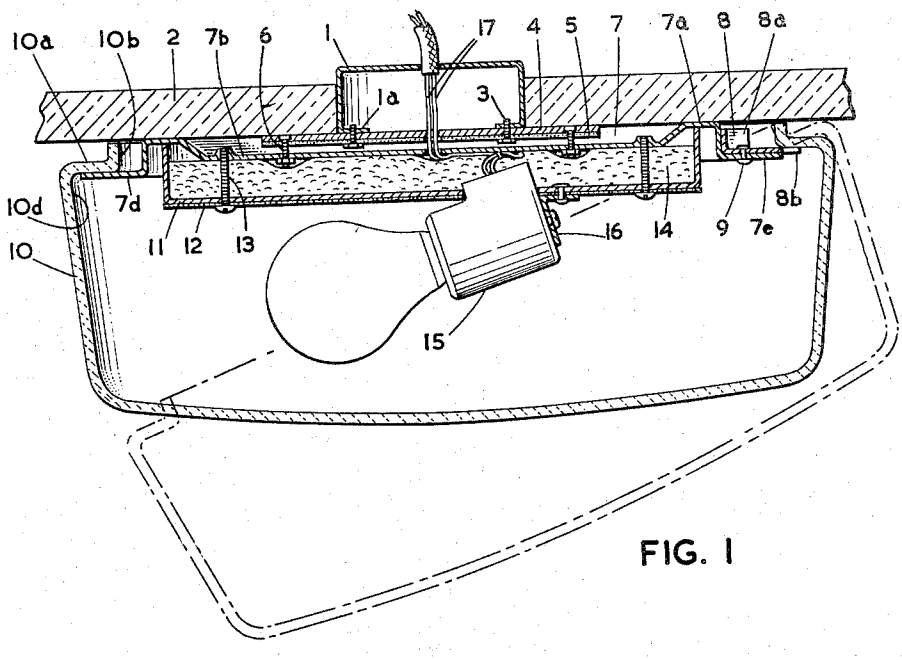



FIG. 1

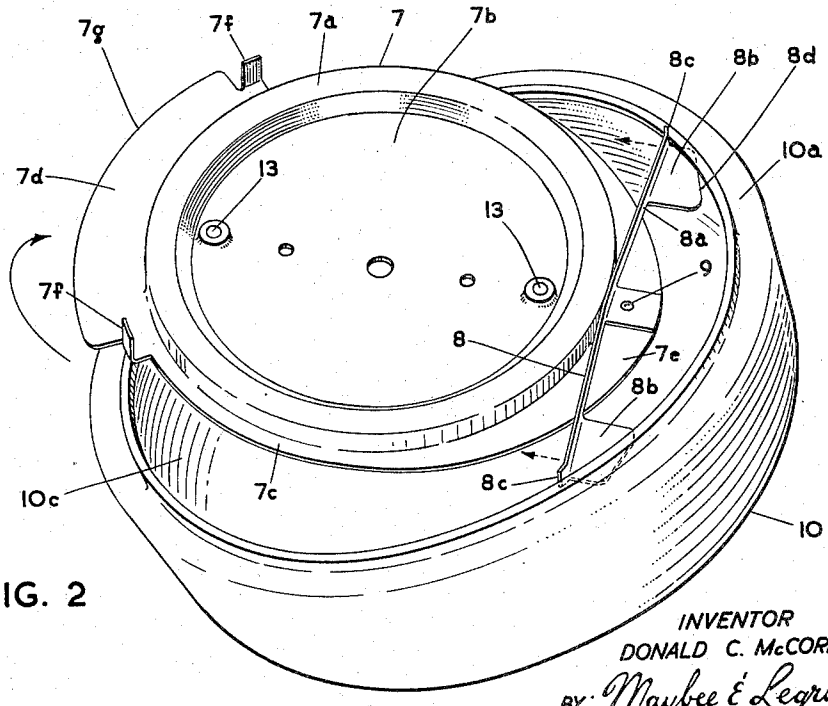



FIG. 2

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# GLOBE SUPPORT

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8 Claims. (Cl. 240—128)

This invention relates to a globe support for an electric lighting fixture, and is concerned primarily with ceiling fixtures.

One object of the invention is to provide a support on which a globe can easily be installed and removed, without having to manipulate screws, levers or knobs.

Another object is to provide a support which is completely hidden by the globe when in place.

The invention utilizes a globe having an inturned edge portion defining an opening in the top of the globe, and is defined in the appended claims, when read in the light of the following description of a preferred embodiment. The preferred embodiment is illustrated in the accompanying drawings, in which:

Fig. 1 is a vertical sectional view through a ceiling lighting fixture, showing in dotted lines a position of the globe when it is being installed or removed; and

Fig. 2 is a top perspective view of the globe, ceiling pan and spring strip of Fig. 1, showing how the globe may be installed or removed.

Referring to Fig. 1, an electrical outlet box **1** is mounted in any desired manner within a ceiling **2** and has a lower inturned peripheral flange **1***a*. Held against the ceiling by screws **3** which pass through the flange **1***a* is an outlet box cover **4** having an asbestos shield **5** with an aluminum facing on its lower surface to provide a thermal barrier.

The outlet box cover **4** supports, by means of bolts **6**, a ceiling pan **7** having an annular portion **7***a* that contacts the ceiling and a dished central portion **7***b* below and spaced from the outlet box cover. The pan **7** has an outwardly extending horizontal rim **7***c* (Fig. 2) having an enlarged outwardly extending horizontal projection or lip **7***d* at the left of the pan as viewed in the drawings. An elongated spring member **8** is secured at its centre to the rim **7***c* at the right hand side of the pan as viewed in the drawings. The spring member consists of a thin strip of spring metal **8***a* having horizontal outwardly extending projections or lips **8***b* at its free ends. The rivet **9** secures the strip **8***a* to the rim **7***c* so that the web of the strip **8***a* is vertical and by so fixing the web the rivet prevents the downward deflection of the strip. The rim **7***c* has an enlarged outwardly extending projection **7***e* at the point where the spring member **8** is secured to the rim **7***c* to provide further means for preventing the downward deflection of the strip **8***a*.

The lips **7***d* and **8***b* are adapted to extend under an inturned edge portion **10***a* of a globe **10**. This edge portion, which includes a small upward flange **10***b*, defines an opening **10***c* in the top of the globe. To install the globe, the right hand side of the edge portion **10***a* is hooked over the lips **8***b*, as shown in Fig. 2. The edge portion of the globe engages the upright end portions **8***c* of the strip **8***a*, and manual pressure applied to the right hand side of the globe causes horizontal pressure to be applied through the globe against the upright ends of the strip, and the spring strip is forced to deflect inwardly until



the left hand side of the edge portion **10***a* can be hooked over the lip **7***d*. Release of the manual pressure allows the spring strip to deflect outwardly again, drawing the globe to the right until the edge portion **10***a* comes up against upright abutments **7***f* that are turned up from the rim **7***c*. The globe is then in the position shown in full lines in Fig. 1, and the spring strip, by urging the globe to the right, holds the globe securely in that position. Removal of the globe may be effected by pressing the globe to the left, thus deflecting the spring strip inwardly until the globe becomes disengaged from the lip **7***d*, after which it can be slipped off the lips **8***b*.

The outermost edges **7***g*, **8***d* of the lips **7***d*, **8***b* are preferably curved to match the curvature of the inner surface **10***d* of the globe. The lips **7***d*, **8***b* are in substantially the same horizontal plane, and the vertical distance between this plane and the ceiling contacting surface of the annular portion **7***a* is only slightly greater than the maximum depth of the edge portion **10***a* (which is considered to include the flange **10***b*), so that the globe when installed fits quite snugly between the lips and ceiling. The firm pressure of the spring strip on the globe, and this snug fit, preventing rattling of the globe in response to surrounding vibrations. The globe entirely conceals the supporting structure.

Besides serving as the support member for the globe, the ceiling pan **6** also supports, by means of screws **13**, a socket pan **11** and underlying asbestos shield **12** having an aluminum facing on its lower surface. A fibreglass disc **14** is provided within the pan **11**, and another aluminum facing is provided on the lower surface of this disc to resist upward transmission of heat. A lamp socket **15** is secured by a bracket **16** to the pan **11**, and is energized by means of leads **17** brought down from the outlet box **1** through central apertures in the cover **4** and pan **7**.

It will be seen that a fixture has been provided wherein the globe is securely held in position and yet is easily removed for cleaning or for replacement of a lamp. The workman has only the globe to hold and manipulate, and the danger of his dropping the globe is therefore minimized. When the ceiling is being painted, the globe can easily be removed so that it is not splashed with paint, and no particular care need be taken in painting around the pan **7** because the globe, when replaced, completely conceals the pan. All visible ceiling bands, screws or hinges have been eliminated, and yet, as illustrated, the construction lends itself to the provision of an ample thermal barrier to prevent the transfer of heat from the lamp to the ceiling.

It is to be understood that the form of the invention herewith shown and described is a preferred example, and various modifications can be carried out without departing from the spirit of the invention or the scope of the appended claims.

What I claim as my invention is:

1. A ceiling support for a globe having an inturned edge portion defining an opening in the top of the globe, comprising a support member having a first outwardly extending horizontal lip at one side, an elongated spring member secured to the opposite side of the support member and having free ends with outwardly extending horizontal lips, all said lips being substantially in a common horizontal plane, the lips of the spring member being engageable under said inturned edge portion of the globe and the free ends of the spring member being deflectable inwardly against spring pressure of the spring member to allow said inturned edge portion to be hooked over said first lip.

2. A support as claimed in claim 1, wherein the support member has upright abutment means inwardly of said first lip and against which the spring member urges

said inturned edge portion when hooked over said first lip.

3. A support as claimed in claim 1, wherein the free ends of the spring member have upright portions engageable with said edge portion when the lips of the spring member are engaged under said edge portion whereby the free ends of the spring member are deflectable inwardly by horizontal pressure applied through the globe against said upright portions.

4. A support as claimed in claim 1, wherein the support member has a ceiling contacting portion which is located above said plane a distance only slightly greater than the maximum depth of said edge portion, whereby said edge portion when supported on the lips is almost in contact with the ceiling and conceals the support.

5. A ceiling support for a globe having an inturned edge portion defining an opening in the top of the globe, comprising a member having first outwardly extending horizontal lip means at one side, an elongated spring strip secured at its centre to the opposite side of the member, the spring strip having a vertical web to resist vertical deflection, and having free ends at which the web is engageable with said edge portion, the spring strip also having at its free ends outwardly extending horizontal lip means engageable under said edge portion, the free ends and lip means of the spring strip when so engaged with said edge portion being deflectable inwardly against spring pressure of the strip by horizontal pressure applied against the free ends through the globe to allow said edge portion to be hooked over said first lip means, said member having upright abutment means inwardly of said first lip means and against which the spring strip urges said hooked over edge portion when said horizontal pressure is removed, all said lip means being substantially in a common horizontal plane, said member having a ceiling contacting portion which is located above said plane a distance only slightly greater than the maximum depth of said edge portion, whereby said edge portion when supported on the lips is almost in contact with the ceiling and conceals the support.



6. A support as claimed in claim 5, wherein said member has further lip means below the spring strip to ensure that the strip does not deflect vertically.

7. A support as claimed in claim 1, wherein the support member has a rigid lip extending below the spring member and preventing downward deflection of the free ends of the spring member under the weight of the globe.

8. A support as claimed in claim 1, wherein the elongated spring member is arranged with one longitudinal edge vertically below the other, the depth of the member between said edges being greater than the thickness of the member so that it is deflectable in a horizontal direction but not in a vertical direction under the weight of the globe.

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