Dec. 23, 1958 R. F. LESTER 2,866,084

LIGHTING UNIT

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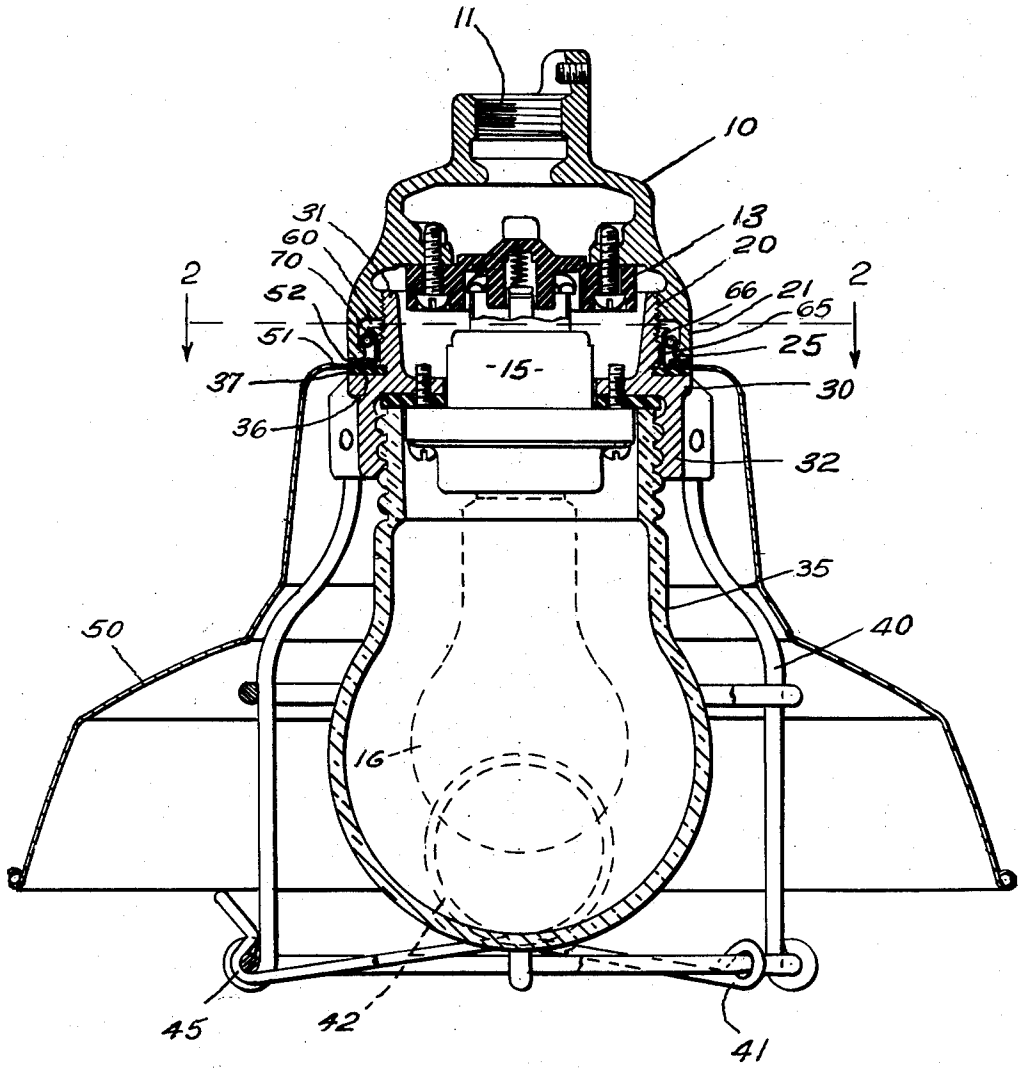


Fig-1

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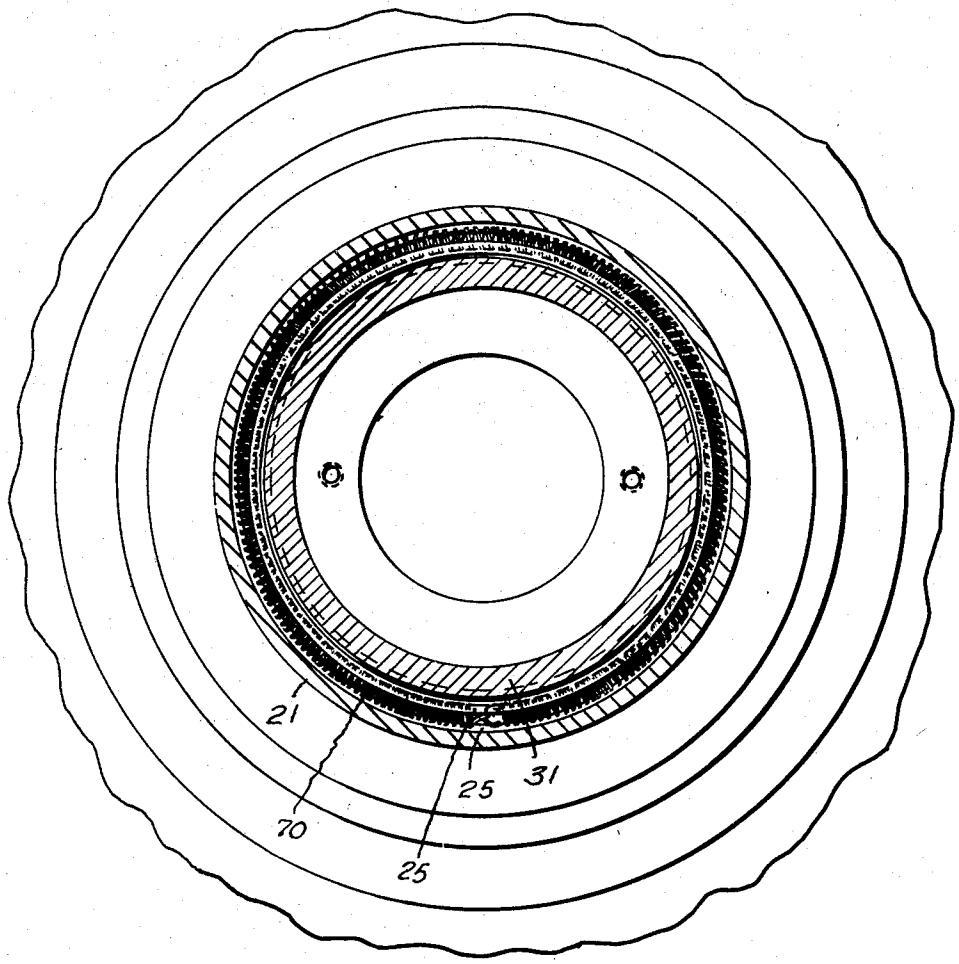


Fig-2-

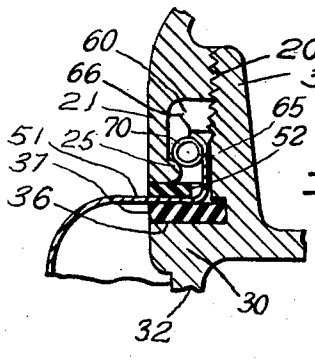


Fig-3-

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LIGHTING UNIT

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2 Claims. (Cl. 240—11.2)

This invention relates to industrial type vapor proof lighting units.

It is an object of this invention to provide a lighting unit wherein the reflecting shade is detachably secured to the lighting unit by a yieldable member economical to manufacture and which functions to effectively hold the shade to the unit during the relamping thereof.

The invention consists of the novel features and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawings in which like characters designate corresponding parts in all the views.

In the drawings—

Figure 1 is a cross section of the lighting unit.

Figure 2 is a cross section taken on line 2—2 of Figure 1.

Figure 3 is an enlarged detail view of the shade mounting means.

The lighting unit is composed of a canopy **10** having a hub threaded at **11** at its upper end for the reception of a wire carrying conduit (not shown). The canopy is circular and conically shaped, and has a contact block **13** with contacts which engage the contacts of the receptacle **15** to form the necessary electrical connections to light the lamp **16**, shown in hidden lines. The canopy is formed with an internal thread **20** and has a flange **21** depending from the lower end of the canopy, which flange has an internal bead **25** for a purpose hereinafter described. Threadedly received in the canopy is a fitting **30**. The fitting has an offset upstanding externally threaded annular flange **31** which is threaded into the canopy **10**, and a lower depending annular flange **32** which is internally threaded for the reception of a complementally threaded globe **35**. A ledge **36** is formed by the offset upstanding flange **31**, and a gasket **37** is mounted on the ledge for a purpose hereinafter described. The fitting **30** has a globe guard **40** mounted on the external surface of the depending flange **32**. The globe guard has a hingedly mounted keeper **41** on its lower end, with a pair of spring-like holders **42** for holding the globe **35** when the keeper is latched, as at **45**, to the lower end of the globe guard.

A reflecting shade **50** has an inwardly extending portion **51** mounted on the ledge **36** above the gasket **37**. Another gasket **52** is mounted on the upper surface of the inwardly extending portion **51**, the gaskets **37** and **52** acting in conjunction to hold the lamp shade **50** in the canopy, and to form a vapor tight joint between the fitting **30** and the canopy **10**.

As will be seen from Figure 1, the depending flange **21** on the canopy is concentrically spaced from the upstanding flange **31** on the fitting **30**, forming an annular space **60**. An upstanding annular flange **65** on the shade

is received in said space **60**. The flange **65** has an outwardly crimped portion **66**. Received in the space between the internal bead **25** on the canopy, and the outwardly crimped edge **66** on the shade, is a coil spring **70**, as will be seen in Figure 2. This coil spring acts to retain the shade **50** in the canopy **10** when the fitting **30** is removed from the canopy. When the fitting is removed from the canopy, it is merely necessary, should it be desired to remove the shade **50**, to pull downwardly on the shade **50**. This will exert a force on the coil spring **70** and tend to compress the individual coils of the spring into an elongated shape in order to allow the outwardly crimped portion **66** of the shade to pass by the internal bead **25** of the canopy and out of the canopy **10**. To insert the shade in the canopy, it is only necessary to push the shade into the canopy with enough force to overcome the coil spring **70** to compress the spring in order to allow the crimped rim **66** to slide over the coil spring.

In practice, it has been found that this method of yieldably retaining the shade in the canopy of the lighting unit is far more beneficial and desirable than pre-existing methods, since although the coil spring may be deformed, it has an elastic deformity—that is, it will not be permanently deformed from the compression on the spring from the shade **50**. With pre-existing retainers made of rubber or the like, which were to be deformed in order to remove the reflecting shade, it often occurred that the retainers became permanently deformed after a certain amount of use, so that it became difficult to insert and remove the shade holder in the unit. Also, heat generated in the lighting unit often caused the rubber retainer to vulcanize to the parts, preventing removal of the shade. It will thus be seen that my construction obviates these difficulties.

What I claim is:

1. A lighting unit comprising a cylindrical canopy terminating in a depending annular flange formed at its lower edge with an internal bead, a globe fitting detachably secured to said canopy and having a radial ledge confronting the under surface of said annular flange, said ledge terminating in an upstanding cylindrical flange spaced radially inwardly from said annular flange and said bead, a reflecting shade having a radial portion and an upstanding cylindrical portion, said cylindrical portion adapted for insertion in the space between said cylindrical flange of the globe fitting and said depending canopy flange, said radial portion adapted to be clamped between said ledge and said annular flange, the upper edge of the cylindrical portion of said shade being bent outwardly toward said canopy flange and being spaced inwardly and upwardly from said bead, an annular metallic retaining member encircling said cylindrical portion of the shade intermediate the outwardly bent edge thereof and said bead and yieldingly engaging said canopy flange, said retaining member being compressible in a radial direction.

2. A lighting unit, as set forth in claim 1, wherein said annular metallic retaining member consists of a multi-coil spring.

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