April 11, 1950 W. R. YOUNG 2,503,931

LAMP HOLDER FOR CIRCULAR LAMPS

Filed Oct. 31, 1945

Fig. 1.

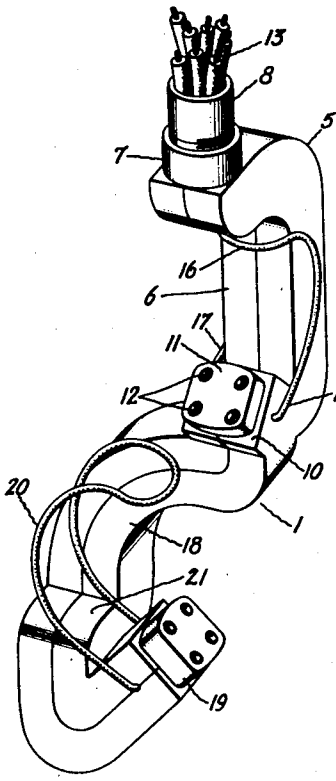


Fig. 2.

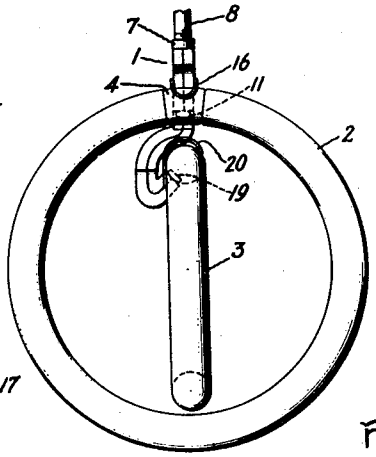


Fig. 3.

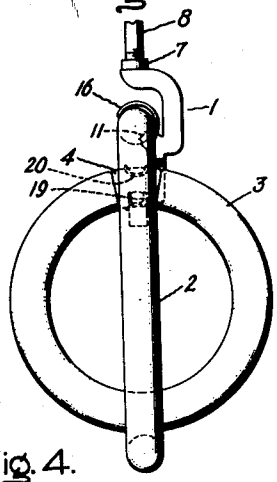


Fig. 4.

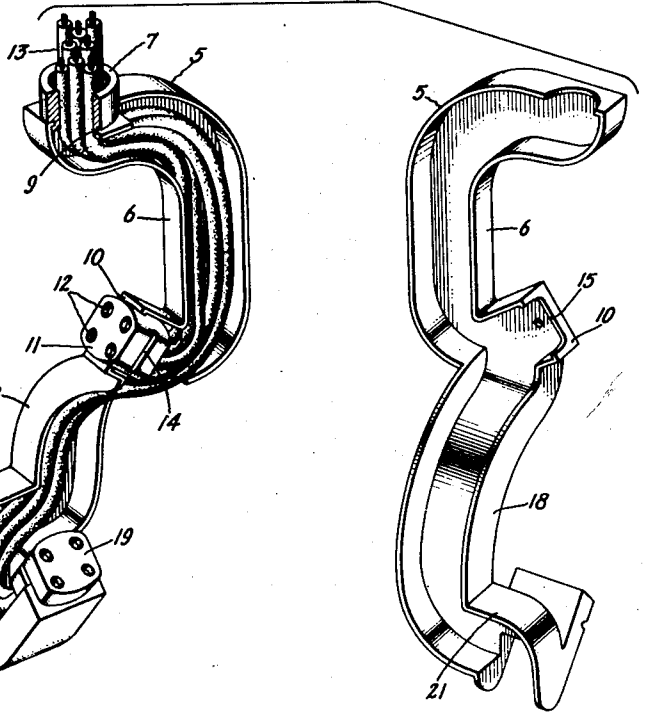
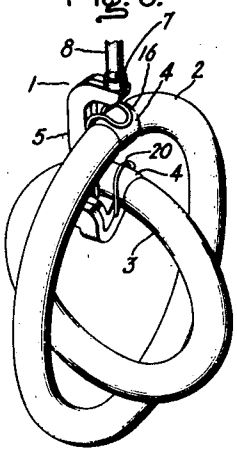


Fig. 5.



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Patented Apr. 11, 1950 2,503,931

UNITED STATES PATENT OFFICE

2,503,931

LAMP HOLDER FOR CIRCULAR LAMPS

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Application October 31, 1945, Serial No. 625,902

10 Claims. (Cl. 240—51.12)

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My invention relates to a lamp holder for circular lamps of the gaseous discharge type, such as fluorescent lamps.

It is an object of my invention to provide a new and improved lamp holder particularly adapted for use with circular fluorescent lamps and which is so constructed and arranged as to support a plurality of such lamps in a pleasing architectural arrangement.

Another object of my invention is the provision of a lamp holder for supporting a plurality of circular fluorescent lamps of different diameters.

In the accompanying drawing, Fig. 1 is a perspective view of a lamp holder constructed in accordance with my invention; Figs. 2 and 3 are front and side views respectively of my lamp holder with circular lamps of different diameters mounted thereon; Fig. 4 is an exploded perspective view of my lamp holder, and Fig. 5 is a perspective view of the holder with two circular lamps mounted thereon.

Referring to the drawing, Figs. 2 and 3 illustrate a lamp holder 1 constructed in accordance with my invention and which supports a plurality of circular fluorescent lamps 2 and 3, the lamps being of different diameters. Such circular fluorescent lamps comprise a glass tube coated with suitable fluorescent material, the ends of the tube being formed as a circle and secured to a base 4. The base is thus built into the periphery of the lamp which forms a complete circle. The base is constructed of any suitable insulating material and is provided with four contact pins (not shown) for making an electrical connection with the lamp filaments.

The lamp holder 1 comprises a supporting member or elongated bracket 5 formed in two parts, as shown by Fig. 4. Preferably each part is constructed of sheet metal material although, if desired, the parts may be molded of a suitable plastic. Each part is formed with sides providing a recess for housing the electrical conductors of the holder. The bracket is provided with a looped or C-shaped portion 6 which is formed so that it will extend around the outline of the lamp base when the lamp is mounted on the holder. At one end of the loop, the bracket is provided with a nipple 7 for supporting the holder from a fixture chain or pipe 8 on which it is screw threaded. The nipple is constructed with a groove 9 so that it may be clamped between the sides of the bracket parts, as shown in Fig. 4. The other end of the loop is formed with a supporting surface 10 which carries an electrical connector or receptacle 11.

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The connector 11 is molded of suitable insulating material, such as rubber or plastic, and is provided with four molded-in sleeves 12 for receiving the four contact pins of the fluorescent lamp. A plurality of conductors 13 are connected to the respective contact sleeves. They are disposed in the recess provided by the two parts of the bracket and extend out through the nipple 7 for connection to the lamp operating circuit. In order to mount the connector in the bracket, the side walls of the connector are formed with grooves 14 which are engaged by corresponding guide edges 15 formed in the walls of the bracket base 10. In assembling the connector 11 in position, the conductors are inserted in the recess in one of the parts of the bracket and the connector mounted on one part of base 10, as shown in Fig. 4. Then the other part of the bracket is assembled in position around the connector, the two parts of the bracket meshing together.

The construction thus far described is adapted to mount a single circular lamp. The contact pins of the lamp are seated in the contact sleeves 12 in the connector which serve to hold the lamp base firmly in position. This means that the base of the lamp is disposed in the space formed by the looped or curved portion 6 of the bracket. In order to hold the lamp in position, a U-shaped spring clip 16 is pivotally mounted on the bracket. It is constructed as a wire loop having arms 17 pivotally mounted in the bracket 5. The end of the clip extends over the base of the lamp to hold the lamp base securely in position on the connector block 11. In this way, there is no danger of the lamp falling out of the holder in the event that the lamp is inadvertently struck or jarred.

In order to provide means for holding additional lamps, a portion of bracket 5 extends downwardly from the loop portion 6 to form a second loop or curved portion 18. It will be seen that the upper end of this second loop is joined integrally with the first loop and that the lower end is provided with a second electrical connector 19 for supporting another circular lamp. In the arrangement shown by the drawing, the two loops 6 and 18 are disposed at right angles to each other. Likewise, the connectors 11 and 19 are disposed at such an angle. This means that the two lamps are supported at right angles to each other. However, it should be manifest that the angle between the loops and connectors may be varied depending upon the angle at which the lamps are to be mounted in relation to each other.

The second electrical connector 19 is identical with the first-mentioned connector 11 and is held in position by portions of the bracket fitting in grooves in the connector in the manner already described. Conductors to the second connector likewise extend through the lamp holder in the recess formed by two parts of the bracket. A second spring clip 20, similar to the clip 16, is carried by the bracket and cooperates with the connector 19 to engage and clamp the base of the lamp in position on the holder.

As shown most clearly by Figs. 1 and 4, the loop 18 in the bracket is formed with an offset portion 21 to provide clearance for the clip 20 when the latter is pivoted away from the lamp base. Also the offset portion so positions the connector 19 that the lamp base of the second lamp is vertically in line with the base of the first lamp and the supporting fixture 8.

My lamp holder is so constructed and arranged as to support circular fluorescent lamps of different diameters nested one within the other. The lamp of greater diameter is mounted on the connector 11 and then the lamp of smaller diameter is placed on the connector 19 within the confines of the large diameter lamp. As shown in Fig. 5, the lamps are disposed at right angles to each other although as pointed out above this angle may be varied by modifying the angular position of the loops 6 and 18 of the supporting bracket. The holder is adapted for suspension from a ceiling fixture and supports the lamps in a manner such that they harmonize with the decorative scheme of a room. While for the purpose of illustration I have shown my lamp holder constructed to support lamps of two different diameters, it should be manifest that the number of lamps may be increased at will by providing the bracket with additional electrical connectors. In this way, lamps of three or more different diameters may be supported in nested position on the holder.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. A holder for a circular tubular lamp having a contact base at one place on its periphery comprising a hollow substantially C-shaped supporting member, means at the upper end of said C-shaped member for dependently suspending said member with a vertical axis of suspension passing through said means, a plug receptacle for making electrical connection with and for supporting the lamp, said receptacle being positioned on the lower end of said member offset from said axis of suspension by an amount approximately equal to the cross-sectional radius of the lamp tube, whereby the lamp diameter which passes through the lamp periphery proximate to the place of the lamp base extends in a substantially vertical direction.

2. A holder for a circular tubular lamp having a contact base at one place on its periphery comprising a hollow substantially C-shaped supporting member, means at the upper end of said C-shaped member for dependently suspending said member with a vertical axis of suspension passing through said means, a plug receptacle for making electrical connection with and for supporting the lamp, said receptacle being positioned on the lower end of said member offset from said axis of suspension by an amount approximately equal to the cross-sectional radius of the lamp tube, whereby the lamp diameter which passes through the lamp periphery proximate to the place of the lamp base extends in

a substantially vertical direction, and a movable locking device for engaging the lamp near its base to hold it in seated position, said device including a substantially U-shaped member having a curved portion substantially conforming to the shape of the lamp tube and being pivotally supported by one end to said member whereby the other end is adapted to be swung over and around the lamp.

3. A holder for a circular tubular lamp having a contact base at one place on its periphery comprising a pendent support having an axis adapted to extend in a substantially vertical direction, a substantially C-shaped member secured at its upper end to said support, a plug receptacle for supporting the lamp and making electrical connection with its base, said receptacle being positioned on the lower end of said member offset from said axis of suspension by an amount approximately equal to the cross-sectional radius of the lamp tube, whereby the lamp diameter which passes through the lamp periphery proximate to the place of said base is substantially coincident with said axis.

4. A holder for two tubular lamps having different diameters and each having a contact base comprising a pendent support having an axis adapted to extend in a substantially vertical direction, a substantially C-shaped member secured at its upper end to said support, a plug receptacle for supporting the larger lamp and making electrical connection with its base, said receptacle being positioned thereon so that a diameter of the lamp when seated in said receptacle is substantially coincident with said axis, a second substantially C-shaped member dependently secured by its upper end to the lower end of first member, a second plug receptacle for the smaller of said lamps, said receptacle being positioned on the lower end of said member offset from said axis of suspension by an amount approximately equal to the cross-sectional radius of the lamp tube, whereby a diameter of said second lamp when seated in said second receptacle is likewise substantially coincident with said axis.

5. A holder for a plurality of tubular lamps having different diameters and each having a contact base comprising an elongated pendent supporting bracket formed of a plurality of substantially C-shaped portions each having at its lower end a plug receptacle for supporting a lamp and making electrical connection with its base, said portions being respectively arranged with their upper ends extending from the lower ends of the next higher portion, said receptacles being positioned on the lower end of said member offset from said axis of suspension by an amount approximately equal to the cross-sectional radius of the lamp tube, whereby all lamps seated in said receptacles have a diameter substantially positioned along a common axis.

6. A holder for a plurality of tubular lamps having different diameters and each having a contact base comprising an elongated pendent supporting bracket formed of a plurality of substantially C-shaped portions each of said portions having at its lower end a plug receptacle for supporting a lamp and making electrical connection with its base, said portions being respectively arranged with their upper ends extending from the lower ends of the next higher portion, said receptacles being positioned at the lower end of said member offset from said axis of suspension by an amount approximately equal

to the cross-sectional radius of the lamp tube and at least one of said receptacles being positioned at a different angle from said axis than another of said receptacles, whereby all lamps seated in said receptacles have a diameter substantially positioned along a common axis and the principal planes of at least two of said lamps are at an angle to each other.

7. A holder for a circular tubular lamp having a contact base at one place on its periphery comprising a hollow substantially C-shaped supporting member, means at the upper end of said C-shaped member for independently suspending said member with a vertical axis of suspension passing through said means, a plug receptacle for making electrical connection with and for supporting the lamp, said receptacle being positioned on the lower end of said member offset from said axis of suspension by an amount approximately equal to the cross-sectional radius of the lamp tube, whereby the lamp diameter which passes through the lamp periphery proximate to the place of the lamp base extends in a substantially vertical direction, said member being formed in two parts, one part being channel shaped in cross section and the other part being adapted to cover said channel, said receptacle being clamped between said parts.

8. A holder for a plurality of tubular lamps having different diameters and each having a contact base comprising an elongated hollow pendent supporting bracket formed of a plurality of substantially C-shaped portions each having at its lower end a plug receptacle for supporting a lamp and making electrical connection with its base, said portions being respectively arranged with their upper ends extending from the lower ends of the next higher portion, said receptacles being positioned on the lower end of said member offset from said axis of suspension by an amount approximately equal to the cross-sectional radius of the lamp tube, whereby all lamps seated in said receptacles have a diameter substantially positioned along a common axis, said bracket being formed in two parts, one part being channel shaped in cross section and the other part being adapted to cover said channel, and said receptacles being clamped between said parts.

9. A holder for a circular tubular lamp having a contact base at one place on its periphery comprising a substantially C-shaped supporting

member, means at the upper end of said C-shaped member for dependently suspending said member with a vertical axis of suspension passing through said means, a plug receptacle for making electrical connection with and for supporting the lamp at said contact base, said member being shaped in substantially an arc of larger radius than the cross-sectional radius of the lamp tube and said receptacle being positioned on the lower end of said member offset from said axis of suspension by an amount approximately equal to the cross-sectional radius of the lamp tube, whereby said member partially surrounds and is proximate to only the base portion of said lamp.

10. A holder for a plurality of tubular lamps having different diameters and each having a contact base at one place on its periphery comprising an elongated pendent supporting bracket formed of a plurality of substantially C-shaped portions each having at its lower end a plug receptacle for supporting a lamp and making electrical connection with its base, said portions being respectively arranged with their upper ends extending from the lower end of the next higher portion and said portions being shaped in substantially an arc of larger radius than the cross-sectional radius of the lamp tube and said receptacles being positioned on the lower end of said member offset from said axis of suspension by an amount approximately equal to the cross-sectional radius of the lamp tube, whereby said bracket partially surrounds and is proximate to said lamps only in the vicinity of their bases.

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