

Nov. 20, 1951

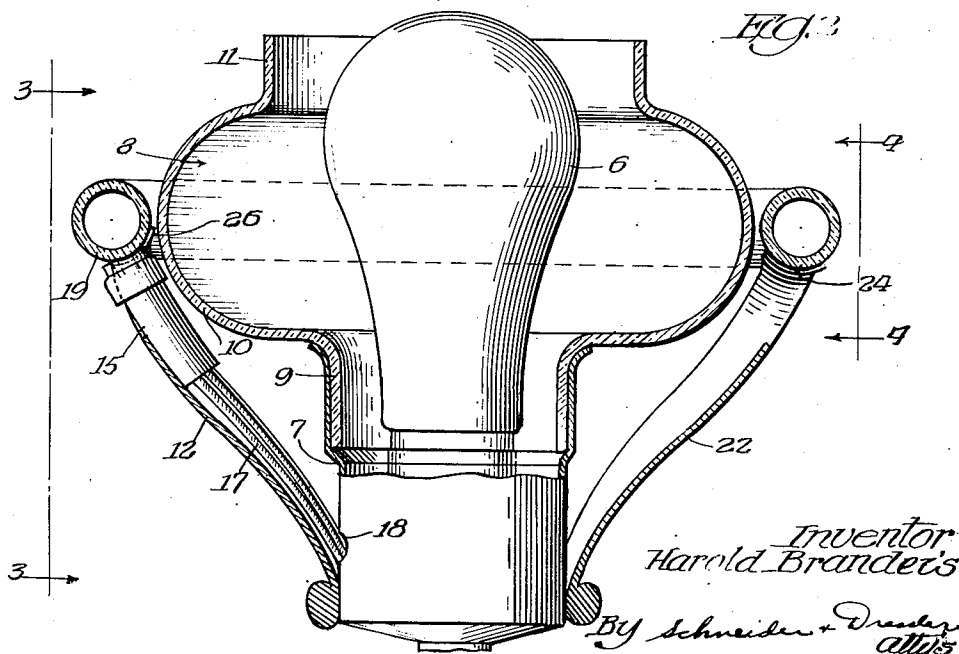
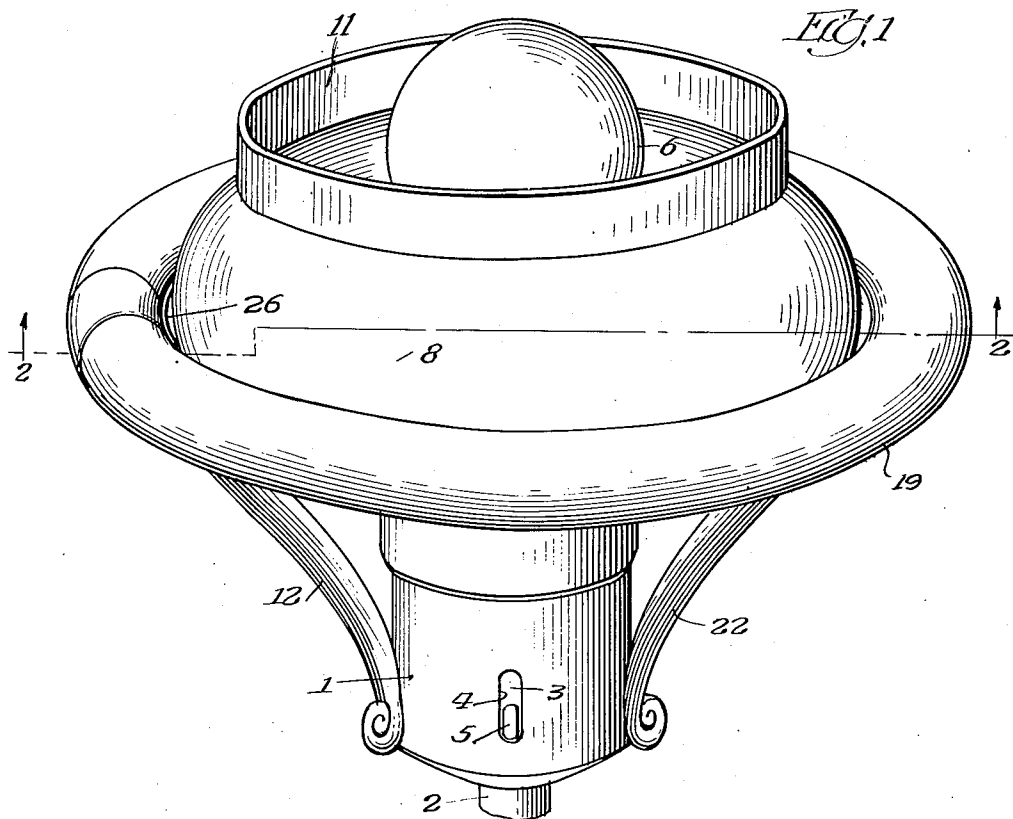
H. BRANDEIS

2,575,486

LAMP FIXTURE HAVING A DIFFUSER BOWL WITH A CIRCULAR  
FLUORESCENT LAMP SURROUNDING THE BOWL

Filed June 28, 1946

2 SHEETS—SHEET 1



Inventor  
Harold Brandeis

By Schneider & Drescher  
attys

Nov. 20, 1951

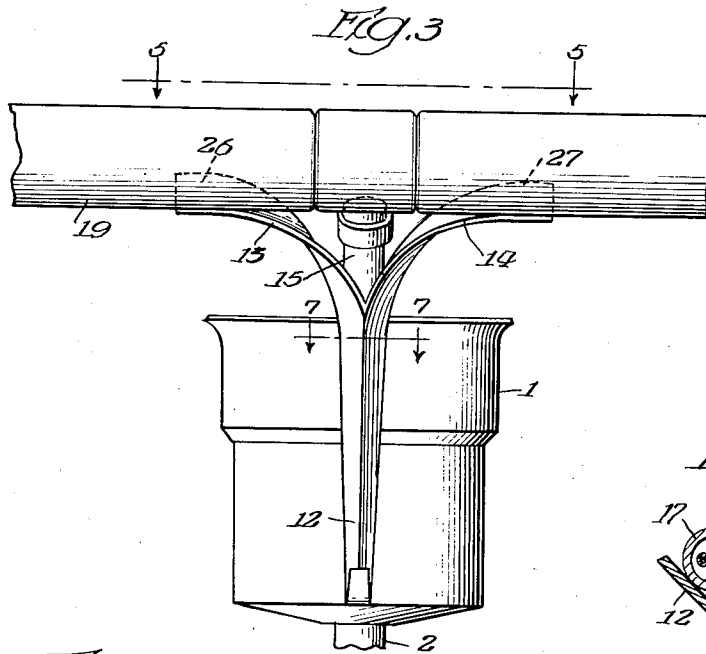
H. BRANDEIS

2,575,486

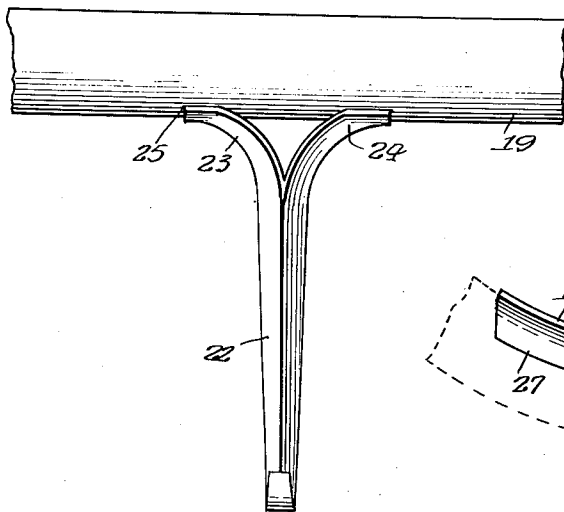
LAMP FIXTURE HAVING A DIFFUSER BOWL WITH A CIRCULAR  
FLUORESCENT LAMP SURROUNDING THE BOWL

Filed June 28, 1946

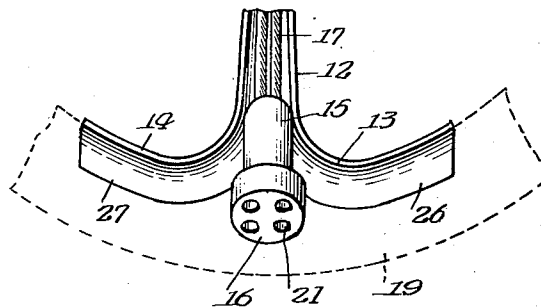
2 SHEETS—SHEET 2



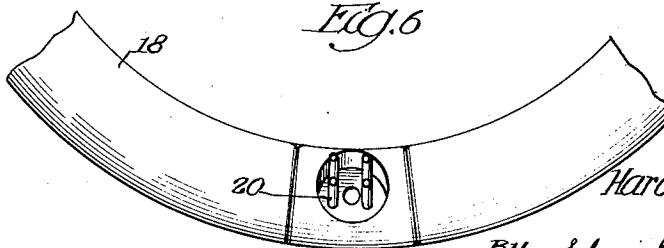
*Fig. 4*



*Fig. 5*



*Fig. 6*



*Inventor*  
*Harold Brandeis*

*By Schneider & Dressler*  
*attys.*

## UNITED STATES PATENT OFFICE

2,575,486

LAMP FIXTURE HAVING A DIFFUSER BOWL  
WITH A CIRCULAR FLUORESCENT LAMP  
SURROUNDING THE BOWLHarold Brandeis, Chicago, Ill., assignor to Colo-  
nial-Premier Company, a corporation of Illinois

Application June 28, 1946, Serial No. 679,931

2 Claims. (Cl. 240—51.12)

1

This invention relates to an incandescent lamp fixture and particularly to such a fixture that permits mounting of an annular fluorescent light tube in a predetermined relationship to the incandescent lamp diffuser bowl mounted on the fixture.

The combination of a conventional incandescent light bulb shielded by a diffuser bowl and an annular fluorescent light tube encircling a portion of the diffuser bowl is known. In such combinations it has heretofore been impossible to position the annular fluorescent tube close to the diffuser bowl at or substantially at the maximum periphery of the bowl, for the supports for the fluorescent tube required that the tube be positioned at a higher or lower level. The result was that the lights from the two different sources did not truly complement each other, but caused shadows and detracted from the efficiency of the combination of light sources.

In the improved fixture of the present invention there is provided means for supporting an annular fluorescent tube closely about a diffuser bowl in a horizontal plane at or substantially at the maximum periphery of the bowl, without the necessity of making either the tube or the diffuser bowl of special size. As is known, the annular fluorescent tube and diffuser bowl are conventional articles which are available on the market only in standardized sizes. These conventional standardized articles are used in accordance with the present invention.

The fixture of the present invention also provides improved means for supporting the annular fluorescent tube against movement in its horizontal plane in any direction.

The structure by which the various results described above are attained will be described in connection with the accompanying drawings, in which:

Figure 1 is a fragmentary perspective view of a lamp fixture embodying the invention;

Fig. 2 is a cross-sectional view taken along the line 2—2 of Fig. 1, showing the electrical connection and the supports for the annular fluorescent light tube;

Fig. 3 is a side elevational view, taken along the line 3—3 of Figure 2, but with the diffuser bowl not shown;

Fig. 4 is a side elevational view, taken along the line 4—4 of Fig. 2, with the diffuser bowl not shown;

Fig. 5 is a top elevational view, taken along the line 5—5 of Figure 3, but showing the annular fluorescent light tube in dotted lines to show

2

more clearly the socket for the terminal prongs of the tube and the means to prevent lateral movement thereof;

Fig. 6 is a fragmentary bottom view of the annular fluorescent light tube showing the terminal prongs; and

Fig. 7 is a cross-sectional view, taken along the line 7—7 of Fig. 3.

In the drawing the reference numeral 1 indicates a socket housing mounted on a shaft 2 which leads to a suitable base (not shown). The lower portion of the socket housing has a switch body 3 and is provided with an aperture 4 to provide access to a switch button or lever 5. The switch body has a conventional socket (not shown) incorporated therein, and an incandescent light bulb 6 is threaded into the socket. The socket housing 1 is provided with a peripheral flange 7 adjacent the top of the switch body. A diffuser bowl 8 or other reflector has its lower section 9 mounted in the socket housing with its edge resting on the flange or ledge 7.

The diffuser bowl illustrated in the drawings comprises a cylindrical lower section 9, a central globular section 10 whose diameter increases from the point adjacent the lower section to a maximum at its mid-point, and then decreases until the section merges into a cylindrical upper section 11. Both cylindrical sections are open ended to facilitate insertion and removal of incandescent light bulbs 6 from the socket.

An arm 12 rigidly mounted on the socket housing 1 projects therefrom and terminates adjacent the maximum periphery of the diffuser bowl. The end of the arm 12 is bifurcated, as indicated at 13 and 14, for a purpose hereinafter described. A socket 15 is rigidly mounted on the arm 12 at the bifurcation so that the plug receiving surface 16 is positioned between the bifurcated portions 13 and 14. The arm 12 is preferably V-shaped in cross-section and wires 17 leading from the socket are substantially concealed by the sides of the V. The wires are led from the socket through an aperture 18 in the socket housing to a source of electrical current. The aperture 18 is also substantially concealed by the arm 12.

An annular fluorescent light tube 19 is provided with terminal prongs 20 that are engageable with recesses 21 in the socket to provide electrical contact. An arm 22 rigidly mounted on the socket housing 1 projects therefrom at a point diametrically opposite the arm 12 and terminates adjacent the maximum periphery of the diffuser bowl. The end of the arm 22 is bifurcated to provide two horizontally extending bracket

3

members 23 and 24. These members are curved slightly, as indicated at 25, and cooperate with the socket 15, at the opposite side of the annular tube, to support the tube closely around the maximum periphery of the diffuser bowl. This three point support is sufficient to hold the annular tube in its horizontal plane, but can not hold the tube against slight lateral movement in its horizontal plane which may sometimes occur because the engagement between the prongs 20 and the recesses 21 must be loose enough to permit easy insertion and removal of the prongs.

In order to provide support for the tube against such lateral movement in any direction in its horizontal plane the arm 12 is bifurcated at its upper end to provide a pair of oppositely directed fingers 13 and 14, each of which is shaped to partially embrace the lower portion of the inside wall of the tube, as indicated at 26 and 27. When the tube is supported on the socket 15 and the bracket members 23 and 24 the portions 26 and 27 of the fingers 13 and 14 engage the inside wall of the tube on opposite sides of the socket 15 to prevent lateral movement of the tube. The fingers 13 and 14 incidentally furnish two additional points of support supplementing the socket 15 and the bracket members 23 and 24. The area of each supporting member which comes into contact with the glass of the annular fluorescent tube is preferably padded with any suitable insulating material to prevent discoloration of the tube.

Although I have described a preferred embodiment of my invention in detail, it will be understood that the description thereof is intended to be illustrative, rather than restrictive, as many details may be modified or changed without departing from the spirit or scope of my invention. Accordingly, I do not intend to be bound to the exact construction described, except as limited by the appended claims.

I claim:

1. In a lamp fixture, a socket housing, a diffuser bowl supported by said socket housing, an annular fluorescent light tube having an inside diameter slightly in excess of the maximum diameter of said diffuser bowl, a pair of arms projecting from opposite sides of said socket housing and terminating in a plane adjacent the maximum diameter of said diffuser bowl, each of said arms

4

having its free end bifurcated to furnish two spaced areas of support for said annular tube, the bifurcated ends of each of said arms extending in opposite directions circumferentially of said annular tube, and each end being shaped in cross section to partially embrace the lower inside wall of the annular tube, and a socket mounted on one of said arms between its bifurcated ends, said socket cooperating with said bifurcated ends to support said tube closely around said diffuser bowl.

2. In a lamp fixture, a socket housing, a diffuser bowl supported by said housing, a pair of oppositely disposed diverging arms rigidly secured to said housing and terminating at a horizontal level adjacent the maximum periphery of said diffuser bowl and on opposite sides thereof, a socket mounted on one of said arms, and an annular fluorescent light tube extending closely around said diffuser bowl adjacent its maximum periphery, said tube being supported by said socket and said other arm, said first mentioned arm being bifurcated and said bifurcated portions on each side of said socket extending in opposite directions circumferentially of said annular tube and having a cross section shaped to engage and partially embrace the lower inside wall of the annular tube to prevent lateral displacement.

HAROLD BRANDEIS.

#### REFERENCES CITED

The following references are of record in the file of this patent:

#### UNITED STATES PATENTS

Number	Name	Date
D. 146,113	McGinnis	Dec. 24, 1946
2,350,462	Johns	June 6, 1944
2,419,965	Pieper	May 6, 1947
2,441,399	De Reamer	May 11, 1948
2,507,074	Wiedenhoeft	May 9, 1950

#### FOREIGN PATENTS

Number	Country	Date
319,120	Germany	1920

#### OTHER REFERENCES

Lighting & Lamps, July 1945, vol. 47, No. 5.