Jan. 7, 1958 T. ODWAZNY 2,819,387

ELECTRIC LAMP SOCKET AND REFLECTOR ASSEMBLY

Filed June 21, 1956

Fig. 1.

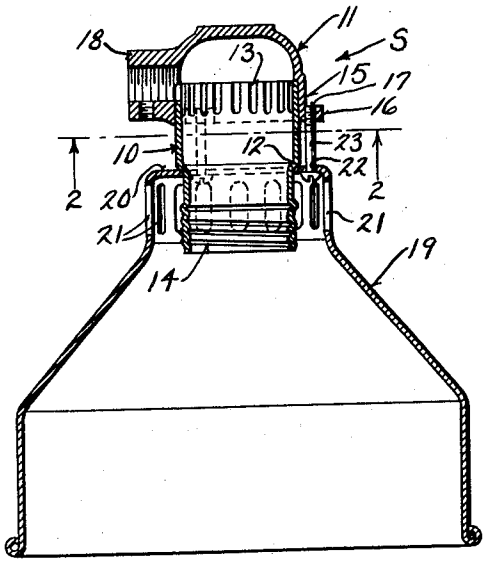


Fig. 3.

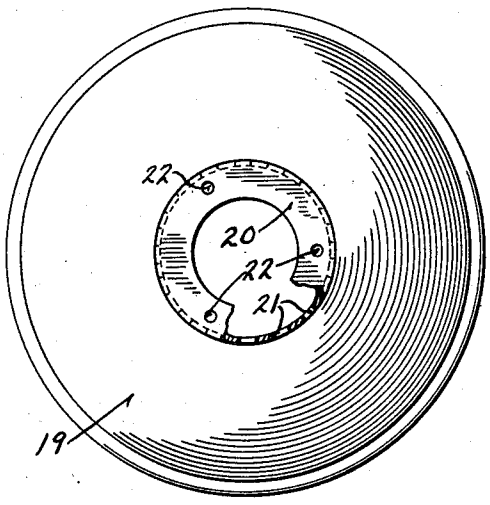


Fig. 2.

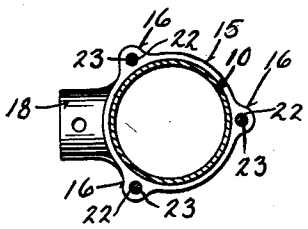


Fig. 4.

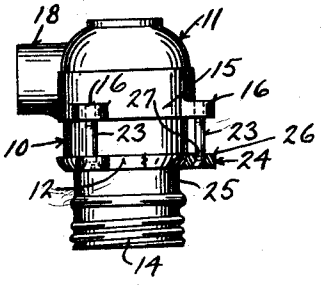
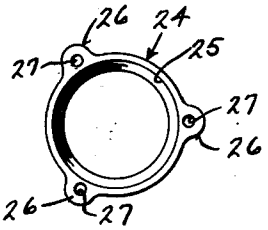


Fig. 5.



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ELECTRIC LAMP SOCKET AND REFLECTOR ASSEMBLY

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Application June 21, 1956, Serial No. 592,825

1 Claim. (Cl. 240—142)

This invention appertains to electric fixtures and more particularly to a novel electric light bulb socket and reflector assembly and the same represents an improvement over my prior application, Serial No. 68,882 filed January 3, 1949, and since abandoned.

Electric light sockets usually embody a substantially cylindrical body shell and a cap detachably united together. Such sockets commonly break apart between the body shell and cap, particularly where the shell carries a lamp shade or reflector and such reflector is used to pull or push the socket to a preferred adjusted position on a base or supporting fixture.

It is, therefore, one of the primary objects of this invention to provide novel means for uniting the cap, standard shell and reflector together, whereby not only will these parts be firmly and rigidly connected, but whereby the entire socket will be braced longitudinally to resist twisting and other strains placed thereon.

A further object of the invention is to provide novel means for bracing a lamp socket and for uniting the cap and body shell together in such a manner that all parts of the connecting device are disposed exteriorly of the socket, so that standard insulators and the like can be used with the socket, the construction being such that no change is needed at all to the body shell.

A further important object of the invention is to provide means for firmly connecting the body shell and cap of a lamp socket and the reflector together, which merely includes an inner circular flange on said reflector for engaging the usual shoulder on the body shell and which flange slidably and rotatably carries adjusting and clamping screws for threaded engagement with ears formed on the cap.

A still further object of the invention is to provide novel means for strongly uniting the body shell and cap of a lamp socket together with the reflector which will be durable and efficient in use, one that will be simple and easy to manufacture and one which can be placed upon the market at a reasonable cost.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts as will be hereinafter more specifically described and claimed, and illustrated in the accompanying drawing, in which drawing:

Figure 1 is a side elevational view in section of my lamp socket assembly showing the novel means employed for connecting the thin standard body shell, cap and reflector together,

Figure 2 is a transverse sectional view of my novel lamp socket assembly, the section being taken on the line 2—2 of Figure 1 and looking in the direction of the arrows,

Figure 3 is a bottom plan view partly in section of my reflector before it is assembled to the lamp socket, certain parts being broken away and in section to illustrate structural detail,

Figure 4 is a side elevational view partly in section of a modified form of my lamp socket assembly and,

Figure 5 is a top plan view of a ring that may be used in lieu of the reflector when necessary.

Referring to the drawing in detail wherein similar reference characters designate corresponding parts throughout the several views, the letter S generally indicates the novel lamp socket assembly and the same includes a thin standard body shell **10** and a removable cap **11**. The shell **10** is of the exact same connection as now found in lamp sockets on the market. Hence, the shell **10** includes a shoulder **12** intermediate its ends. This shoulder usually forms a support for the internal insulators and the like (not shown). The upper end of the shell can be crimped as at **13** so that the same can fit into the cap **11**. The outer end of the shell can also be internally threaded as at **14** to premit the securing of a light bulb (not shown) thereto.

The cap **11** is provided with a rim **15** for receiving the crimped inner end **13** of the shell **10** and this rim is provided at spaced points with radially extending lugs or ears **16**. These ears are internally threaded as at **17**, for a purpose which will appear later. Further, the cap **11** is provided with an internally threaded laterally extending projection **18** for connection to a flexible support (not shown). This projection **18** extending laterally from the cap enables the lamp and reflector to be positioned at an angle without bending the flexible support to a great degree.

In accordance with my invention, a reflector **19** is provided for engaging the shoulder **12**. The reflector **19** is provided at its upper end with an inwardly projecting circular flange **20** adapted to fit snugly in the shoulder **12** of the shell **10**.

I further provide elongated openings **21** adjacent the top of the reflector so that cooling air will circulate about the bulb when the lamp is lit. The circular flange **20** is also provided with a number of circular openings **22**. The same number of openings is provided and correspond to the ears **16** of the cap **11**. The openings **22** slidably and rotatably receive bracing and clamping screws **23** and these screws extend through the openings **22** and are received in the internally threaded ears **16**. Thus, by turning the screws **23**, the cap and reflector are drawn tightly about the standard body shell **10**.

In use, my novel lamp socket assembly S and its associated parts are assembled in the ordinary manner after which the reflector **19** and its circular flange **20** is slipped on to the shell **10** and the flange rests against the shoulder **12**. The screws **23** are slid through the circular openings **22** and into the ears **16** and are threaded until the cap **11** is drawn down tight on the shell **10**. The screws **23** effectively brace the socket and its reflectors irrespective of any strains placed thereon and the breaking of the socket by the shell cap and reflector is prevented.

In Figures 4 and 5, I have illustrated a modified form of my invention wherein a ring **24** having a rounded shoulder **25** is provided to engage the shoulder **12** of the shell **10** and this ring is also provided with a number of outwardly projecting ears **26** corresponding to the ears **16** and the ears **26** are provided with circular openings **27** to receive the screws **23** and the ring **24** is drawn against the shoulder and assembled in much the same manner as the reflector **19** is assembled.

From the foregoing, it is believed that the features and advantages of my invention will be readily apparent to those skilled in the art and it will, of course, be understood that changes in the form, proportion and minor details of construction may be resorted to without de-

parting from the spirit of the invention or the scope of the appended claim.

I claim:

In combination an electric light lamp socket and reflector assembly of the type having a thin metallic shell for threadably receiving a light bulb comprising, a cap fitted on the shell having radially extending internally threaded ears, said shell having an annular shoulder thereon intermediate its ends, a reflector fitted on the shell having its inner periphery provided with a circular flange for snug engagement with the annular shoulder of said shell, and headed screws extending through the flange and into the ears for drawing the reflector and shell toward the cap, said screws extending longitudinally with said shell.

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