

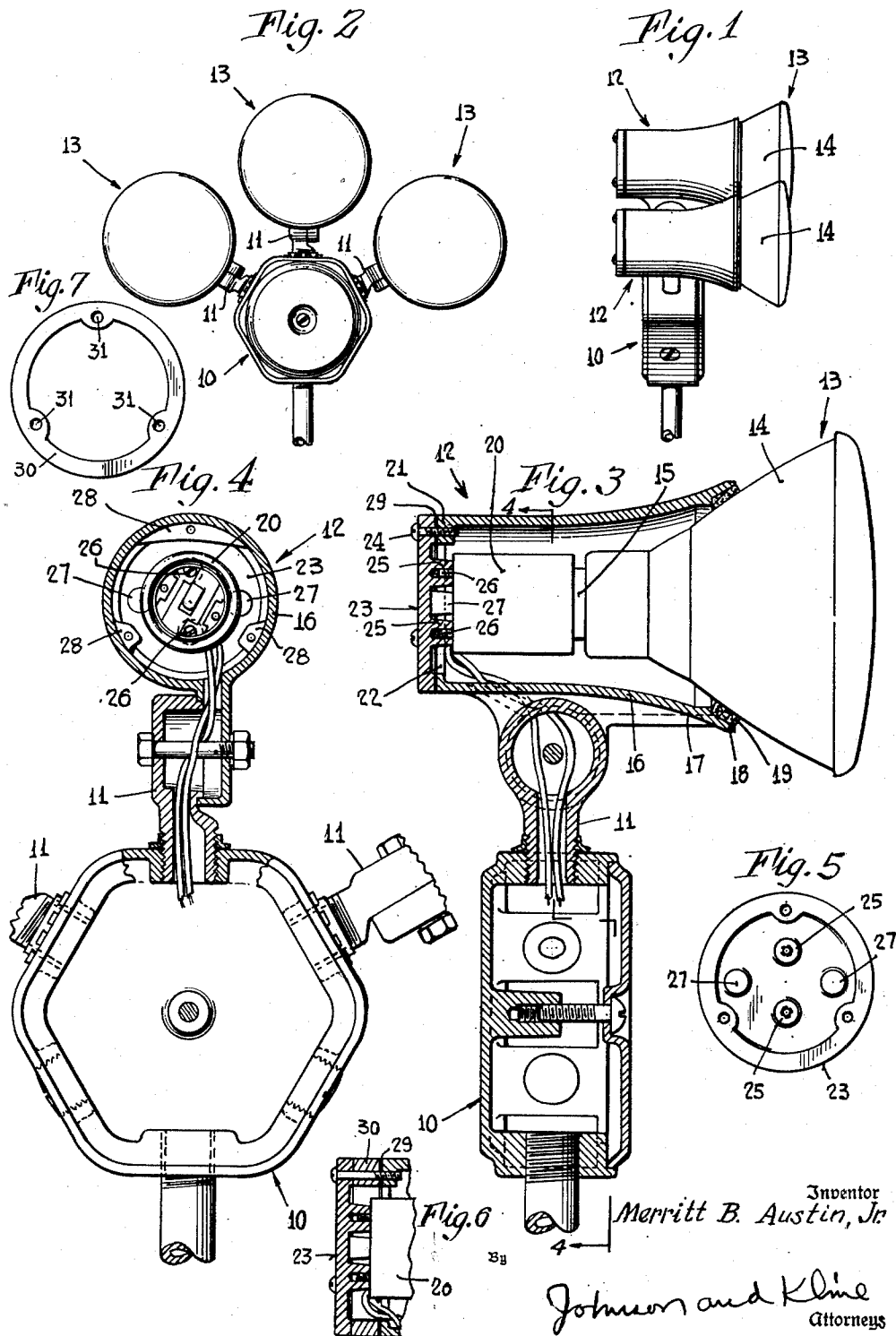
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LAMP HOLDER FOR REFLECTOR-TYPE OUTDOOR LAMPS

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LAMP HOLDER FOR REFLECTOR-TYPE
OUTDOOR LAMPS

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1 Claim. (Cl. 240—3)

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This invention relates to holders for electric lamps of the type used in outdoor installations, commonly termed reflector flood or spot lamps.

In the outdoor lighting of gasoline stations, road stands, athletic fields and the like, clusters of reflector flood or spot lights are coming more and more into use. These clusters commonly comprise a main, supporting connector box having brackets to which are pivotally attached cup-shaped lamp holders having sockets into which the reflector flood or spot lamps are screwed.

It has been the practice to form the lamp holders in these clusters of metal castings, having the shape of relatively deep cups with integral bottom portions to which the sockets for the lamp were fastened. In this prior type of construction it was difficult to attach or screw the socket into the holder casting and to the bottom wall thereof, due to the narrowness of the cup and its relatively great depth making the mounting area very inaccessible. The mounting procedure was therefore somewhat hit or miss and time-consuming, since the screw holes in the bottom of the lamp holder were hidden from view by the socket through which the screws passed.

Also, in these prior constructions the distance from the mouth of the holder to the integral back or bottom wall was fixed, resulting in the holder being limited to one size of reflector flood or spot lamp.

An object of the present invention is to provide an improved lamp holder for use in cluster lights and the like, which enables the socket for the lamp to be very easily and quickly attached or fastened in place in the holder, and also easily detached for servicing when required.

A further object of the invention is to provide an improved lamp holder as above set forth, which is readily adaptable to different sizes of reflector flood or spot lamps by a simply effected change or adjustment.

Another object of the invention is to provide an improved lamp holder according to the above, which is very simple and sturdy in construction, and is economical to fabricate.

In accomplishing the above objects, I provide a novel holder structure comprising an elongate tubular cast metal shell having openings at both ends, and a separate closure member for the rear end of said shell, the said closure member having means for demountably securing a lamp socket to its inner side, to extend into the shell when the closure is fastened in place. The lamp socket may be easily and quickly secured to the closure member before the latter is attached to

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the shell, since these parts are all accessible, and therefore there is obviated the difficulty in assembly encountered in the prior constructions. Moreover, the wiring for the lamp socket may also be very easily arranged, with less danger of the insulation becoming abraded and the wires being exposed.

I also provide a spacer element which can be inserted under the closure member prior to its being fastened, or else omitted as desired. When the spacer is used, the holder is adapted to mount larger or longer bulb sizes; when the spacer is not used, the holder accommodates shorter or smaller sizes.

Preferably the closure is secured to the shell by screws, and the spacer is in the form of a ring, having holes through it to accommodate the screws whereby a simple and effective, weather tight assembly is had.

Other features and advantages will hereinafter appear.

In the accompanying drawings:

Figure 1 is a side elevational view of several improved lamp holders of the present invention, mounted in a cluster.

Fig. 2 is a front elevational view of the cluster shown in Fig. 1.

Fig. 3 is a vertical axial sectional view through one of the improved lamp holders, and through the mounting bracket and box therefor.

Fig. 4 is a vertical transverse sectional view taken on line 4—4 of Fig. 3.

Fig. 5 is a plan view of the closure plate member for the rear end of the holder shell, showing the inner side of the member.

Fig. 6 is a fragmentary vertical sectional view of the rear part of the shell, and of the closure shown in Fig. 3, but with a spacer ring interposed between the closure and shell; and

Fig. 7 is a plan view of the spacer ring illustrated in Fig. 6.

Referring to Figs. 1 through 4, a cluster light assembly is shown comprising a connector box 10 having brackets 11 on which are mounted the improved lamp holders 12 of this invention.

The lamp holders 12 carry outdoor reflector flood or spot lamps 13 each having a glass envelope formed with a rear tapered reflector portion 14 and a lamp base 15 at the rear of said portion.

Each lamp holder 12, as shown in Figs. 3 and 4, comprises an elongate tubular shell 16 of smaller diameter than the periphery of the lamp envelope, adapted to receive within it a substantial rear part of the lamp 13. The shell 16 is formed

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of a metal casting and has its forward portion 17 flaring to a larger diameter, the rim 18 of said portion having a yieldable washer or gasket 19 for engagement with the lamp reflector portion 14. The base 15 of the lamp 13 is screwed into an electrical socket 20.

In accordance with the present invention, the rear end 21 of the shell 16 is made to have an opening 22, and a separate closure plate 23 is provided, having the form of a flat disk which is removably secured to the end of the shell as by screws 24. The closure plate 23 has inwardly extending bosses 25 provided with threaded holes for receiving screws 26 which pass through the socket 20 and secure the latter to the closure.

To provide additional support for the socket 20, the closure disk 23 may have additional projections or bosses 27 engageable with the back wall of the socket 20.

Preferably, as shown in Fig. 4, the rear end 21 of the shell 16 has integral lugs 28 cast into it, which are provided with threaded holes for receiving the fastening screws 24. To provide for a weather tight connection, a sealing washer 29 may be interposed between the closure disk 23 and the end 21 of the shell 16.

By the above construction it is extremely easy to mount or assemble the socket 20 in the shell 16. To do this, it is merely necessary to first attach the socket 20 to the closure plate 23 before securing the latter to the shell. Such attachment may obviously be quickly and easily done, since access to these parts is readily had. After the socket has been securely attached to the closure disk, the latter may then be fastened to the end 21 of the shell 16 by means of the screws 24, such fastening being also easily effected.

In accordance with the invention I provide novel means whereby the holder 12 is adapted to accommodate different sizes of lamps 13. One form of such means I show in Figs. 6 and 7, wherein I provide a spacer ring 30 adapted to be interposed between the closure 23 and the rear end of the shell 16. The spacer ring 30 has screw holes 31 through which the fastening screws 24 may pass.

It will be understood that when the spacer ring 30 is used, the socket 20 will be set more deeply in the shell 16, thereby enabling a lamp 13 of greater length to be properly mounted in the holder 12. When the spacer 30 is not used, as illustrated in Fig. 3, the lamp holder 12 is adapted to hold lamps 13 of shorter length. The spacer 30 may be very easily incorporated in the assembly or omitted as desired, and provides a convenient adjustment means for adapting the lamp holder to different sizes of lamps.

Variations and modifications may be made within the scope of the claim and portions of the improvements may be used without others.

I claim:

In a weatherproof outdoor lamp holder of the

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type having an outwardly flaring tubular housing having an enlarged mouth and an annular cushioning means at the interior of its mouth portion, and having a socket in the housing to receive and support a reflector-type outdoor lamp of the kind having a relatively large envelope provided with a front surface for exposure to the weather and a tapered rear surface, said rear surface contacting said cushioning means and forming a weather-tight connection with the housing at the flared end thereof, said lamp being thereby prevented from passing completely through the bore of the housing, the improvement which comprises: the rear end of the housing terminating in a continuous annular edge having a plurality of inwardly extended lugs disposed and projecting solely into the bore of the housing, said annular edge and lugs defining a rear opening in the housing; a closure plate for the rear of the housing, having a planar, faced, marginal portion closely fitting and conforming in outline to the contour of the continuous annular edge of the housing; two pairs of spaced bosses on and projecting from the inner side of the closure plate for mounting the lamp socket on one side solely thereof in a position axially normal to the plate, said rear opening being large enough to permit insertion of the socket into the housing when the socket is mounted on the plate to position the socket within the housing for the reception of the base of the lamp, the bosses of the said pairs being disposed in staggered relation in a zone extending around the center of the closure plate and said bosses all having flat socket-engaging faces lying in a single plane perpendicular to the axis of the socket and disposed forwardly of the plane of the said faced marginal portion of the closure plate and engaging the rear of the socket, the bosses of one pair being closer to each other than the bosses of the other pair and having threaded holes to receive fastening screws passing through the socket, the bosses of the other pair engaging the back of the socket and holding the socket against pivotal movement about the fastening therefor; and means securing the closure plate to the housing in weather-tight relation thereto.

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