Dec. 23, 1941. J. A. McKAY 2,267,208

REFLECTOR HOLDER

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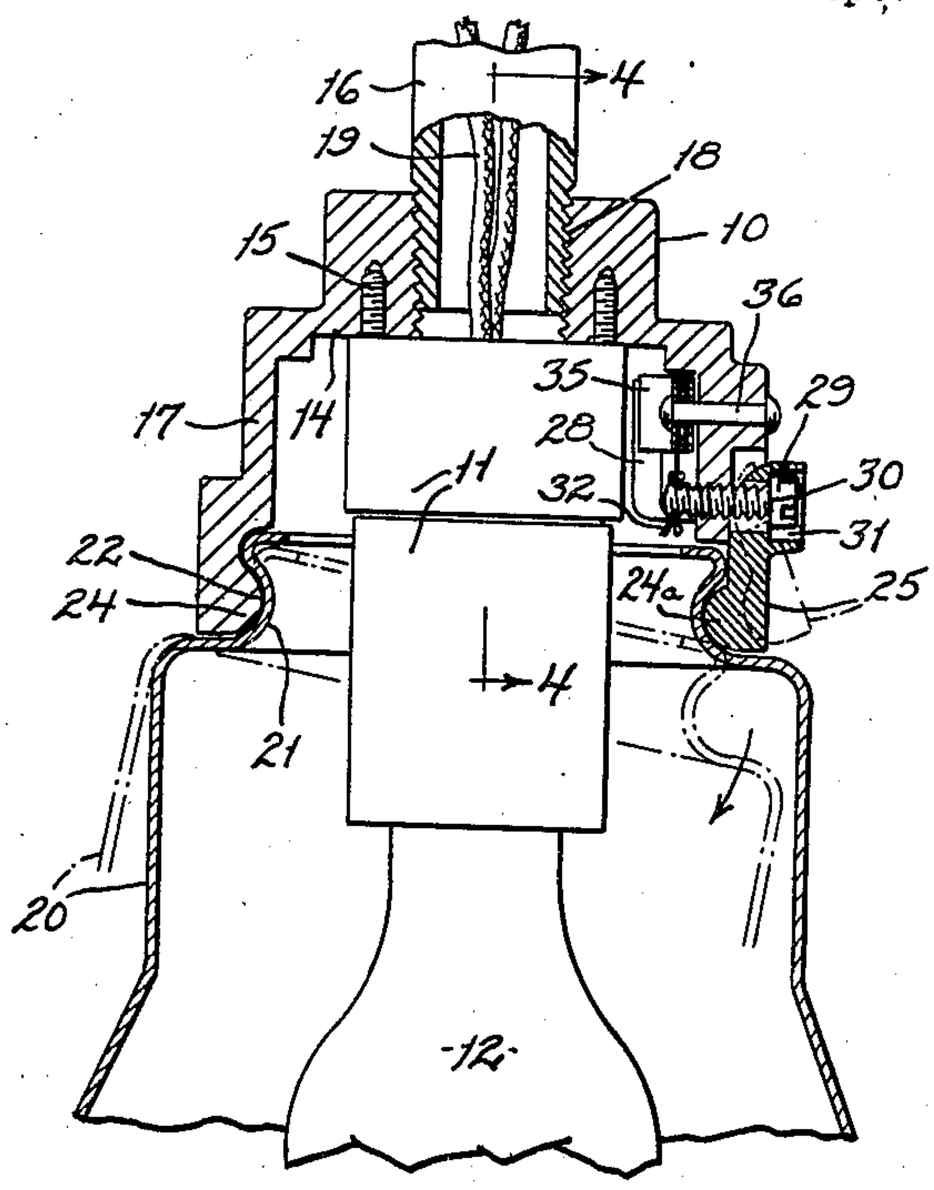

FIG. 2

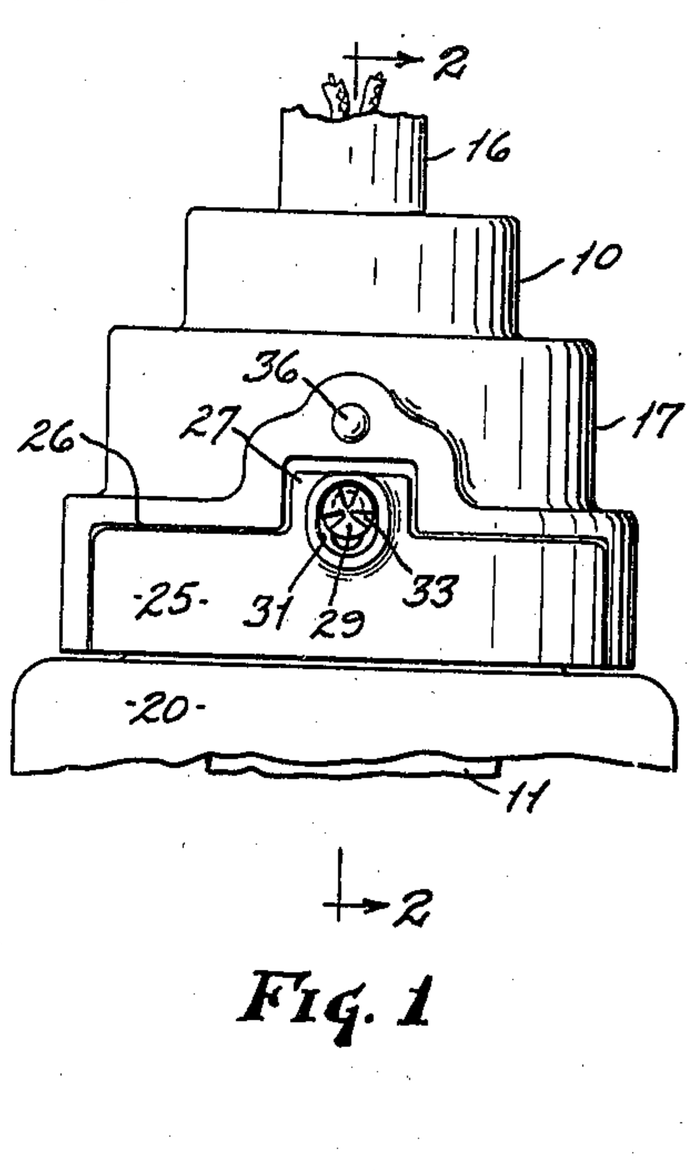

FIG. 1

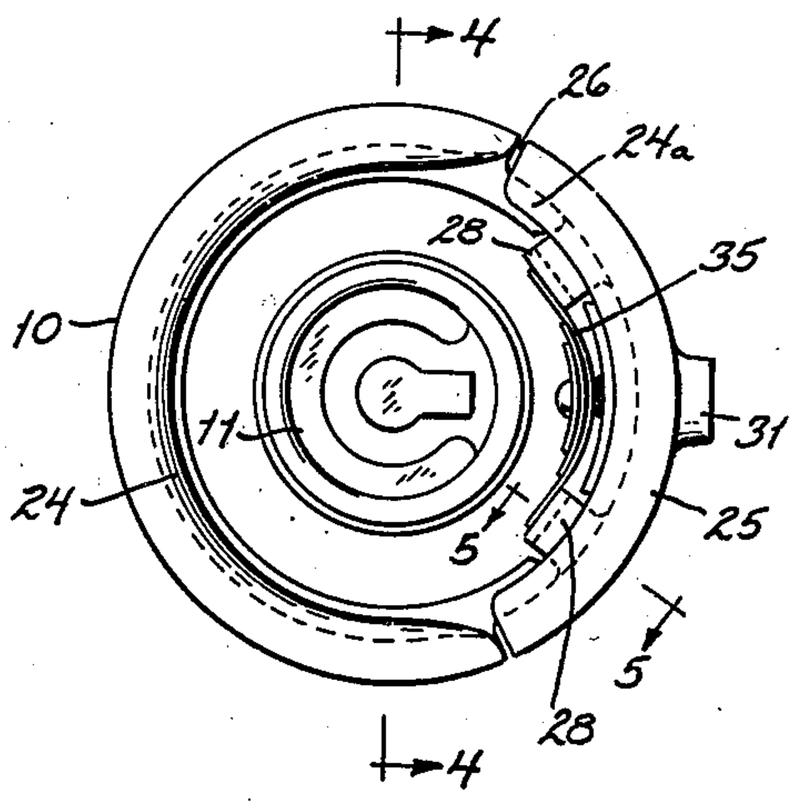

FIG. 3

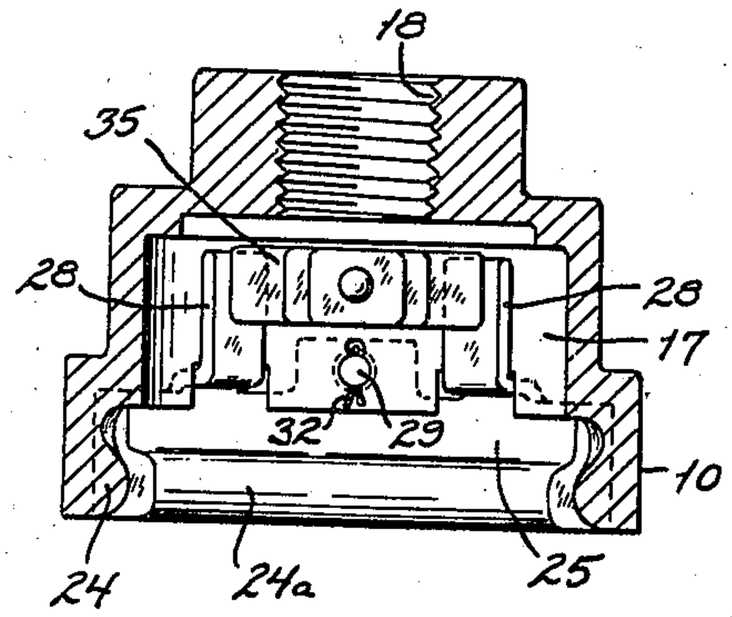

FIG. 4

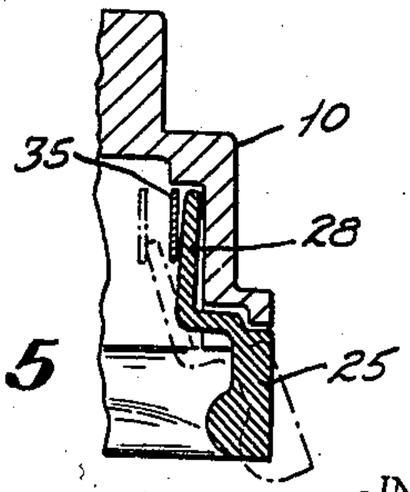

FIG. 5

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REFLECTOR HOLDER

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3 Claims. (Cl. 240—128)

This invention relates to an improved reflector holder, and more especially to a reflector holder for use with electric lamps. This, therefore, is the general object of the present invention.

A more specific object of this invention is to provide a reflector holder from which the reflector may be quickly and easily removed.

A further object of the present invention is the provision of a reflector holder arranged to removably receive an electric lamp, and to retain a lamp reflector in position thereon in such a manner that the reflector will be secured against inadvertant displacement, and at the same time so arranged as to be readily and quickly removed from the holder for replacement or cleaning purposes.

Other objects of the present invention will become more apparent from the following description, in which I illustrate a preferred embodiment of my invention. The essential features of the invention will be summarized in the claims.

In the drawing, Fig. 1 is a side elevation of my improved reflector holder; Fig. 2 is an axially extending vertical section, as indicated by the lines 2—2 on Fig. 1; Fig. 3 is a bottom plan view of the holder itself, the lamp and reflector having been removed therefrom; Fig. 4 is a vertical section through the holder, the plane of the section being indicated by the lines 4—4 on Figs. 2 and 3; Fig. 5 is a fragmentary sectional detail, as indicated by the lines 5—5 on Fig. 3.

Referring again to the drawing, my improved reflector holder is generally indicated at 10, and comprises a hollow, open-ended body, as, for instance, a casting, in which is mounted a lamp socket 11, adapted and arranged to receive an electric lamp 12 in the usual manner. The socket 11 may be of the usual porcelain or composition type and is secured to the top wall 14 of the body by bolts or screws 15 and is partially enclosed by the downwardly extending cylindrical side wall 17 of the body 10.

The holder 10 is arranged to be mounted on a hollow bushing or conduit 16, which, as shown, is connected to a threaded opening 18 extending through the top wall 14 of the body, and through which electric conductor wires 19 pass to the lamp socket 11.

The reflector 20 is provided adjacent its upper end with a reduced neck 21 having an annular groove formation 22 by means of which the reflector is secured in position on the holder.

In the form of my invention illustrated in the accompanying drawing, the cylindrical side wall of the holder body 10 is provided, adjacent its lower end, with an inwardly extending annular rib formation 24. This rib formation is preferably complementary to the groove of the reflector neck 21, heretofore mentioned.

Insertion of the reflector neck 21 in the holder 10 is made possible by a movable section 25 of the side wall 17 of the holder body. As illustrated in the drawing, that portion of the side wall 17 of the body having the rib formation 24 is cut away for about one-third of the circumference of the holder and is replaced by a movable section 25 having a rib formation 24—*a* which forms a continuation of the rib 24 of the body. The upper portion of this movable section 25 seats in a recess 26 formed in the body 10 and is provided with an upwardly extending lug 27, which engages an external surface of the body, as shown in Fig. 2, and a pair of inwardly and then upwardly extending ears 28, which engage the internal surface of the body, as illustrated in Fig. 5.

The section 25 of the holder is movably secured to the holder by a screw 29, which passes through the lug 27 on the movable member and is in threading engagement with the side wall of the holder. Thus, when this set screw is turned inward, where its shoulder 30 engages the bottom of its protecting recess 31, the member 25 will be securely retained against movement on the holder, as shown by full lines in Fig. 2. The screw 29 is provided with a cotter pin 32, which prevents complete removal thereof, and is preferably provided with a recess 33 adapted to receive an especially shaped tool, so as to make removal of the reflector by unauthorized persons difficult.

When it is desired to remove the reflector from the holder, the screw 29 is loosened, and the reflector swung downwardly as indicated by the arrow shown in Fig. 2, thus camming the movable section 25 of the holder to the dotted line position, whereupon the reflector may be readily withdrawn from the holder. The movable section 25 of the holder is normally retained in the position shown in full lines in Fig. 2 by a leaf spring formation 35, which is secured to the holder as by a rivet 36. The ends of this spring engage the upper ends of the ears 28 of the movable member, as shown in Figs. 3, 4 and 5.

The camming of the movable section 25 outwardly against the action of the spring 35 is facilitated by the curvilinear or semi-cylindrical contour of the retaining rib 24—*a* of the movable section 25. The contour of this rib is such that when engaged by the top of the reflector 20, positioned for insertion in the holder, as indicated by

the dotted lines in Fig. 2, movement of the reflector in a direction opposite to that indicated by the arrow in Fig. 2, will cam the movable section **25** outwardly against the action of the spring **35** to permit entrance of the neck of the holder in the reflector, after which the spring will retain the reflector in position, when, if desired, the movable section **25** and hence the reflector, may be locked in position by the screw **29**.

From the foregoing description it will be seen that I have provided a reflector holder from which the reflector may be readily removed, and which holder may be economically manufactured and readily assembled.

I claim:

1. A reflector holder comprising a hollow open-ended body, having a downwardly extending annular skirt provided with a recess, said skirt also having an internal annularly extending rib for engaging an annular recess formed in a reflector, one section of said rib being movable and having an upwardly extending lug engaging an external surface of said skirt and seat in the recess therein, means pivotally interconnecting said lug and said skirt whereby the bottom of said movable section may be rocked radially outward and upward to permit a reflector to be positioned in said holder, and a spring to return said movable section to a reflector engaging position.

2. A reflector holder comprising a hollow body having a downwardly extending annular skirt provided with a recess, said skirt also having an internal annularly extending rib for engaging an annular recess formed in a reflector, one section of said rib being movable and having an upwardly extending lug engaging an external surface of said skirt and seating in the recess therein a screw passing freely through said lug and threaded in said skirt to interconnect said movable section with said skirt, said screw when tight preventing movement of said movable section and when loose allowing it to swing outwardly at the lower edge to permit the removal of the reflector, and a spring mounted entirely within the confines of said body to return said movable section to a reflector engaging position.

3. A reflector holder comprising a hollow member of approximate bell shape open at its lower end and provided at its top with means for attachment to a fixed support, said hollow member having adjacent the lower end a substantially cylindrical wall with an omitted arcuate region leading from the lower end, a movable section having an arcuate portion adapted to occupy the omitted space in the hollow member and having an exterior face substantially registering arcuately with the exterior of the member, the member itself and the removable section being formed on their inner faces with arcuate beads registering longitudinally, said movable section in an intermediate region being provided with an upwardly extending lip normally occupying a downwardly facing recess in the wall of the hollow member, said movable section having an inwardly extending portion across the lower edge of the hollow member at the omitted region, said movable section having an upwardly projecting portion which lies along the inner surface of the hollow member, a spring within the hollow member attached thereto and bearing on the upwardly extending portion of the movable member, and a screw passing through the upwardly extending lip of the movable member and threaded into the hollow member, whereby the movable member may be held rigidly to the hollow member.

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