Nov. 18, 1958 O. W. SCHWEIKLE 2,861,175

TROUBLE LAMP

Filed June 14, 1957

FIG. 1

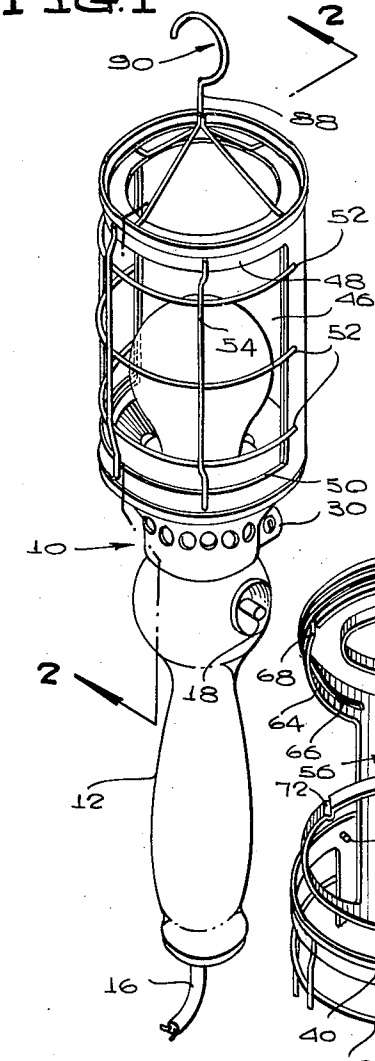


FIG. 2

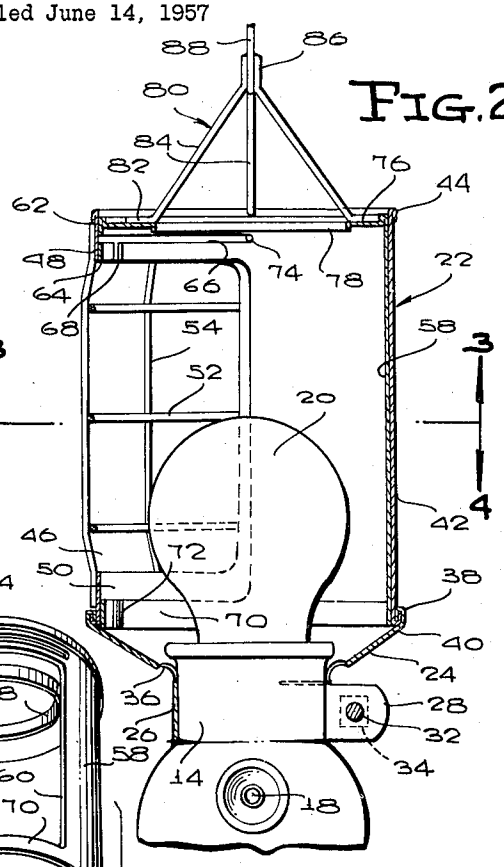


FIG. 5

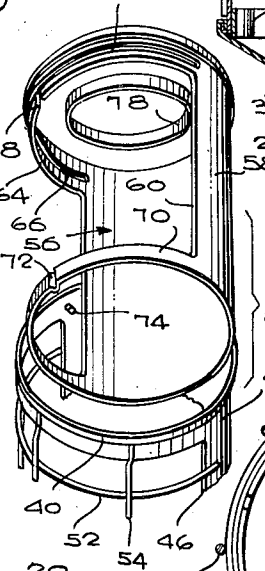


FIG. 3

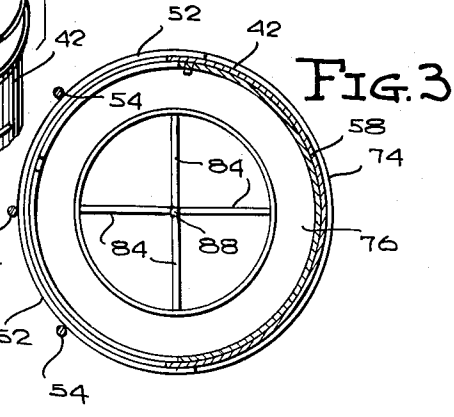
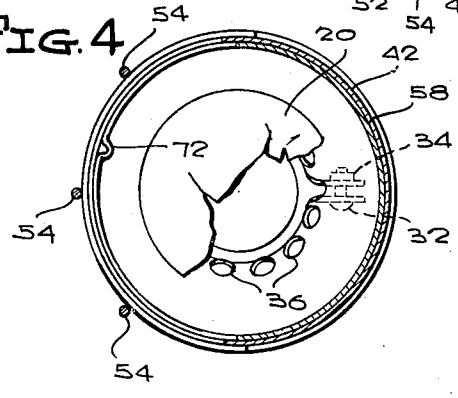


FIG. 4



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United States Patent Office 2,861,175
Patented Nov. 18, 1958

2,861,175

TROUBLE LAMP

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Application June 14, 1957, Serial No. 665,684
3 Claims. (Cl. 240—54)

The present invention relates to electrical illuminating means, and more specifically, the present invention pertains to a guard for an electric light bulb.

One of the primary objects of this invention is to provide a handle mounted electric light bulb with a guard or shield which may be adjusted to permit the passage therethrough of greater or lesser amounts of light rays.

A further object of this invention is to provide a trouble lamp with an improved combination of a light guard and reflector means.

It is a still further object of this invention to provide a trouble lamp with a light guard and reflector, the reflector being adjustable to control the light ray emission.

This invention contemplates, as a still further object, the provision of a trouble lamp of the type referred to above which is noncomplex in construction and assembly, inexpensive to manufacture, and which is durable in use.

Other and further objects and advantages of this invention will become more apparent from a consideration of the following specification when read in conjunction with the annexed drawing, in which:

Figure 1 is a perspective view of a trouble lamp constructed in accordance with the teachings of the present invention;

Figure 2 is an enlarged detailed cross sectional view, partly in elevation, the view being taken on the vertical plane of line 2—2 of Figure 1, looking in the direction of the arrows;

Figure 3 is a detailed cross sectional view taken on the horizontal plane of line 3—3 of Figure 2, looking in the direction of the arrows;

Figure 4 is a detailed cross sectional view taken on the horizontal plane of line 4—4 of Figure 2, looking in the direction of the arrows; and

Figure 5 is an exploded perspective view of the lamp guard and reflector unit.

Referring now more specifically to the drawing, reference numeral 10 designates, in general, a trouble lamp constructed in accordance with the present invention. The lamp 10 is seen to include an elongated substantially hollow cylindrical handle 12 having an electric light socket 14 fixedly secured to one end thereof. One end of an electric light cord 16 is extended through the hollow handle 12 and connected to the socket 14 in the conventional manner. A conventional push button switch 18 controls the flow of current to the socket 14. As is illustrated in Figures 1 and 2, the socket 14 receives a conventional light bulb 20.

The combined lamp guard and reflector device to which the present invention is addressed is designated, in general, by the reference numeral 22. This device is seen to include a substantially frusto-conical support member 24 which terminates at its lower end in a depending hollow cylindrical split collar 26, the ends of which terminate in laterally and outwardly turned confronting tabs 28, 30. The collar 26 surrounds and engages the socket 14 and the support member 24 is rigidly secured thereto by means of the screw 32 which extends through suitable apertures formed in the tabs 28, 30 and the lock nut 34. The support is completed by providing a plurality of circumferentially spaced apertures 36 at the junction point of the collar with the support member 24.

The upper end of the support member 24 terminates in a flange 38 which is reverted over a reverted flange 40 formed on the lower end of a vertically elongated substantially hollow cylindrical member 42. The upper end of the member 42 terminates in a reverted flange 44 in order to lend rigidity to the structure and to present a blunt edge. The member 42 is provided with a semi-circular opening or window 46 having vertically spaced and substantially parallel top and bottom flanges 48, 50, respectively. At vertically spaced intervals, the opening 46 is traversed by a plurality of substantially semi-circular ribs 52 fixedly secured to the member 42 adjacent the marginal sides of the opening 46. At radially spaced intervals, the opening 46 is traversed in a vertical direction by a plurality of outwardly bowed lips 54 having their opposed ends rigidly secured to the flanges 48, 50.

Reference numeral 56 designates, in general, a reflector for the trouble lamp 10. The reflector 56 is seen to comprise a vertically elongated substantially hollow cylindrical element 58 having a semi-circular opening 60 formed therein. Reference numerals 62, 64 denote a pair of vertically spaced and substantially parallel flanges at the upper end of the opening 60, the flanges being separated from each other by a semi-circular slot 66. As is clearly seen in Figures 2 and 5 of the drawing, the flange 64 is interrupted by a vertically extending slot 68 which communicates with the slot 66 at its upper end. A flange 70 is disposed at the lower end of the opening 60, the flange 70 being coaxially aligned with the flanges 62, 64. The flange 70 is traversed by a groove 72 that is disposed in vertical alignment with the slot 68.

The cylindrical element 58 is telescoped within the cylindrical member 42, the grooved portion 72 passing a locking pin 74 which projects inwardly from one end of the flange 48. The pin 74 enters the slot 68 formed in the flange 64 and passes into the slot 66. Thereafter, the cylindrical member and cylindrical element are locked together by turning the two relative to each other until the pin 74 engages against either of the ends of the slot 66.

An annular member 76 having a centrally disposed opening 78 is rigidly secured to the upper end of the cylindrical element 58 by conventional means. Reference numeral 80 designates, in general, a plurality of struts. Each of the struts 80 is substantially L-shaped in configuration and includes a foot portion 82 fixedly secured to the annular member 76 at radially spaced intervals. The leg portions 84 of the strut 80 converge at an angle upwardly and the upper ends thereof are bent vertically to provide terminal ends 86. The ends 86 are fixedly secured to the lower end of a stem 88 of a substantially C-shaped hook 90.

With the reflector 58 disposed within the guard 42 in the manner described above, it now becomes obvious that the operator may control the degree of light emanating from the bulb 20. Through the simple expedient of turning the reflector 58 by the leg portions 84 or hook 90 axially within the guard 42, or by holding the hook stationary and rotating the handle 12, the reflector 58 may be extended across a greater or lesser area of the opening or window 46 formed in the guard 42. The present invention embodies the guard with the adjustable feature which allows light to emanate from the side or if the side opening is closed entirely, then all the light rays will emanate from the open end of the device.

Having described and illustrated one embodiment of this invention in detail, it will be understood that the same is offered merely by way of example, and that the invention is to be limited only by the scope of the appended claims.

What is claimed is:

1. A trouble lamp comprising an elongated handle member having a pair of opposed ends, an electric light socket for an electric light bulb, said socket being fixedly secured to one end of said handle, means extending through the other end of said handle for connecting said socket with a source of E. M. F., support means, said support means comprising a frusto-conical member having a depending substantially hollow cylindrical split sleeve, said sleeve having the adjacent ends thereof terminating in outwardly extending spaced and confronting tabs, said sleeve being mounted on said socket, means for securing said tabs together to clamp said sleeve against said socket, a plurality of apertures formed in said support member adjacent the junction of said frusto-conical member with said sleeve, a light guard comprising an elongated substantially hollow cylindrical member having a pair of opposed open ends, said cylindrical member being disposed on said support with one of its said ends engaging against said frusto-conical member, means fixedly securing said one end of said guard to said frusto-conical member, said cylindrical member having a window formed in the side wall thereof, a plurality of ribs extending laterally across said window in spaced relation relative to each other, means fixedly securing the opposed ends of said ribs to said cylindrical member, a plurality of ribs extending longitudinally of said window in spaced relation relative to each other, means fixedly securing the opposed ends of said last named ribs to said cylindrical member, said cylindrical member having a pin extending inwardly thereof, said pin being disposed adjacent the other end of said cylindrical member proximate said window, a light reflector, said reflector comprising an elongated substantially hollow cylindrical element having a pair of opposed open ends and an opening formed in the side wall thereof, said cylindrical element having an axially extending groove formed therein immediately adjacent said window at one end thereof, said cylindrical element having an arcuately shaped slot formed therein adjacent the other end of said window, said cylindrical element having a second slot formed therein, said second slot communicating at one of its ends with said first slot and being in open communication at its other end with said opening, said cylindrical element being telescoped within said cylindrical member with said pin being disposed within said first slot to rotatably secure together said cylindrical element and cylindrical member, an annular member fixedly secured to said cylindrical element, and suspension means fixedly secured to said annular member.

2. A trouble lamp as defined in claim 1, and said last named means comprising a plurality of struts having an end thereof secured to said annular member in radially spaced relation relative to each other, a hook having a shank portion, and means fixedly securing the other ends of said struts to said shank portion.

3. A trouble lamp comprising an elongated handle member having a pair of opposed ends, an electric light socket for an electric light bulb, said socket being fixedly secured to one end of said handle, means connecting said socket with a source of E. M. F., support means mounted on said socket, a light guard comprising an elongated substantially hollow cylindrical member having a pair of opposed open ends, said cylindrical member being disposed on said support means with one of its said ends engaging thereagainst, means fixedly securing said one end of said guard to said support means, said cylindrical member having a window formed in the side wall thereof, said cylindrical member having a pin extending inwardly thereof, said pin being disposed adjacent the other end of said cylindrical member proximate said window, a light reflector, said reflector comprising an elongated substantially hollow cylindrical element having a pair of opposed open ends and an opening formed in the side wall thereof, said cylindrical element having an axially extending groove formed therein immediately adjacent said window at one end thereof, said cylindrical element having an arcuately shaped slot formed therein adjacent the other end of said window, said cylindrical element having a second slot formed therein, said second slot communicating at one of its ends with said first slot and being in open communication at its other end with said opening, said cylindrical element being telescoped within said cylindrical member with said pin being disposed within said first slot to rotatably secure together said cylindrical element and said cylindrical member, an annular member fixedly secured to said cylindrical element, and suspension means fixedly secured to said annular member.

References Cited in the file of this patent

FOREIGN PATENTS

509,477	Great Britain	July 17, 1939
732,093	Germany	Feb. 20, 1943