April 16, 1957 C. R. THATCHER 2,789,208

WELDERS LIGHT GUARD

Filed Aug. 2, 1955

FIG. 1.

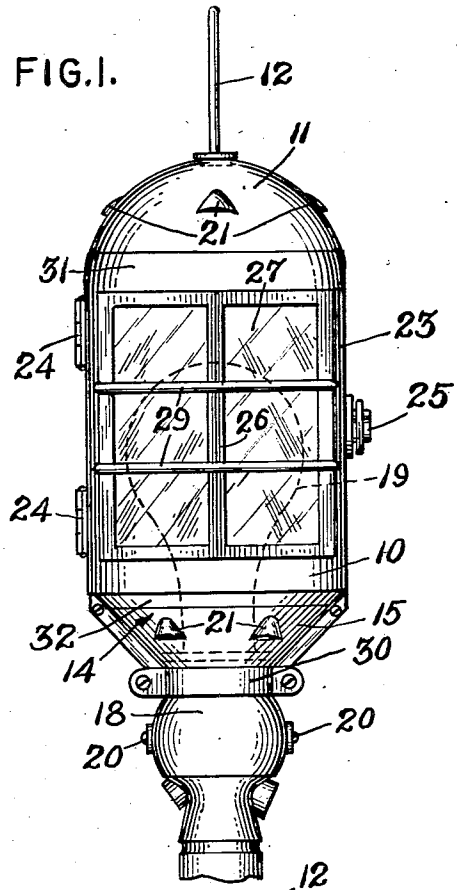


FIG. 2.

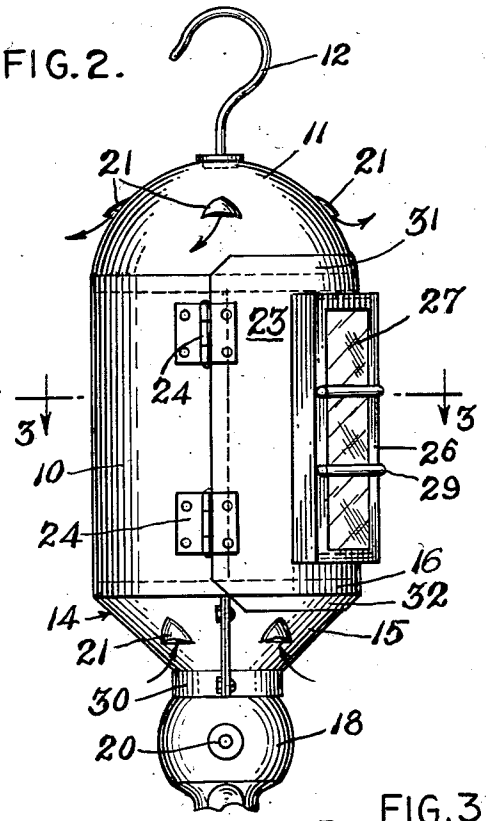


FIG. 3.

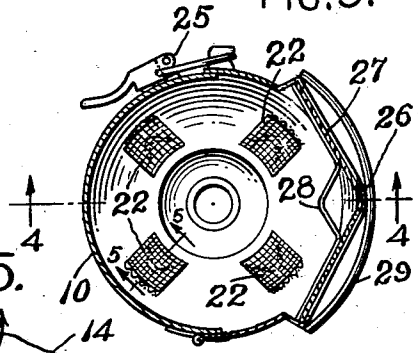


FIG. 4.

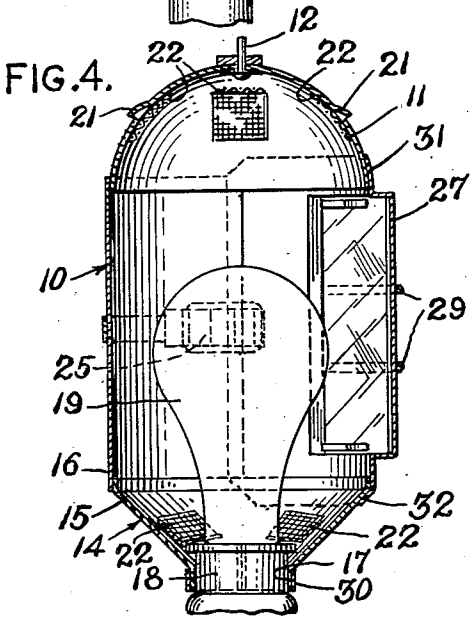
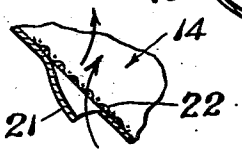


FIG. 5.



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WELDER'S LIGHT GUARD

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2 Claims. (Cl. 240—54)

This invention relates to a light, and more particularly to a guard for a light or incandescent bulb.

The object of the invention is to provide a guard which will prevent a bulb from becoming damaged, as when the bulb or light is being used by workmen such as welders.

Another object of the invention is to provide a guard for a light bulb whereby the light bulb can be used to illuminate areas which are usually inaccessible, and whereby the guard is provided with a means for dissipating heat generated by the light bulb, there being a door or closure member hingedly connected to the guard so that access can be gained to the interior of the housing as when the bulb is to be replaced or changed.

A further object of the invention is to provide a light guard which is extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are used to designate like parts throughout the same:

Figure 1 is a front elevational view of the light guard, constructed according to the present invention.

Figure 2 is an elevational view taken at right angles to the view shown in Figure 1.

Figure 3 is a sectional view taken on the line 3—3 of Figure 2.

Figure 4 is a sectional view taken on the line 4—4 of Figure 3.

Figure 5 is a sectional view taken on the line 5—5 of Figure 3.

Referring in detail to the drawings, the numeral 10 designates a hollow housing which can be made of any suitable material such as metal, and secured to an end of the housing 10 is a curved end member 11 which has a hook 12 extending therefrom whereby the light guard can be suspended from a suitable object.

There is further provided a body member 14 which includes a frustro-conical section 15 that terminates on one end in an annular flange 16 which is secured within an end of the housing 10. The body member 14 further includes an annular flange 17 which is of smaller diameter than the flange 16. The flange 17 surrounds a fitting or socket 18 which has a light bulb 19 arranged in engagement therewith, and the fitting 18 is adapted to be connected to a suitable source of electrical energy by means of wires or the like. Switches 20 may be provided for controlling actuation of the light bulb 19.

The light guard of the present invention is provided with a means for dissipating heat generated by the bulb 19, and this means comprises a plurality of struckout portions 21 which define vent openings, and these openings are covered by screen or reticulated material 22. Thus, the screens 22 prevent any foreign matter such as sparks generated by welding apparatus, from accidentally entering the housing 10 and breaking the light bulb 19.

There is further provided a door 23 which is hingedly connected to the housing 10 by means of hinges 24. A

latch 25 is provided for retaining the door 23 in its locked or closed position.

Mounted in the door 23 is a framework 26 which has openings over which extend transparent windows 27, Figure 3. Spring members 28 are provided for retaining the glass windows 27 in their proper position in the framework 26 of the door 23. Guard rails 29 may extend over the outer surface of the windows 27 so as to prevent the windows 27 from becoming accidentally broken or damaged. There is further provided a clamp 30 which serves to maintain the flange 17 mounted on the socket 18.

From the foregoing, it is apparent that there has been provided a light guard which is especially suitable for use by workmen such as persons doing welding. In use, the guard may be suspended from a suitable article by means of the hook 12. A suitable wire or wires can lead from the fitting 18 to a source of electrical energy so as to illuminate or energize the bulb 19. The light rays from the bulb 19 will emanate through the transparent windows 27 so that the workman can readily see even in ordinarily inaccessible or dark locations. The rails or bars 29 help protect the windows 27, but in the event that any of the windows 27 become broken, the spring members 28 can be disengaged so as to permit replacement of the windows 27. The door 23 is maintained closed by means of the latch 25, and the door 23 can be swung open on the hinges 24 when the bulb 19 is to be removed or replaced. The vents 21 serve to dissipate the heat generated by the bulb 19, and the screens 22 prevent sparks or the like generated by welders' equipment from accidentally damaging the bulb 19.

With the present invention, breakage of the bulb 19 will be eliminated or minimized, and the housing can be made of strong lightweight material. The door 23 has overlapping end portions 31 and 32 which help reinforce the parts and provide a better seal. If desired, the windows 27 may be made of a suitable plastic or spark resistant material which can be wiped off when they become dirty.

I claim:

1. In a light guard, a hollow housing, a curved end member secured to an end of said housing, a hook extending from said end member, a body member arranged contiguous to the other end of said housing and including a circular flange secured to said housing, said body member further including a frustro-conical section and a second flange smaller in diameter than said first named flange, a socket mounted in said second flange, a light bulb arranged in engagement with said socket, a clamp arranged in engagement with said second flange, a door hingedly connected to said housing, a latch for maintaining said door in closed position, said door including transparent windows, spring clips for retaining said windows in said door, guard bars arranged across said windows, said body member and end member being provided with a plurality of struckout portions defining vent openings, and screens extending across said vent openings.

2. A light guard comprising a hollow housing, a curved end member secured to an end of said housing, a hook extending from said end member, a body member arranged contiguous to the other end of said housing and including a circular flange secured to said housing, said body member further including a frustro-conical section and a second flange smaller in diameter than said first named flange, a socket mounted in said second flange, a light bulb arranged in engagement with said socket and adapted to be connected to a source of electrical energy, a clamp arranged in engagement with said second flange for maintaining said second flange in engagement with said socket, a door hingedly connected to said housing, said door having overlapping end portions to help reinforce the parts and provide a better seal, a latch for maintaining said door in closed position, said door including transparent

windows, spring clips for retaining said windows in said door, whereby in the event any of the windows become broken, the spring clips can be disengaged so as to permit replacement of the windows, guard bars arranged across the outer surface of said windows, said body member and end member being provided with a plurality of spaced apart struckout portions defining vent openings, and screens extending across said vent openings for preventing any foreign matter such as sparks generated by welding apparatus from accidentally entering the housing and breaking the light bulb.

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