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ELECTRIC LIGHT GUARD

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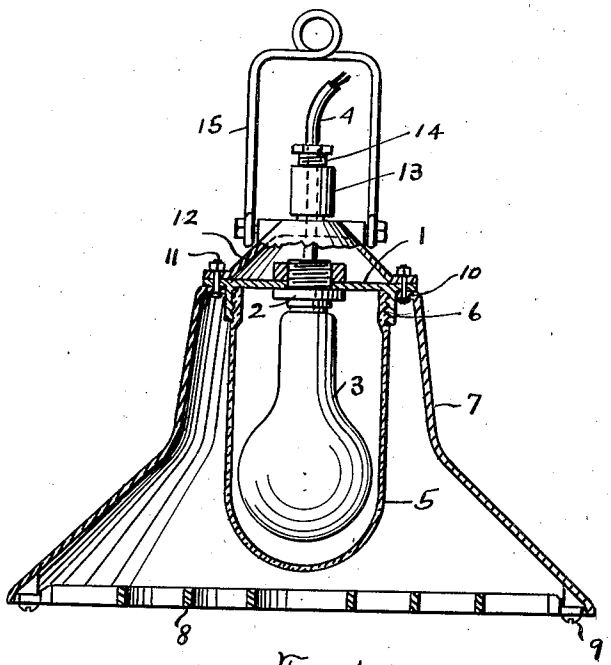


Fig. 1.

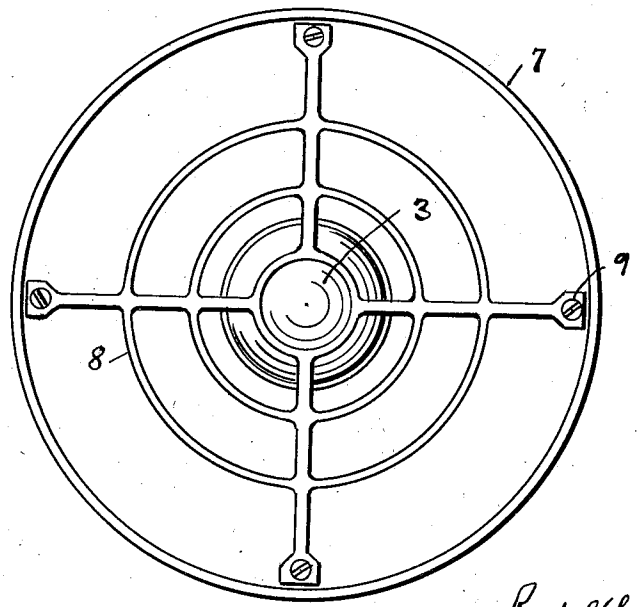


Fig. 2.

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ELECTRIC LIGHT GUARD

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2 Claims. (Cl. 240—11.2)

This invention relates to an electric light guard.

An object of the invention is to provide a guard of the character described having a socket to receive a conventional electric light globe, and provided with means for shielding the globe and the electrical connections to exclude gas therefrom when the electric light is used in the presence of an explosive gas.

When so shielded and protected, the light may be safely used in oil tanks, and tank cars, when it is necessary to inspect, or repair, the interior thereof without danger of explosion.

While this type of electric light has been especially designed for making interior inspections of oil tanks and tank cars, it is of general utility for use in the presence of an explosive gas.

With the above and other objects in view, the invention has particular relation to certain novel features of construction, arrangement of parts, and use, an example of which is given in this specification and illustrated in the accompanying drawing, wherein:

Figure 1 shows a sectional view of the guard, and

Figure 2 shows a front elevation.

In the drawing the numeral 1 designates a socket plate carrying the conventional type of socket 2 to receive the electric light globe 3 in the usual manner. Electric wiring 4 is connected to the socket in the usual way for the supply of the current to the globe.

A translucid shield 5 surrounds the globe 3 and is screwed into the internally threaded socket 6 of the plate 1, thus forming a gas-tight shield about the globe.

There is a forwardly flared guard 7 whose outer end supports a skeleton 8 which is detachably secured to the forward end of the guard 7 by suitable set screws as 9 or by other suitable fasteners. The other end of the guard 7 has the inwardly turned flange 10 which surrounds the socket 6 and is bolted to the margin of the plate 1 by means of bolts 11.

On the opposite side of the plate 1 from the guard 7, there is a hood 12 whose margin is clamped to the margin of said plate by the bolts 11. This hood is preferably conically shaped and at its apex has a sleeve 13 through which the wiring 4 passes, and a stuffing box 14 is secured in the outer end of the sleeve around the wiring to form a gas-tight joint.

The globe 3 and the electrical connections will all thus be enclosed in a gas-tight compartment by the shield 5 and the hood 12, and the stuffing box 14 so that when the light is used in oil tanks, or oil tank cars, or at other places where there is explosive gas, or explosives, the explosive will be excluded from all electrical connections which would be liable to create a spark and cause an explosion.

If desired, the guard may be equipped with a U-shaped bracket 15 having a pivotal connection to the hood 12 as shown and to which a line may be connected for suspending the light in a tank, tank car, or similar location.

What I claim is:

1. In combination, a supporting plate, a globe socket on the plate, an electric light globe in the socket, a shield socket on the plate, a translucid shield around and spaced from the globe and screwed into the shield socket and forming a gas-tight compartment for the globe, electrical wiring connected to the globe socket, and a hood having a marginal flange fitted against the plate and enclosing the connections, said hood forming gas tight joints with the plate and wiring to form a gas tight chamber for the electrical connections, a guard around the shield, one end of which has an internal flange fitted against the plate and securing means passing through said flanges and plate.

2. In combination, an attaching plate, a socket thereon, an electric light globe in the socket, electric wiring connected to the socket, a translucid shield around the globe and detachably secured to the plate and forming a gas-tight compartment in which the globe is located, a hood on the opposite side of the plate from the globe and whose margin is outturned and fitted against the plate and forms a gas-tight joint therewith, said hood being approximately cone-shaped and having a sleeve at its apex through which the wiring passes and a stuffing box secured in the outer end of the sleeve around the wiring and forming gas-tight joints with the sleeve and wiring, a guard having an inturned annular flange at one end fitted against the plate and whose other end is flared, said guard surrounding the shield and securing bolts through the flanges and plate.

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