June 16, 1942. C. H. BISSELL 2,286,891

ROUGH SERVICE ELECTRIC HAND LAMP

Filed Jan. 9, 1941

Fig. 1

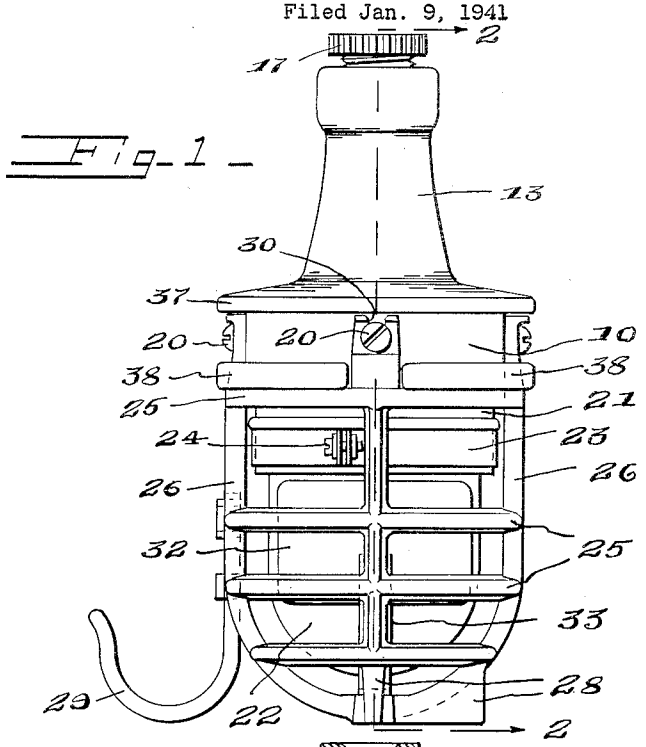
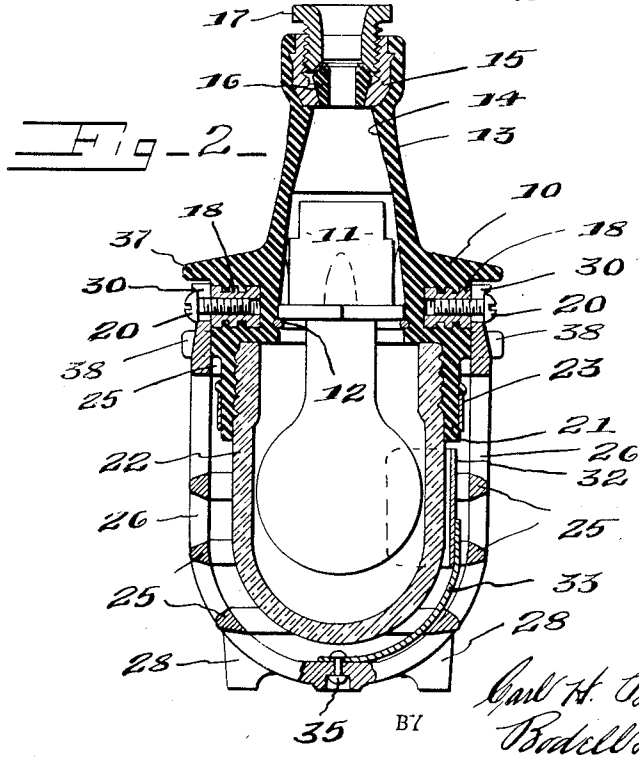


Fig. 2



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ROUGH SERVICE ELECTRIC HAND LAMP

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2 Claims. (Cl. 240—54)

This invention relates to electric hand lamps of the type secured to a lamp cord or lead. More particularly the invention has to do with a device of the type alluded to intended particularly for rough or severe service in connection with the construction, repair and maintenance of machinery in hazardous locations, such as the repair of aircraft engines. Electric hand lamps used under such conditions receive particularly severe service. The engine of the average aircraft, or military aircraft, is positioned at a height of eight to ten feet above the floor of the hanger. These hand lamps are often dropped from this height with the result that the guard and globe become broken and, in the event there is any gasoline, or other inflammable material on the floor, a serious fire is likely to result.

This invention has as an object an electric hand lamp embodying a particularly economical but durable construction particularly fitting it for rough service and permitting the lamp to be dropped, or to receive similar hard usage, without becoming broken, and at the same time the construction is such as to conveniently permit the guard and globe to be disassembled from the body section to permit the unit to be relamped.

The invention consists in the novel features and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawing in which like characters designate corresponding parts in all the views.

Figure 1 is a side elevational view of a hand lamp embodying my invention.

Figure 2 is a vertical sectional view taken on line 2—2, Figure 1.

The lamp consists of a body 10 preferably of cylindrical formation and being formed of radially resilient material such as rubber. A lamp socket 11 is carried by the body and detachably secured thereto as by a ring 12. The integral handle portion 13 is provided with a suitable passage 14 leading from the lamp receptacle for the reception of the conventional lamp cord and, in order that the same may be secured in gas tight relation to the body, the outer end of the handle portion is provided with an insert 15 of plastic material provided with a conical inner bore to receive a rubber compression sleeve 16 adapted to encircle the lamp cord. The sleeve 16 is compressed tightly against the lamp cord and against the bore of the insert 15 by a compression nut 17 threading into the insert and which is also preferably formed of plastic material. The body is of appreciable dimension both axially and radially, and is formed with a plurality of metal inserts 18 spaced apart circumferentially about the periphery of the body and provided with threaded apertures to receive screws 20.

The body is also formed with an axially extending annular flange 21 arranged concentrically of the lamp socket 11 and adapted to receive the open end of a conventional glass globe 22. The inner surface of the flange 21 is moulded or formed with screw threads or ribs complemental to those on the exterior of the globe, and the flange is encircled by a metallic band 23 provided with a screw 24 by which the band is constricted to tightly compress the flange against the globe.

The globe is protected by a heavy cast metal guard cage consisting of a series of horizontally arranged ringlike ribs 25, and a series of axially extending ribs 26. The ribs 26 follow a parallel contour to the globe 22. A plurality of the ribs are provided with bosses 28 on their curved portions which form a convenient support for the lamp when it is arranged in vertical position. A hook 29 is also secured to one of the ribs 26 and forms a convenient means of hanging the lamp in inverted position. The ribs 26 extend somewhat beyond the open end of the guard cage and are slotted as at 30 to receive the screws 20 and by which the guard is detachably secured to the body 10.

The body 10 is formed with integral radially extending flanges 37, 38. The flange 37 overhangs the ends of the ribs 26 when the guard is attached to the body and serves as a means to protect the guard. The flange 38 is interrupted to receive the upper ends of the ribs 26 and is engaged by the top circular rib 25. Thus the flanges 37, 38 serve to protect the upper portion of the guard by absorbing both radial and axial shocks in the event the lamp is dropped from an appreciable height. If the lamp strikes on the end of the guard, the shock is taken up by the top rib 25 being forced against the flange 38.

With this construction, the globe is yieldingly suspended from the body and the guard by means of the depending ring or flange 21 and thus any shocks imparted to the body, or to the guard, are absorbed with the result that the lamp may be dropped from a height of several feet onto a concrete floor without damaging the globe.

The guard cage is provided with a reflector 32 mounted upon an arcuate shaped bracket 33 pivoted at the axis of the guard as by a rivet 35.

The arrangement is such that the reflector 32 may be shifted circumferentially of the globe 22.

What I claim is:

1. A rough service electric hand lamp comprising a body formed of resilient material, a lamp receptacle mounted in the body, a globe detachably mounted on the body, said body being provided with a plurality of metal inserts spaced circumferentially about the periphery of the body and each insert having a threaded aperture, a guard cage encircling the globe and being formed with a plurality of axially extending ribs, the ends of said ribs at the open end of the guard being formed with slots spaced complemental to said inserts, and a screw extending through each slot and threading into the adjacent insert to detachably secure the guard to the body, said body being also formed with a radially extending flange overlying the open end of the guard, and the body also having a second radially extending flange spaced axially from said first mentioned flange and being formed with interrupted portions to receive the ends of the ribs of the guard, and said guard being provided with a member arranged to engage said second flange upon the application of force tending to move the guard axially toward the body.

2. A rough service electric hand lamp comprising a body formed of resilient material, a lamp receptacle mounted in the body, a globe detachably mounted on the body, said body being provided with a plurality of metal inserts spaced circumferentially about the periphery of the body and each insert having a threaded aperture, a guard enclosing the globe and being formed with a plurality of axially extending ribs and a plurality of axially spaced apart circular ribs, like ends of said axially extending ribs being formed with slots spaced complemental to said inserts, and a screw extending through each of said slots and threading into the adjacent insert to detachably secure the guard to the body, said body having a radially extending flange overlying the slotted end of said guard and having a second radially extending flange spaced axially from said first mentioned flange and being formed with interrupted portions to receive the axially extending ribs of the guard, and one of the circumferentially extending ribs of the guard being arranged to engage said second flange upon the application of force tending to move the guard axially toward the body.

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