

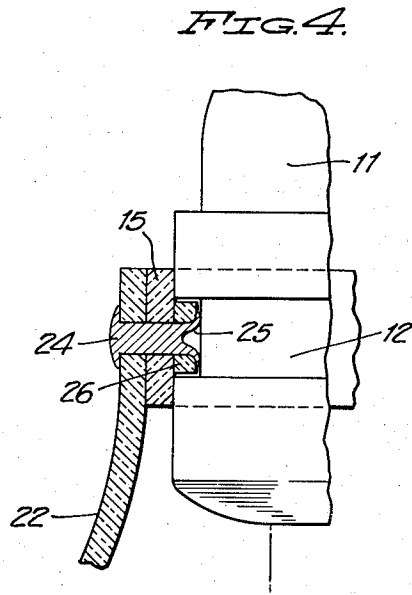
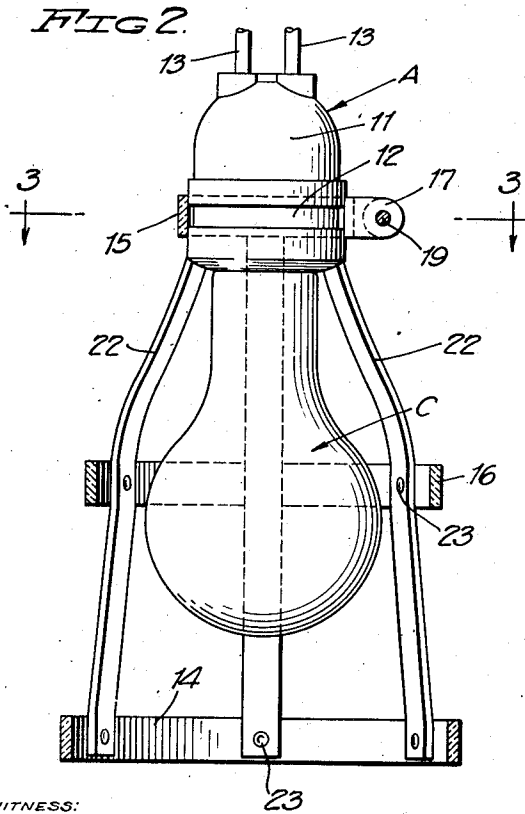
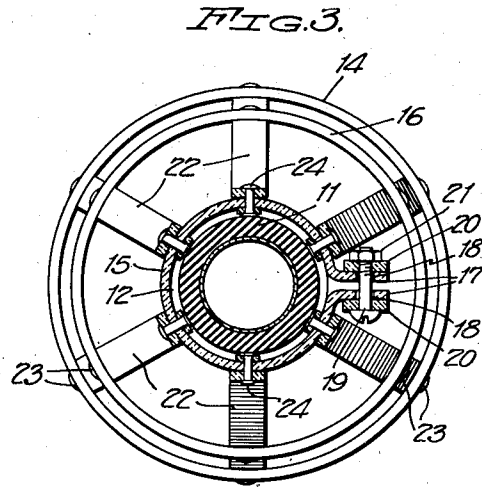
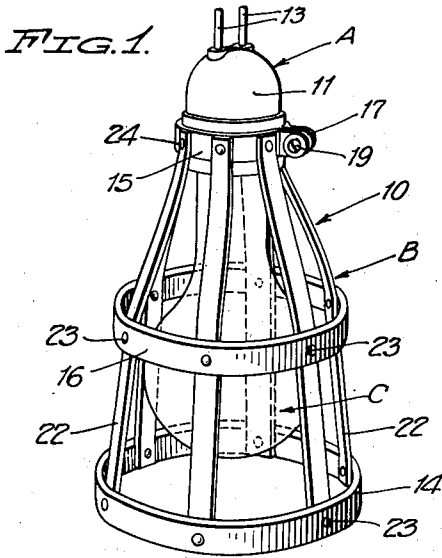
Sept. 25, 1945.

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2,385,655

SAFETY LAMP GUARD

Filed April 24, 1943



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2,385,655

SAFETY LAMP GUARD

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Application April 24, 1943, Serial No. 484,323

1 Claim. (Cl. 240—102)

This invention relates to improvements in safety lamp guards of the portable type made of insulating material.

Prior devices of this character with which I am familiar are made wholly or partly of rubber. Due to the present shortage of rubber and restrictions as to its use, this material is not available, therefore the primary object of this invention is to construct a safety lamp guard made of fibre material which is an excellent non-conductor of electricity and which is sufficiently rigid to protect the electric lamp from breakage during use of the lamp.

Another feature of the invention resides in a safety lamp guard which is clampingly supported in a novel manner upon a standard insulated lamp socket of the portable lamp.

A further feature of the invention is to provide a fibre cage-like guard composed of a series of concentric rings to which radially arranged strips are riveted, the rivets of one of the end rings being utilized to interfit in a groove provided in the guard supporting lamp socket for preventing separation of the guard from the socket in an axial direction.

Other novel features of the invention will become apparent as the following specification is read in conjunction with the accompanying drawing, in which,

Figure 1 is a perspective view of a lamp equipped with the safety guard.

Figure 2 is a vertical sectional view.

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

Figure 4 is an enlarged detail vertical sectional view on the line 4—4 of Figure 3.

Referring to the drawing by reference characters, the numeral 10 designates a portable lamp in its entirety embodying the features of the invention about to be described. The lamp 10 includes broadly, a lamp socket A, a safety guard B attached to the socket A, and an electric incandescent lamp bulb C.

The socket A is of standard make and includes an outer rubber shell 11 enclosing the threaded metal shell into which the threaded base of the lamp C is screwed. The rubber shell 11 is provided with an annular channel 12 of U-shape in cross section and which is disposed adjacent the open end of the socket. Terminal conductor wires 13—13 extend through the closed end of the socket to facilitate the connection of the lamp 10 with a source of electric current.

The safety guard B consists of a cage-like body made of a non-conducting material, such as stiff

vulcanized fibre, and includes a continuous outer end ring 14 made of flat fibre, a split inner end clamping ring 15 made of flat fibre and of a smaller diameter than the ring 14, and an intermediate continuous ring 16 and also made of flat fibre and being of the same or slightly less diameter than the outer end ring 14. The rings 14, 15, and 16 are disposed in substantially concentric relation and are substantially equidistantly spaced apart. The ends of the split ring 15 are bent outwardly at right angle to the axis of the ring to provide substantially parallel terminal ears 17—17 provided with aligned openings 18. A threaded bolt 19 passes through the aligned openings 18, there being fibre washers 20—20 between the respective ears and the head of the bolt 19 and a nut 21 threaded to the threaded end of the bolt.

Extending from the split end ring 15 to the continuous end ring 14 are flat fibre strips 22 arranged in equidistantly spaced radial relation. The strips 22 are embraced by the continuous rings 14 and 16 so that their flat outer sides flatly fit against the flat inner sides of the said rings. The inner ends of the strips 22 flatly fit against the split clamping ring 15. Rivets 23 pass through the rings 14 and 16 and through the strips 22 for rigidly securing the strips and rings 14 and 16 together. Hollow rivets 24 pass through the inner ends of the strips and through the split clamping ring 15. Mounted on the inner upset ends 25 of the rivets 24 are fibre disks or washers 26 which provide projections which extend inwardly from the inner flat side of the split ring 15. Thus, the strips 22 are fixedly connected at their points of contact with the rings 14, 15 and 16. Due to the difference in diameters of the split ring 15 and intermediate ring 16, the strips 22 are bent inwardly so that their inner ends will flatly contact the outer flat side of the ring 15.

As previously mentioned, the safety guard B is supported by the socket A, by reason of the fitting of the split clamping ring 15 about the rubber shell 11 so that the series of projections 26 seat in the channel 12 as best illustrated in Figures 3 and 4. The width of the ring 15 is greater than that of the channel so that it overlies and conceals the channel. It will be understood that the split fibre clamping ring possesses a certain resiliency which enables the spreading of the ring to facilitate the seating of the projections into the channel and their separation therefrom. By screwing the nut 21 tight upon the bolt 19, the split clamping ring 15 will be brought into tight clamping engagement with the rubber shell 11

and securely held against relative turning movement. By tightly contracting the split ring 15 about the shell 11, the projections 26 will interfit with the walls of the channel 12 and prevent the guard B from being accidentally pulled away from the socket A.

The incandescent lamp C may be inserted through the outer open end of the guard B and its base screwed into the socket A.

In use, the fibre guard B of the portable lamp 10, protects the electric lamp C from breakage and due to the di-electric material from which the guard is constructed, short circuits are prevented should the guard be accidentally brought in contact with "live" electrical conductors. The projecting portion of the socket A may serve as a safe handle by which the portable lamp 10 may be grasped. Should it be desired to hang the lamp 10, the ring 14 may be engaged with a hook, nail, or other fixed engageable element.

From the foregoing description, it will be seen that I have provided a simple, inexpensive, safety lamp guard which is a non-conductor of electricity, strong and durable to withstand the abuses of use, and which is constructed of materials now available for general use.

While I have shown and described what I consider to be the preferred embodiment of my in-

vention, I wish it to be understood that such changes in construction and design as come within the scope of the appended claim may be resorted to if desired without departing from the spirit of the invention.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent of the United States, is:

In a lamp having a lamp receiving socket provided with an exterior annular channel, a lamp guard including an inner split resilient fibre ring and rigid spaced apart continuous fibre rings, all of the rings being in substantially concentric relation, flat fibre strips flatly fitting against the outer side of the split ring and flatly fitting against the continuous rings, metal rivets passing through the rings and strips for securing the same together, and enlarged inwardly projecting heads provided on the inner ends of those rivets passing through the split ring and strips, said split ring being contracted about said socket with the enlarged heads being snugly disposed in said channel for interlocking with the opposed walls thereof, and fastening means carried by the ends of the split ring for securing the same in contracted position about the socket.

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