July 29, 1930. F. C. KOLLATH 1,771,640

PORTABLE ELECTRIC LAMP

Filed July 13, 1928

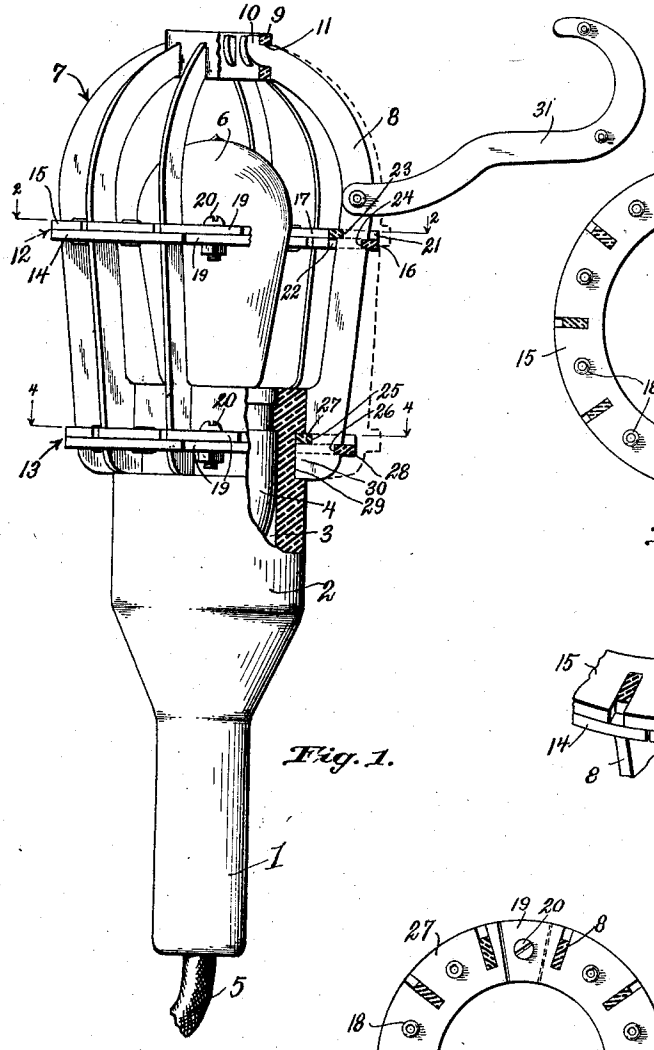


Fig. 1.

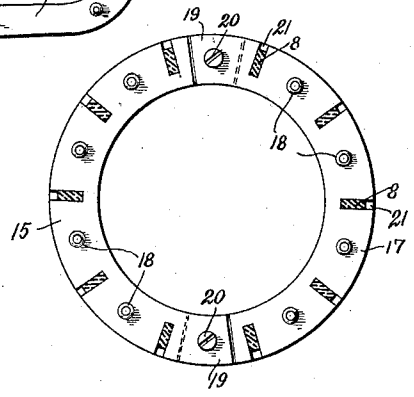


Fig. 2.

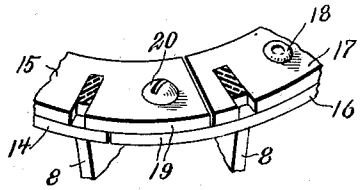


Fig. 3.

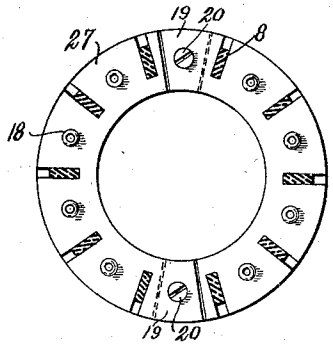


Fig. 4.

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UNITED STATES PATENT OFFICE

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PORTABLE ELECTRIC LAMP

Application filed July 13, 1928. Serial No. 292,569.

My invention relates to improvements in portable electric lamps, and has for one of its objects to provide a new form of insulated lamp holding device including an improved lamp guard.

Another object is to provide an improved portable lamp having a minimum number of parts and in which the guard may be easily removed and attached and will be snugly held in correct relative position on a flexible and resilient handle, preferably rubber.

These and other objects of my invention will be apparent from the specifications and claims.

Realizing that my invention may be varied in its physical embodiment without departing from the spirit of the invention, I desire it to be understood that the specific construction and form herein shown is to be taken as illustrative and not in a limited sense.

In the accompanying drawings, like portions of the device are designated by like characters thruout the several figures.

Fig. 1 is a side elevation partially in section.

Fig. 2 is a transverse sectional view taken on a line corresponding to line 2—2 of Fig. 1.

Fig. 3 is a perspective view of a portion of the guard rings and illustrates the method of securing the guard in position.

Fig. 4 is a sectional view taken on line 4—4 of Fig. 1.

Referring now to the drawings, the handle 1 is preferably made of flexible and resilient material such as rubber, and is provided with an enlarged portion 2 having a recess or chamber 3 therein to receive the socket 4. Suitable conductors 5 extend thru the handle and are secured to the socket.

The lamp 6 is protected by the guard 7 which is made of insulating material, preferably fibre, and consists of a plurality of comparatively thin strips 8 which are connected at their upper ends, as shown in Fig. 1, to the ring 9. The upper portions of the ribs or strips 8 are curved to conform somewhat to the contour of the bulb used and are provided with L shaped hooks 10 which are inserted thru the radial openings in the ring 9, the ring is preferably made of fibre tubing.

The strips 8 are held in spaced relation by means of the split rings 12 and 13. The split ring 12 comprises four semicircular insulating members 14—15—16 and 17 preferably fibre, the members 14 and 15 being secured together by means of eyelets 18 to form one half of the split ring, and the members 16 and 17 also secured together by similar eyelets to form the other half. The members are so positioned that when secured together overlapping ends 19 are provided, as shown in Fig. 3, and which may be secured together by means of the bolts 20.

The upper members 15 and 17 are provided with the radial slots 21, and the lower members 14 and 16 with corresponding radial slots 22. It will be noted that as the slots in the members 14 and 16, and 15 and 17 extend in opposite directions respectively, when the strips 8 are inserted in these slots and the eyelets 18 secured in place, all of the strips in each half of the guard are held securely in spaced relation. The strips 8 are provided with notches 23 and 24 to engage the ring members and prevent longitudinal movement.

The split ring 13 is somewhat smaller in diameter but is otherwise exactly the same construction as the ring 12. The strips 8 are provided with notches 25 and 26 to engage the semicircular members 27 and 28 respectively.

After the guard is assembled as described it may be secured to the enlarged end 2 of the handle 1 as shown in Fig. 1 by springing the lower ends of the two halves of the guard outwardly, as shown by dotted lines, and inserting the enlarged portion of the handle in the ring 13, the two halves of the ring are then pressed together snugly against the yielding material of the handle until the bolts 20 can be inserted and secured in place. The ring 13 is slightly smaller in inside diameter than the outside diameter of the handle so that considerable pressure is necessary to bring the parts into alignment so that the bolts 20 may be inserted.

The handle is provided with an annular groove 29 in which the ring seats, the shoulders of the groove assisting to prevent longitudinal movement.

The inner edges of the lower ends of the strips 8 are parallel with and also press snugly against the handle, the inwardly extending portion 30 seating in the groove 29. An adjustable hook 31 is secured to one of the strips 8.

It will be noted that the rubber handle provides an efficient shock absorbing device and that the guard, handle and lamp are held securely in parallel relation with a minimum number of parts. The act of clamping the guard on the handle also clamps the socket securely.

The members 15 and 17 of the ring 12 are identical and interchangeable, as are also members 14 and 16. The corresponding members of the ring 13 are also interchangeable.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A portable electric lighting device comprising a flexible rubber handle having a chamber therein, a socket in said chamber to receive an electric lamp, a guard around said lamp comprising radially disposed insulating strips secured together at their upper ends, the lower ends of said strips being secured to a sectional ring each half of said ring comprising flat insulating semicircular members having oppositely extending slots to receive the ends of said strips and secured together to form arcuate strip interlocking members greater than a semicircle, and means for detachably securing together the halves of said arcuate members to form a circular ring.

2. A guard for electric lamps comprising a plurality of flat strips of insulating material disposed edgewise radially around the lamp, a means for securing the corresponding ends of said strips in adjacent spaced relation, a sectional ring to which the opposite ends of said strips are attached, each section of said ring comprising a plurality of arcuate members having oppositely disposed radial slots therein, said sections being secured together to form a separable split ring, said strips interlocking in said slots.

3. A combined supporting and clamping ring for rubber handled hand portables comprising a plurality of sections detachably secured together, each of said sections comprising a plurality of arcuate members, one of said members having outwardly extending slots, a corresponding member having inwardly extending slots, strips in said slots, said members cooperating with said strips to hold said strips perpendicular to said ring when said members are secured together.

4. A portable electric lighting device comprising a soft rubber handle having a chamber therein, a socket in said chamber for holding a lamp, a removable guard around said lamp, said guard comprising a plurality of strips radially disposed edgewise around said lamp, means for securing the corresponding ends of said strips together, means for clamping the opposite ends of said strips in spaced relation around said handle, said means comprising cooperating arcuate members having aligned oppositely disposed slots therein to receive the strips, the strips having locating notches to receive the arcuate members, means for securing the arcuate members together to form ring sections, and means for detachably clamping said sections snugly around said handle whereby said socket said handle and said guard are clamped resiliently in parallel relation.

5. A portable electric lighting device comprising a flexible rubber handle having a chamber therein, a socket in said chamber to receive an electric lamp, a guard around said lamp comprising radially disposed insulating strips secured together at their upper ends, the lower ends of said strips being secured to a sectional ring, each section of said ring comprising flat insulating semicircular members having oppositely disposed slots to receive the ends of said strips and secured together with ends in staggered radial alignment, and means for detachably securing together the extending ends and clamping said ring snugly around said handle, a second sectional ring intermediate the ends of said strips and also comprising flat insulating semicircular members having oppositely extending slots to receive the strips and secured together with ends in staggered radial alignment, and means for detachably securing together the extending ends of the ring.

6. In a lamp guard having radially disposed insulating strips, a sectional supporting ring for said strips, each section comprising arcuate members secured together in staggered radial alignment, the members having oppositely disposed radially aligned slots, said strips being interlocked in said slots, and means for securing the extending ends of said sections together.

In witness whereof, I have hereunto subscribed my name.

FRANCIS C. KOLLATH.