May 9, 1939. F. C. KOLLATH 2,157,738

LAMP GUARD AND HANDLE

Filed June 26, 1936

FIG. 1.

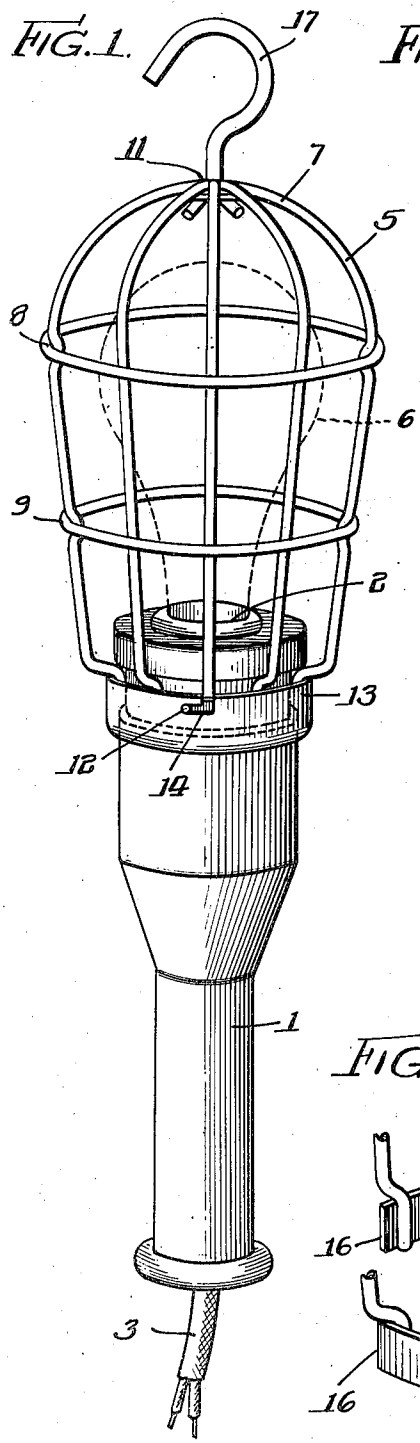


FIG. 2.

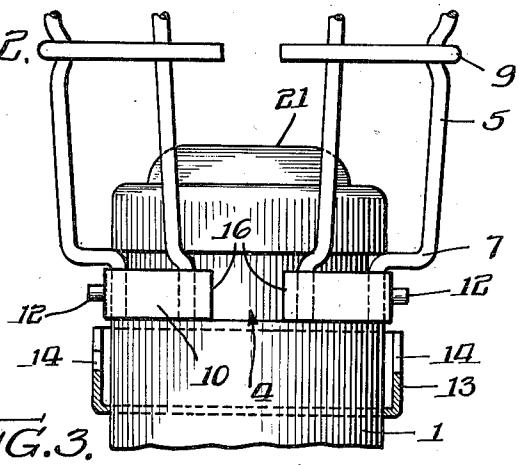


FIG. 3.

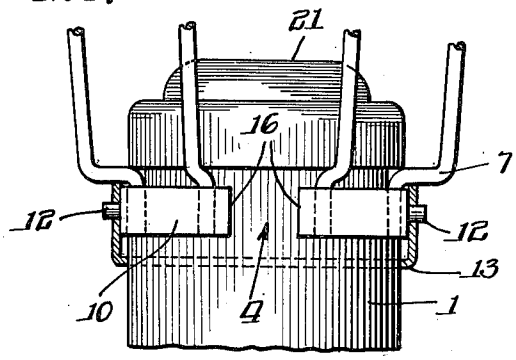


FIG. 4.

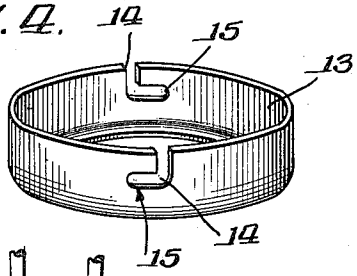
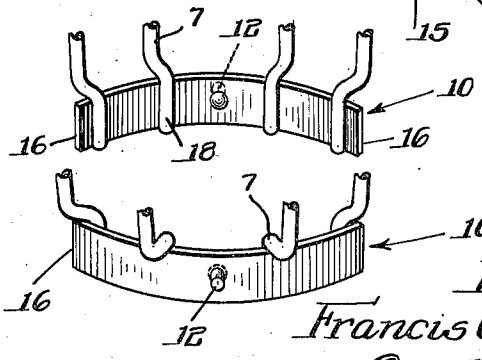


FIG. 5.



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LAMP GUARD AND HANDLE

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3 Claims. (Cl. 240—54)

This invention relates to a portable electric lamp and particularly to a lamp guard and a handle. More specifically the invention relates to a handle and a lamp guard therefor with means for locking the guard to the handle.

The primary object of the invention is to provide a new and improved simple means for permitting quick and ready attachability or detachability of the lamp guard with respect to its supporting handle whereby the guard may be quickly and readily detached or removed from the handle to permit removal or insertion of an electric light globe in the socket which is supported by the handle.

A further object of the invention is to provide a new and simple means for locking the guard to the handle whereby the guard may be released and detached from the handle by merely turning a collar which cooperates with the handle and the guard for locking these two latter elements together.

A further object of the invention is to provide a locking element for locking a lamp guard to a flexible rubber handle element, the locking element being maintained in position and the parts being maintained in locked position due to the flexible or resilient characteristics of the material from which the handle is made.

Numerous other objects and advantages will be apparent throughout the progress of the following specification.

The accompanying drawing illustrates a selected embodiment of the invention and the views therein are as follows:

Fig. 1 is a detail perspective view of a guard and handle and embodying the invention.

Fig. 2 is a detail elevational view showing the construction of the parts and the manner of application, the locking collar being shown in inoperative position.

Fig. 3 is a detail sectional view similar to Fig. 2, but showing the locking collar in its operative or locked position.

Fig. 4 is a detail perspective view of the improved locking collar.

Fig. 5 is a detail sectional view of part of the guard.

The combined lamp guard and handle herein shown for the purpose of illustration, comprises a handle 1 made of soft rubber-like material. This handle is provided with a relatively enlarged recess at its upper end to receive a lamp socket 2. The handle 1 is made hollow, there being a longitudinal bore provided therein to receive electric conductors 3 which are electrically connected to the shell or socket 2. The upper end of the handle 1 is provided with a circumferential groove 4. guard 5 is adapted to cooperate with the handle 1 and be locked thereto to guard an electric lamp 6. The guard is preferably made of longitudinal wires 7 which are held together by circumferential upper and lower wires or ribs 8 and 9 respectively, and a lower collar element 10. The circumferential wires 8 and 9 and the lower supporting collar element 10 are split, as indicated in Fig. 2, and, therefore, really comprise two half or semi-cylindrical portions which are united together at the upper end of the guard, as indicated at 11. The guard 5, therefore, is free to be spread apart a predetermined distance at its bottom to permit the insertion of an electric globe 6. The vertical height of the collar portion 10 is such that it will be readily received in the circumferential recess 4 in the handle 1. Oppositely disposed pins or projections 12 extend outwardly from the outer face of the collar portion 10, there being preferably one pin on each of the half or semi-circular portions of the collar element 10.

A collar 13 is adapted to be frictionally, or otherwise supported or held, by the handle 1 and is adapted to have relative vertical movement with respect to the handle. This collar 13 is provided with oppositely disposed bayonet slots 14 which are adapted to receive the pins 12 on the guard collar portion 10.

As previously set forth, the handle 1 is made of rubber, or soft, resilient rubber-like material, and, therefore, is capable of being squeezed within certain limits and, inasmuch as the length of the two semi-circular portions of the collar 10 are less than the circumference of the handle about the peripheral recess 4, the collar portion 10 may be squeezed inwardly a certain amount sufficient to permit the collar 13 to be pushed upwardly from the position shown in Fig. 2 into locking engagement, as shown in Fig. 3. The collar 13, of course, is positioned with respect to the pins 12 so that the pins 12 will be received in the bayonet slots 14 and locked in the lower horizontal slotted portion 15 of the bayonet slots 14.

The invention, therefore, contemplates and is directed to a locking element, such as the collar 13, for locking the lamp guard in position on the handle, the locking being effected by the resilient outward urge or springiness of the rubber handle. Therefore, in order to apply and fasten the guard to the handle, the guard is positioned with respect to the handle in such a manner that the collar-like portion 10 of the guard will be received

in the peripheral groove 4 in the handle. The guard is then squeezed together so that the free ends 16 of the collar-like portion 10 can be squeezed inwardly by compressing the rubber handle. When the guard is so squeezed and the rubber is urged inwardly, the collar 13 is free to be slid upwardly to bring the slots 14 into registration with the pins 12; then, by giving the collar 13 a twist, the pins 12 will be locked in the portions 15 of the bayonet slots 14.

The invention, therefore, provides a handy locking element which can be quickly and readily manipulated and operated to lock and hold the parts together, thereby dispensing with the conventional bolt and nut locking arrangement as all that is required to release the guard from the handle is a mere twist of the hand and a downward pull on the collar 13. Because the rubber is somewhat compressed, or rather squeezed or forced inwardly, there will always be an outward urge against the collar, the resilient characteristics of the rubber urging the collar portion 10 of the guard outwardly and consequently creating an outward urge of the collar 10 against the locking collar 13.

If desired, the guard 5 may include, or have attached thereto in any suitable or appropriate manner, a hook 17 to permit the device to be hung up.

In the present embodiment shown, the vertical or longitudinal wires 7 have their lower ends welded or otherwise fixed to the internal surface of the guard collar portion 10, as indicated at 18 in Fig. 5. Therefore, the compressing force or urging action of the rubber handle with respect to the guard is primarily against the lower ends 18 of the longitudinal wires 7. This arrangement permits easy squeezing or compression of the rubber because of the limited amount of contact and further tends to prevent turning action of the guard with respect to the handle because the end portions 18 are pressed into the rubber and, in order to cause turning movement of the guard with respect to the handle, a displacement of the rubber would be necessary.

Changes may be made in the form, construction and arrangement of the parts without departing from the spirit of the invention or sacrificing any of its advantages, and the right is hereby reserved to make all such changes as fairly fall within the scope of the following claims.

The invention is hereby claimed as follows:

1. A combined lamp guard and handle comprising a handle portion made of soft, flexible rubber-like material and having a peripheral groove formed at one end, a lamp guard having its lower portion formed of two semi-circular parts adapted to be spread apart to receive a lamp globe and to receive and encircle the handle, said semicircular parts being receivable in the peripheral groove of the handle, and a collar about the handle and adapted to have engagement with the guard for fastening the guard to the handle, said semicircular parts of the guard being pressed into the flexible rubber handle when the collar is moved into engagement therewith and causing frictional engagement between the guard and handle and between the guard and collar, said guard and collar being provided with pin and slot connections.

2. A combined lamp guard and handle comprising a soft, flexible rubber-like handle portion having an outer peripheral groove formed near its upper end, a lamp guard having a two-piece collar at its lower end, vertical wires fixed to the sections of the guard collar on the inner surfaces thereof, the collar being adapted to be received in the groove with the wires engaging rubber of the handle, each section of the guard collar having pins extending therefrom, and a collar surrounding the handle and engaging the pins, the guard collar being adapted to be squeezed within certain limits to permit the collar to receive the pins, the flexible resilient characteristics of the rubber handle causing the parts to be held frictionally together.

3. A combined lamp guard and handle comprising a handle of soft, resilient, rubber-like material and having a peripheral groove adjacent its lamp-receiving end, a resilient lamp guard having a split collar at its lower end, said collar being adapted to be received within said peripheral groove to secure the guard to the handle, and an inflexible ring fitted snugly upon said handle against inadvertent movement but movable longitudinally thereof under the application of force, said ring having opposed slots extending therethrough and said split collar having oppositely directed pins interengaging with said slots whereby said guard is restrained axially of said handle, the resiliency of the handle and guard causing the ring, collar and handle to be held in tight frictional engagement thereby preventing inadvertent rotation of the ring and release of the lamp guard.

FRANCIS C. KOLLATH.