Aug. 10, 1954 J. D. KEVORKIAN 2,686,254

LAMP GUARD CONSTRUCTION

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Fig. 1

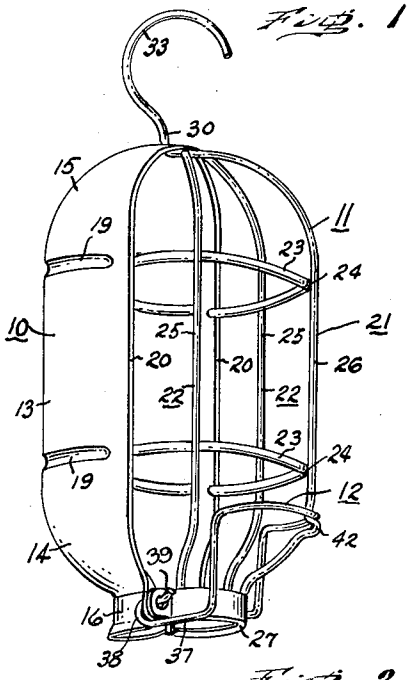


Fig. 3

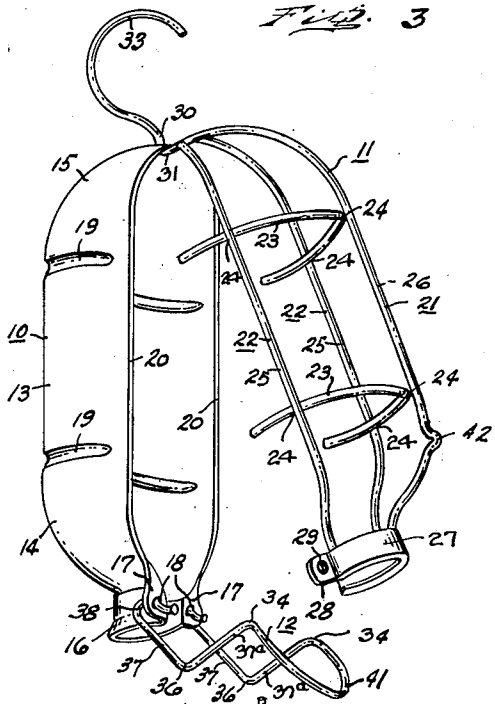


Fig. 2

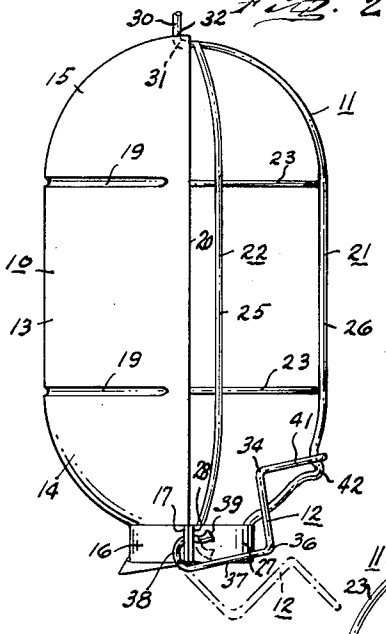


Fig. 4

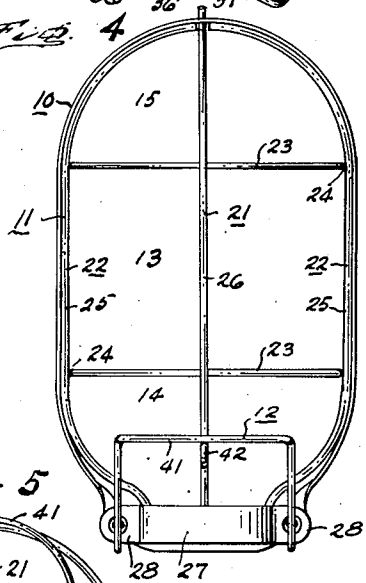
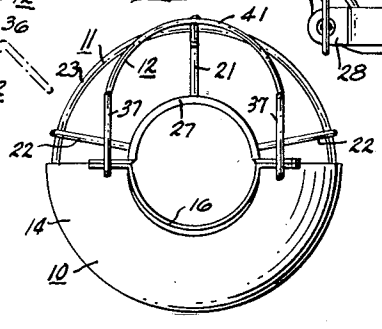


Fig. 5



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LAMP GUARD CONSTRUCTION

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4 Claims. (Cl. 240—102)

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This invention relates generally to lamp guards and is more particularly concerned with an improved construction of lamp guard of the type having separable reflector and wire guard members.

Among the principal objects of the present invention is to provide a lamp guard of the type having separable reflector and wire guard members for a lamp to be protectively enclosed therebetween with improved means for facilitating assembly and disassembly of the members as may be required in connection with initial assembly of the lamp guard and the replacement of damaged parts.

Another object of the present invention is to provide such a lamp guard with means devoid of threaded elements but adapted to normally secure the reflector and wire guard members together and for quick complete separation thereof to facilitate initial assembly of the lamp guard and replacement of damaged parts.

Other objects and advantages of the invention will appear more fully hereinafter, it being understood that the present invention consists substantially in the combination, construction, location and relative arrangement of parts, as more fully described hereinafter, as shown in the accompanying drawings and as finally pointed out in the appended claims.

In the accompanying drawings, which are illustrative of a preferred construction of lamp guard embodying the principles of the present invention:

Figure 1 is a perspective view of the guard in its assembled form;

Figure 2 is a side elevational view thereof;

Figure 3 is similar to Figure 1 but shows the guard partially assembled or disassembled;

Figure 4 is a front elevational view of the guard;

Figure 5 is a bottom view of the guard.

Referring now to the drawings, it will be observed that the lamp guard of the present invention essentially consists of a reflector part 10 suitably cut and stamped of sheet metal, a wire guard part 11 formed of wire rod elements which are bent and welded together to form an open frame which mates with the reflector part 10 to provide a protective enclosure for a lamp (not shown), and a clamping member 12 formed of a wire rod element and disposed proximate the base of the lamp guard.

The sheet metal reflector 10 is formed to provide a central or intermediate body portion 13 of substantially semicylindrical shape in transverse cross section, the opposite end portions 14 and 15 of reflector part 10 being correspondingly concaved, as shown, to provide maximum light reflecting efficiency for the unit. The lower concaved part 14 of the reflector part 10 is axially extended to provide a collar member 16 of semicylindrical shape, the opposite extremities of which are respectively provided with outwardly projecting coplanar lugs 17—17, each having a hole 18 therein for a purpose to be described hereinafter.

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To reinforce and strengthen the sheet metal reflector part 10, it is provided with a pair of circumferentially extending ribs 19—19, which are arranged in axially spaced, parallel relation, it being noted that these ribs are each so embossed in the reflector shell as to project interiorly thereof and that the opposite ends of each rib respectively terminate short of the marginal edges 20—20 of the reflector shell.

The wire guard part 11 of the lamp guard unit is formed of a wire rod element 21 reversely bent generally to the form of an S, a pair of similar wire rod elements 22—22 each bent generally to the form of an inverted J and a second pair of similar wire rod elements 23—23 each bent generally to the form of a C, all of these elements being suitably secured together, as shown, as by spot-welding at the points 24, to provide a rigid open frame of a shape which generally conforms and is complementary to that of the reflector part 10.

The vertically extending portions 25—25 of the wire rod elements 22—22 are symmetrically disposed to either side of the vertically extending portion 26 of the element 21, while the transverse circular elements 23—23, which hold the portions 25—25 and 26 in circumferentially spaced relation, are each of a length sufficient to present the opposite ends thereof just inside the marginal edges 20—20 of the reflector shell when the wire guard and the shell are asembled as shown in Figure 1. The lower extremities of the wire rod elements 21 and 22—22 are respectively secured, preferably by welding, to a collar member 27 of semicylindrical shape, the latter being provided with outwardly projecting coplanar lugs 28—28, each having a hole 29 therein for a purpose to be described hereinafter.

It will be noted that the transverse circular elements 23—23 are secured to the inner sides of the wire portions 25—25 and are respectively disposed in circumferential continuation of the internal ribs 19—19 of the reflector shell 10. Thus, when the shell and wire guard are asembled, the

ribs 18—18 and the circular elements 23—23 provide an axially spaced pair of internal strengthening ribs extending about the full circumference of the cylindrical portion of the assembled unit.

For detachably securing together the upper ends of the reflector shell 10 and the guard 11, the central wire rod element 21 is provided with a portion 30 bent sharply, as at 31, to project upwardly through an opening 32 suitably provided therefor in the top of the reflector shell, which upwardly projecting portion 30 terminates in a supporting hook 33 for the lamp guard.

The clamping member 12 essentially consists of a U-shaped wire rod element shaped to provide a pair of laterally spaced identical legs each sharply bent, as at 34 and 36, to form angularly related portions 37 and 37a, the leg portions 37—37 of the member 12 being respectively provided with hooked ends 38—38 terminating in reversely turned extremities 39—39. The portions 37a—37a are interconnected by a transversely extending curved bail portion 41 disposed in a plane offset from that of the leg portions 37—37.

Normally, the clamping member 12 is hingedly connected to the reflector shell part of the lamp guard, the hooked ends 38—38 of said member being pivotally joined to the apertured lugs 17—17 of the reflector shell collar 16 by projection of the reversely turned extremities 39—39 rearwardly through the openings 18—18 in said lugs, as best shown in Figure 3.

When it is desired to operatively clamp the guard to the lamp socket (not shown), the collar part 27 of the wire frame 11 is swung into engagement with the complemental collar part 16 of the reflector shell to present the apertured lugs of the one part in registry with the other (see Figures 1 and 2), simultaneously as the terminal extremities 39—39 of the clamping member 12 are respectively projected through the openings 29—29 of the collar part 27. Thereupon, the clamping member is swung upwardly about its hooked ends hinged to the registered collar parts 16 and 27 into position, as shown in Figures 1 and 2, wherein the transversely extending portion 41 engages a retainer 42 formed as an integral part of the central element 21 of the wire frame 11. As the clamping member 12 is swung into its secured position, the terminal extremities 39—39 thereof act not only to cam the lugs 28—28 of the collar part 27 into tight engagement with the lugs 17—17 of the collar part 16, but also to maintain the collar parts 16 and 27 in registered, clamping relation about the lamp socket to which the guard is secured.

When it is desired to replace a lamp, it is merely necessary to bear down on the transversely extending bail portion 41 of clamping member 12. Initial downward swinging movement of the latter detaches the bail portion 41 from the retainer element 42, and further movement disposes the hooks 38—38 and their reversely curved terminal extremities 39—39 in such position that lugs 28—28 of the collar part 27 may be disengaged therefrom, whereupon the wire guard part 11 may be swung outward from reflector part 10, as shown in Figure 3. Thus, the collar members 16 and 27 are unclamped from the lamp socket or holder (not shown), following which the lamp guard may be removed from the latter and the lamp replaced. By reversing the procedure just described, the lamp guard may be again attached

to the lamp socket or holder, as will be readily understood.

When it is desired to completely separate the wire guard part 11 from the reflector part 10, as when it is desired to replace a damaged part, this may be readily effected by proceeding from the condition of the lamp guard shown in Figure 3 to disengage the upper end portions 30 and 33 of wire rod element 21 from the opening 32 in the reflector part 10. Ordinarily, however, the aforementioned end portions remain engaged in the opening 32 to provide a hinged connection between the top ends of the reflector part 10 and the wire guard part 11. In assembling the wire guard part 11 and the reflector part 10, whether initially or otherwise, the reverse of the procedure just outlined is followed.

It will be understood, of course, that the present invention is susceptible of various changes and modifications which may be made from time to time without departing from the general principles or real spirit of the invention, and it is accordingly intended to claim the same as indicated by the appended claims.

What is claimed as new and useful is:

1. In a lamp guard of the character described, complementally shaped reflection and guard parts disposed to form an enclosure for a lamp, means at the top of said lamp guard securing said parts together and affording relative swinging movement thereof, collars at the base of said parts together forming an annular member, the terminal portions of each of said collars being turned outward for disposition in abutting relation to those of the other collar, a single wire element of generally U-shape disposed with its opposite side portions respectively straddling said annular member and disposed in lower abutting relation with respect to abutting terminal portions of said collars, said side portions respectively terminating in rearwardly and upwardly turned hooks for projection back through alined openings in said abutting terminal portions, the transversely extending portion of said U-shaped element being disposed to engage a keeper element formed on said guard part for preventing said swinging movement and for clamping said collars together to form said annular member for embracing the lamp socket or holder.

2. In a lamp guard as defined in claim 1 wherein each of the collars is of semicircular form and wherein the outwardly turned terminal portions thereof are disposed in coplanar relation.

3. In a lamp guard of the character described, complementally shaped reflection and guard parts disposed to form an enclosure for a lamp, means at the top of said lamp guard for securing said parts together and affording relative swinging movement thereof, a pair of apertured elements for each of said parts disposed respectively on opposite sides of the part and extending outwardly in opposite directions from the base of the guard each in side abutting relation to an apertured element of the other part, a single wire element of generally U-shape disposed in straddling relation to said base and with its opposite end portions each extending under the abutting apertured elements on one side of said base and terminating in a rearwardly and upwardly turned hook for projection back through the apertures in the abutting elements, the transversely extending portion of said U-shaped element being disposed to engage a keeper element formed on said guard part for preventing said

swinging movement and for clamping said base about the lamp socket or holder.

4. In a lamp guard of the character described, complementally shaped reflector and wire guard main body parts disposed to form an enclosure for a lamp, means at the top of said lamp guard for hingedly securing said main body parts together for relative swinging movement thereof, a pair of complemental semi-circular collars respectively disposed at the bottom ends of said main body parts to conjointly form an annular base member for the lamp guard, each of said semi-circular collars having a pair of oppositely projecting apertured elements, said semi-circular collars being adapted for disposition about a lamp socket or the like with corresponding apertured elements thereof in registry, a single wire bail element of generally U-shape disposed in straddling relation to said annular base, the opposite end portions of said wire bail being respectively provided with hooks turned toward the transversely extending portion of said wire

bail each projected through a registering pair of said apertured elements, the transversely extending portion of said wire bail being swingable relatively to said annular base and being positioned to engage said wire guard part at a point located above its collar whereby to effectively clamp together the semi-circular collars of both main body parts, and a detent for releasably securing said wire bail element in locked engagement with said wire guard part.

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