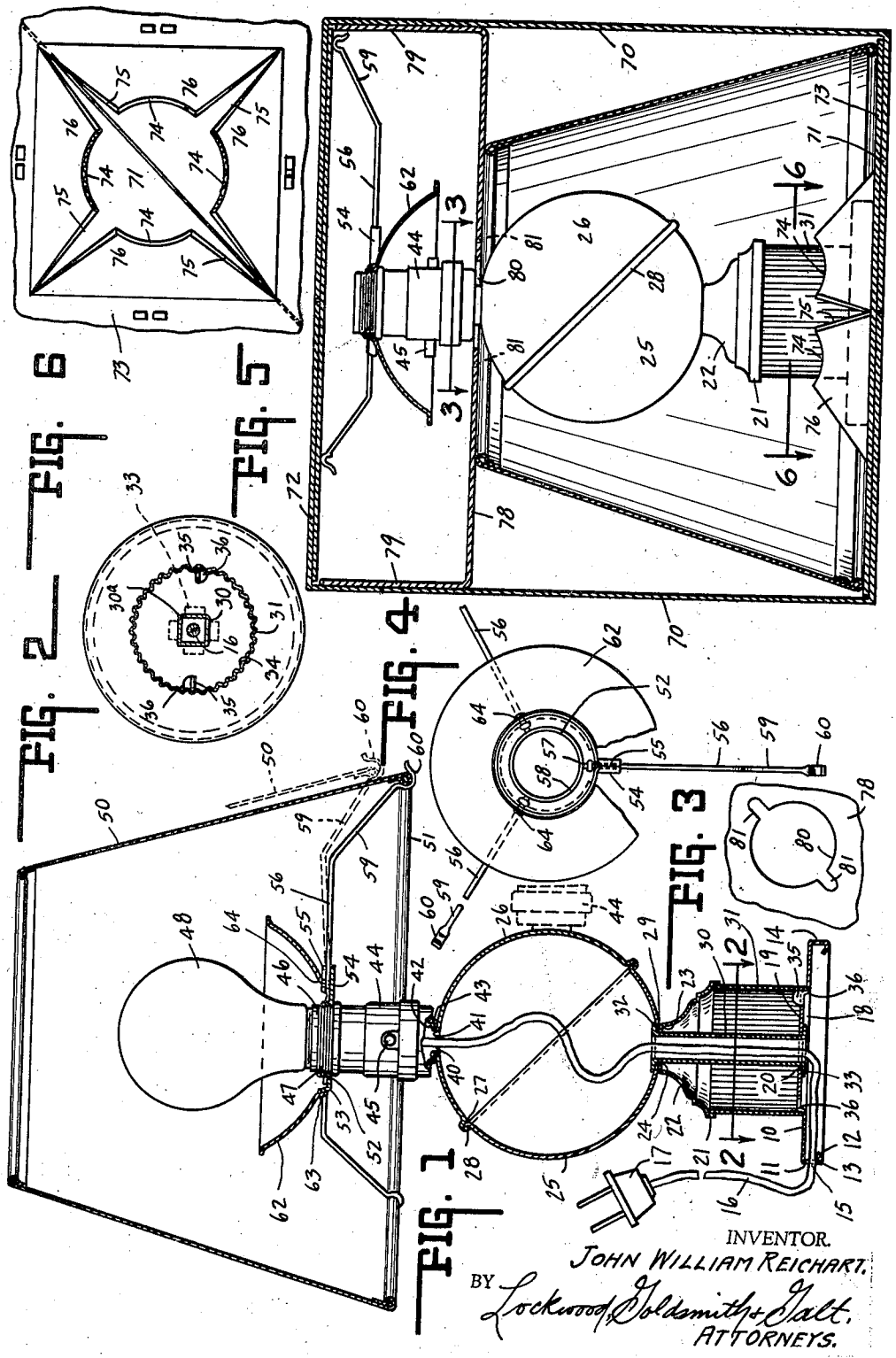
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COMBINATION LAMP STRUCTURE

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COMBINATION LAMP STRUCTURE

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This invention relates to a lamp structure.

One object of this invention is to include in a lamp structure a pivot or hinge structure whereby a portion thereof may serve as a pedestal, table or like type support for the lamp and may also serve as a hanging bracket for wall, et cetera, engagement for "pin-up" support for the lamp.

Another object of the invention is to provide a shield for the bulb of the lamp to eliminate direct glare therefrom when used as either type of lamp.

Another object of the invention is to provide a shade support, independent of the bulb, which clampingly supports a shade so same will not be displaced etc., by casual contact therewith when the lamp is used as either type.

Another object of the invention is to provide in a lamp structure an interlocking relation whereby a simple, rugged and relatively immovable connection is obtained between parts of the structure.

A further object of the invention is to provide a lamp structure capable of ready association of parts and so formed that certain cooperating relationship exists therebetween, facilitating packaging in minimum bulk or volume containers.

The chief feature of the invention resides in the formation of a lamp structure whereby each of the aforesaid objects may be accomplished.

Other objects and features will be set forth more fully hereinafter.

The full nature of the invention will be understood from the accompanying drawing and the following description and claims:

In the drawing,

Fig. 1 is a central sectional view of a shaded multiple type lamp structure, the bulb and socket being shown in elevation, full lines illustrating use as a table or pedestal type lamp and dotted lines indicating the adjustable lower portions in the wall or "pin-up" position, and the shade and supporting arms prior to association.

Fig. 2 is a transverse sectional view taken on line 2—2 of Fig. 1 and in the direction of the arrows.

Fig. 3 is a sectional view taken on line 3—3 of Fig. 5 and in the direction of the arrows.

Fig. 4 is a top plan view of the combination shield and shade supporting arm structure, a portion being broken away to show the connection therebetween in greater detail.

Fig. 5 is a central sectional view of a container structure with the disassembled lamp therein.

Fig. 6 is a plan sectional view of the box bottom.

In the drawing, 10 indicates a base element provided with a peripheral skirt portion 11 with an inwardly and upwardly directed flange portion 12 forming a smooth, contact portion 13. An elongated slot 14 is provided in the skirt. It is adapted to receive the projecting portion of the head of the nail, or an angle screw, or the like, in a wall or upright surface when the lamp structure is to be used as a wall or "pin-up" lamp. Herein diametrically opposite the slot 14, there is provided an aperture 15 and the same is adapted to pass a cord 16 which at its free end mounts a plug element 17 for conventional socket reception. The base portion 10 is embossed or dished upwardly as at 18 forming the central plate portion 19, which is centrally apertured as at 20, the aperture being herein square in outline.

In spaced relation thereto, there is a tubular structure having a peripheral frame portion or skirt 21 and an upwardly and inwardly directed portion 22 of ornamental character, the latter at its upper end extending inwardly as at 23 to form a bearing, said bearing being apertured as at 24.

Herein there are illustrated two hemispherical shells 25 and 26. The shell 25 has an outwardly directed rim portion 27 and the shell 26 has an inwardly directed cooperating rim portion 28, the two confronting each other and being so arranged that the same interlock and thus are prevented from disengagement or separation, yet permit of relative rotational movement about their confronting outer edges.

The hemispherical portion 25, offset from the central axis, is apertured as at 29 and herein said aperture registers with the aperture 24 in the bearing portion 23 and is also rectangular in outline corresponding to the outline of the opening 20 in the bearing portion 19 of the base member 10.

A similarly outlined tubular clamping structure is indicated as at 30, see Fig. 2, and the same extends through a tubular spacing member 31, to which reference will presently be had, and extends through the canopy type member 22 and is seated in the correspondingly outline apertures 29 and 20 aforesaid.

Each end of this tubular clamping means or member is provided with outwardly and laterally directed extensions 32 located within the shell 25

and extensions 33 at the lower end and located within base 10. Thus, the shell 25 is definitely located and rigidly connected to the base 10 and in a predetermined relationship. The axis of rotation between the two hemispherical shells is such that it bears a definite relationship to the opening 14 when the lamp is positioned for "pin-up" purposes and with respect to the opening 15, which then would lie beneath the opening 14 for current supply purposes by means of the cord 16, the same being shown clearly in Fig. 1 by the dotted lines.

Referring to the tubular standard 31, the same, as shown most clearly in Fig. 2, consists of an annularly corrugated member, the corrugations being indicated by the numeral 34. Herein tongues 35 are provided by forming openings 36 in the base portion 10 adjacent or coincident with the offset portion 18 and these upwardly directed tongues, of which there are at least two, diametrically positioned, or a plurality in arcuately spaced relation, serve to centrally locate the tubular standard 31 and prevent lateral displacement thereof relative to the base and prevent relative rotational movement relative to said base.

It will be noted—see Figs. 1 and 2—that the tubular clamping means 30 consists of a sheet of metal formed into polygonal outline and having a closed relationship at the adjacent edges 30a. At opposite ends, each side of this tubular member is provided with lateral enlargements, the enlargements initially being coplaner with the supporting side and thereafter being deformed laterally in the assembling and clamping operation incident to uniting the shell 25 and the base 10 to form a rigid lower body portion of the lamp structure.

Herein the upper shell 25 is apertured as at 40 and said aperture is defined by an outwardly directed collar portion 41, the same being turned upwardly and laterally as at 42 to lock thereto the base portion 43 of a lamp socket structure, generally indicated by the numeral 44 and having the switch operating member 45, if desired, the bulb receiving portion 46 and the external thread adjacent thereto as at 47. This bulb socket portion 46 is adapted to support a bulb 48, the current to which is controlled by switch control member 45 and said current is supplied through said socket by the cord 16 which, as previously stated, extends upwardly through the tubular clamping structure 30, which furthermore extends through the two semi-circular connecting body portions.

The numeral 50 indicates a shade of frustum type and herein of frusto conical shape, the lower edge being indicated by the numeral 51. There is provided a hub member 52 which is internally threaded to mount upon the threaded portion 47 of the lamp bulb socket and the portion 52 includes an outward extension or annular flange portion 53, and the latter at spaced points extends outwardly and terminates in gripping arms 54, split as at 55. Herein—see Fig. 4—three of said tubular sockets are provided and each receives the inner end of a spring rib or arm 56 that bears at its inner end 57 against the surface 58 of the internally threaded portion 52.

Each arm 56 considerably remote from the socket received end, includes an angularly directed portion 59, the same terminating at its free end in the hook portion 60. In Fig. 1 the full lines indicate these arm portions 56 which are substantially horizontal when the lower end 51 of the shade is seated in the hook portion 60 and the cooperation is such this arm portion is then under compression and tends to extend and thus does clampingly engage and seat the lower end 51 of the shade. The dotted line positions of these parts show their relative relationship before the shade and arms are associated together. When so associated together, the two are rigidly connected together and casual displacement or accidental separation is prevented.

When the lamp structure is utilized as a wall or "pin-up" lamp, it is quite apparent that direct glare from the bulb 48 may be exceedingly annoying. Also, for mantle purposes, this glare may be annoying. When the lamp is utilized as a mantle lamp, it is of table lamp type. In both of these instances, such glare is substantially prevented by the provision of a shield 62—see Figs. 2 and 4—which is of somewhat frustoconical type and its inner smaller and lower end is defined by a collar portion 63. This collar portion 63 is pressed upon by the outer rim of portion 53 of the hub arrangement of the lamp shade support structure. The shield collar 63 is notched at 64 to accommodate arms 56 and sockets 54.

Reference now will be had to Figs. 5 and 6 wherein further utility of this lamp structure is illustrated. In this figure, the numeral 70 indicates side walls of a container, 71 the bottom and 72 the top. Bottom portion 73 is centrally apertured as at 74 and radially slit as at 75 to form upwardly directed tongues 76. These tongue portions are turned upwardly and the base 10 of the lamp is seated in the recess thus formed. The tongues then are turned down and the inner edges 74 frictionally engage the tubular pedestal portion of the lamp body. Thus, the lamp at its lower end is centrally located and rigidly anchored in the container.

The shade structure then is placed in the container. Thereafter there is inserted a partition member 78 having laterally and upwardly directed flanges 79, the same frictionally engaging the side walls 70. This partition 78 is apertured as at 80—see Fig. 3—and the same is laterally enlarged as at 81 to permit the passage of the bulb socket and the switch member, respectively, so that the partition 78 may bear upon the upper edge of the shade 50 and immediately adjacent the socket connection to the sphere. The unitary shade support and shield then is inverted and screw threaded on to the upper end of the bulb socket so that the free ends of the arms extend outwardly and upwardly. If desired, the outer and larger edge of the shield may engage the partition 78. This partition naturally prevents the upper end of the lamp body from lateral displacement so that the lamp body is rigidly mounted in the container and hence, the shield is similarly mounted.

The lower edge 51 of the lamp shade may be of such diameter that the inside surfaces of the container side walls 70 may be tangential thereto, thus definitely locating the shade and preventing displacement thereof. The height of the shade also may be such although optional herein, that its upper edge is engaged by the partition, as herein illustrated, when its lower edge 51 is supported by the member 73 of the bottom 71, thus definitely locating the shade. The arm portions as previously stated, are directed outwardly and herein upwardly, since the shade support and shield unit are inverted.

The entire structure, therefore, when packaged for transportation, storage, and the like, is ar-

ranged in a very compact relationship and is adapted for reception by the main volume type container. The partition 78, as stated, prevents penetration of the lamp shade by the arm portions. The cord and the like preferably is carried upwardly and extends through one of the openings 81, see Fig. 3, in the partition and is suitably looped into a compact form and these loops are held together by a rubber band in a conventional manner, so that the supply line and plug is formed into a compact unit and thus, does not have any contact with the lamp body proper or the shade, the same being below the partition. It is to be understood the illustrations herein and the particular description are directed to but one specific embodiment of the invention.

While the invention has been illustrated and described in great detail in the drawing and foregoing description, the same is to be considered as illustrative and not restrictive in character.

The several modifications described herein as well as others which will readily suggest themselves to persons skilled in this art, all are considered to be within the broad scope of the invention, reference being had to the appended claims.

The invention claimed is:

1. In a lamp structure including a tubular shade having a lower edge ring, a bulb socket and a portable body portion, the combination of a shade support having a hub portion for mounting on the socket, and a plurality of outwardly directed resilient arms connected at their inner ends to the hub portion, each terminating at the outer end in an outwardly concave reentrant curved portion operatively bearing on the ring above and below the inner periphery thereof for clampingly engaging the ring of the shade by outward radial force of said arms.

2. In a lamp structure including a shade support and as defined by claim 1, characterized by the arms adjacent the outer ring engaging ends being directed downwardly for concealment by the shade of the hub portion and all but the ring clamping portions of said arms.

3. In a lamp structure capable of table and pin-up use and having a lamp socket element and a base element selectively supportable by resting upon a surface and hanging from a support, the central axis of the base element always being perpendicular to the supporting face thereof, the combination of a hollow, spherical type swivelable connection between the elements, said connection consisting of a hemispherical shell rigid with each element, the confronting equatorial edges of said shell hemispheres providing a pivotal, equatorial and sole connection therebetween, the plane of which always is at approximately 45° to the face of the base element, each element having connection to the adjacent hemisphere and offset approximately 45° from the pole thereof whereby when the hemispheres are equatorially adjusted so that the offset connections are aligned, that alignment and the central axes of the base and socket elements are coincident.

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