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(54) A lampshade carrier

(57) A lampshade carrier (5) for carrying a lampshade (4) and a lamp base (3) of a table lamp (1) comprises a bulb holder engaging ring (17) for securing to a bulb holder (7) of the table lamp (1), and three support assemblies (18) supporting a support ring (24) above the bulb holder engaging ring (17) for engaging a mounting ring (14) of the lampshade (4), for in turn supporting the lampshade (4) at a desired position relative to the lamp base (3). Each support assembly (18) comprises a first member (26) extending upwardly from the bulb holder engaging ring (17) and a second member (27) extending downwardly from the support ring (24). A clip (29) having a clamping bore (31) extending therethrough slideably accommodates the corresponding first and second members (26,27) therethrough for facilitating adjusting the height of the support ring (24) above the bulb holder engaging ring (17).

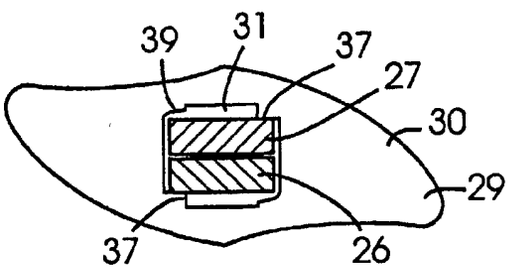

Fig. 8

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Description

[0001] The present invention relates to a lampshade carrier for supporting a lampshade on a lamp fitting, and in particular, on a lamp fitting of the type in which a light bulb is supported in a bulb holder extending upwardly from the lamp fitting.

[0002] Such lamp fittings are typically table lamps, standard lamps and other free-standing lamps, as well as, for example, wall lights in which a bulb holder is supported on a wall mounted support, and the bulb holder is oriented so that the light bulb extends upwardly from the bulb holder. Such lamp fittings may also be ceiling suspended fittings in which a bulb holder support is suspended from the ceiling, and the bulb holder is located on the support with a light bulb extending upwardly from the bulb holder. In such lamp fittings a lampshade may be supported on the lamp fitting by a bulb engaging clip arrangement which is centrally located relative to the lampshade for clipping onto the light bulb. An alternative method for securing the lampshade to such fittings is by way of a lampshade carrier which typically is secured to the bulb holder, and extends upwardly therefrom for engaging a centrally located mounting ring of the lampshade. A problem with such lampshade carriers is that many different sizes of carriers are required for accommodating different types and sizes of lampshades. In some lampshades the mounting ring is located adjacent the top of the lampshade, while in other lampshades the mounting ring is located within the lampshade intermediate the top and bottom thereof. Additionally, lampshades differ vastly in size, and in particular, in height. This, thus, requires the provision of many different sizes of lampshade carriers for accommodating different sizes and types of lampshades so that the lampshade is located relative to the light bulb at a desired relative position. This is a considerable inconvenience, since it requires that lampshade stockists should stock many different sizes of lampshade carriers. There is therefore a need for a lampshade carrier which overcomes this problem.

[0003] The present invention is directed towards providing such a lampshade carrier.

[0004] According to the invention there is provided a lampshade carrier for supporting a lampshade on a lamp fitting, the lampshade carrier comprising a lower lamp engaging means for engaging the lamp fitting, and an upper lampshade engaging means for supporting the lampshade, at least one support means extending between the upper lampshade engaging means and the lower lamp engaging means for supporting the upper lampshade engaging means spaced apart above the lower lamp engaging means, each support means comprising a first member associated with one of the lower lamp engaging means and the upper lampshade engaging means, and a second member associated with the other of the lower lamp engaging means and the upper lampshade engaging means, the first and second members being co-operable with each other for supporting the upper lampshade engaging means above the lower lamp engaging means, and being moveable relative to each other for varying the spacing between the upper lampshade engaging means and the lower lamp engaging means, and a clip for securing the first and second members together for supporting the upper lampshade engaging means above the lower lamp engaging means at a desired spacing.

[0005] In one embodiment of the invention at least one of the first and second members is an elongated member. Preferably, both of the first and second members are elongated members.

[0006] In another embodiment of the invention the first and second members are slideable relative to each other.

[0007] In another embodiment of the invention the first and second members extend parallel to each other.

[0008] In a further embodiment of the invention the first and second members of each pair of first and second members are of similar transverse cross-section.

[0009] Preferably, the first and second members are of rectangular transverse cross-section.

[0010] In one embodiment of the invention each clip slideably engages at least one of the corresponding first and second members.

[0011] In another embodiment of the invention each clip slideably engages both of the corresponding first and second members.

[0012] In one preferred embodiment of the invention each clip comprises a body member having a clamping bore extending therethrough for accommodating the corresponding first and second members through the body member, the clamping bore being shaped so that in a first orientation of the body member the corresponding first and second members are slideable therethrough and slideable relative to each other, and in a second orientation of the body member the corresponding first and second members are tightly clamped together in the clamping bore for preventing relative sliding movement of the first and second members.

[0013] Preferably, the body member of each clip is rotatable about the corresponding first and second members between the first orientation and the second orientation. Advantageously, the body member of each clip is rotatable through approximately 90° between the respective first and second orientations.

[0014] Ideally, two first lugs spaced apart at 180° intervals around the clamping bore of each clip extend into the clamping bore thereof, and two second lugs spaced apart at 180° intervals around the clamping bore extend into the clamping bore, the second lugs being spaced from the first lugs at 90°, the first and second lugs together defining opposite clamping faces for engaging and clamping the corresponding first and second members together when the body member is in the second orientation.

[0015] In one embodiment of the invention the dis-

tance between the first and second lugs of the clamping bore of each clip through the centre of the clamping bore is such as to permit rotation of the body member between the first and second orientations.

[0016] Advantageously, the distance between the second lugs through the centre of the clamping bore of each clip is such that the second lugs engage the adjacent ones of the corresponding first and second members with a snap action as the body member is being oriented between the first and second orientations.

[0017] In one embodiment of the invention the distance between the second lugs through the centre of the clamping bore of each clip is greater than the distance between the first lugs through the centre of the clamping bore.

[0018] Preferably, the first and second lugs of each clip define opposite locating faces disposed at 90° to the corresponding clamping faces for locating the first and second members in the clamping bore when the clip is in the first orientation.

[0019] In one embodiment of the invention the clamping bore of each clip is a parallel sided bore. Preferably, adjacent sides of the clamping bore of each clip are disposed at 90° to each other. Advantageously, the clamping bore of each clip is of rectangular transverse cross-section.

[0020] Ideally, at least one of the second lugs in the clamping bore of each clip is resilient for facilitating rotation of the body member between the first and second orientations with the snap action. Preferably, both of the second lugs in the clamping bore of each clip are resilient for facilitating rotation of the body member between the first and second orientations with the snap action.

[0021] In another embodiment of the invention the body member of each clip is of resilient material for facilitating rotation of the clip between the first and second orientations with the snap action.

[0022] Alternatively, each clip fixedly engages one of the corresponding first and second members, and slideably engages the other of the first and second members, and a securing means is provided for securing the clip to the one of the first and second members which is slideably engaged by the clip.

[0023] Preferably, an engagement bore extends through each clip for slideably engaging the one of the first and second members which is slideably engaged by the clip. Preferably, the securing means of each clip comprises a grub screw located in the clip and releasably engageable with the one of the first and second members which is slideably engaged by the engaging bore.

[0024] In one embodiment of the invention the engagement bore of each clip is of transverse cross-section which substantially defines the transverse cross-section of the one of the first and second members which is slideably engaged by the bore.

[0025] In one embodiment of the invention each clip comprises a socket for engaging the one of the first and second members which is fixedly engaged by the clip. Preferably, the socket of each clip engages the one of the first and second members with an interference fit. Advantageously, the socket and the engagement bore of each clip define respective axes which extend parallel to each other. Ideally, each clip fixedly engages the one of the first and second members at the free end of the said one of the first and second members.

[0026] In another alternative embodiment of the invention at least one clip is provided extending from one of the corresponding first and second members for engaging a receiving means in the other of the first and second members.

[0027] In another embodiment of the invention a plurality of spaced apart receiving means are provided in the one of the first and second members for engaging the at least one clip for facilitating selective varying of the spacing between the upper lampshade engaging means and the lower lamp engaging means. Preferably, each receiving means comprises a receiving opening in the one of the first and second members. Advantageously, each receiving opening is of keyhole shape having a first opening and a second opening communicating with the first opening, the transverse width of the second opening being less than that of the first opening for facilitating retention of the clip in the receiving opening. Ideally, each clip comprises a shank extending from the one of the first and second members, the shank terminating in a head which is of size for facilitating engagement and disengagement of the clip with the receiving opening through the first opening, and for preventing withdrawal of the clip from the receiving opening through the second opening.

[0028] In one embodiment of the invention one of the first and second members terminates in a guide means for slideably engaging the other of the first and second members. Preferably, the guide means is provided on the first member. Advantageously, the guide means is provided adjacent the free end of the first member. Ideally, each guide means comprises a guide ring.

[0029] In one embodiment of the invention each clip is provided on the second member. Preferably, each clip is provided towards the free end of the second member. Advantageously, each clip is fixedly mounted on the corresponding second member.

[0030] In one embodiment of the invention each first member extends from the lower lamp engaging means. Preferably, each first member extends upwardly from the lower lamp engaging means.

[0031] In another embodiment of the invention each second member extends from the upper lampshade engaging means. Preferably, each second member extends downwardly from the upper lampshade engaging means.

[0032] In one embodiment of the invention the upper lampshade engaging means is adapted for engaging a mounting ring of a lampshade.

[0033] In another embodiment of the invention the up-

per lampshade engaging means comprises a support ring for engaging the mounting ring of the lampshade.

[0034] In another embodiment of the invention the upper lampshade engaging means is integrally formed with the lampshade.

[0035] Alternatively, the lower lamp engaging means is adapted for engaging a bulb holder of the lamp fitting.

[0036] In one embodiment of the invention the lower lamp engaging means comprises a bulb holder engaging ring.

[0037] In another embodiment of the invention the lower lamp engaging means is integrally formed with the light fitting.

[0038] In an alternative embodiment of the invention the lower lamp engaging means and the upper lampshade engaging means and the first and second members are of steel.

[0039] Preferably, the first and second members are of flat stock steel. Advantageously, the lower lamp engaging means and the upper lampshade engaging means and the first and second members are of wire.

[0040] Alternatively, the lower lamp engaging means and the upper lampshade engaging means are of plastics material.

[0041] In one embodiment of the invention the first and second members are of plastics material.

[0042] In another embodiment of the invention the lower lamp engaging means and the first members are integrally injection moulded in one piece.

[0043] In a further embodiment of the invention the upper lampshade engaging means and the second members are integrally injection moulded in one piece. In a further embodiment of the invention the clips are integrally injection moulded with the second members.

[0044] In one embodiment of the invention each clip is of plastics material.

[0045] Additionally, the invention provides a lampshade comprising the lampshade carrier according to the invention.

[0046] In one embodiment of the invention the lampshade carrier forms an integral part of the lampshade.

[0047] Further the invention provides a lamp fitting comprising the lampshade carrier according to the invention.

[0048] In one embodiment of the invention the lampshade carrier forms an integral part of the lamp fitting.

[0049] The invention also provides a lamp comprising a lamp fitting and a lampshade, the lampshade being supported on the lamp fitting by a lampshade carrier according to the invention.

[0050] The invention will be more clearly understood from the following description of some preferred embodiments thereof, which are given by way of example only, with reference to the accompanying drawings, in which:

Fig. 1 is a cutaway perspective view of a lamp according to the invention incorporating a lampshade carrier also according to the invention,

Fig. 2 is a perspective view of the lampshade carrier of Fig. 1,

Fig. 3 is a perspective view of a portion of the lampshade carrier of Fig. 1,

Fig. 4 is a perspective view of another portion of the lampshade carrier of Fig. 1,

Fig. 5 is a perspective view of another portion of the lampshade carrier of Fig. 1,

Fig. 6 is a plan view of the portion of Fig. 5 of the lampshade carrier of Fig. 1,

Fig. 7 is a transverse cross-sectional plan view of a portion of the lampshade carrier of Fig. 1 on the line VII-VII of Fig. 2,

Fig. 8 is a view similar to Fig. 7 of the portion of Fig. 7 of the lampshade carrier of Fig. 1 showing the portion in a different orientation,

Fig. 9 is a cutaway perspective view of a lamp according to another embodiment of the invention incorporating a lampshade carrier also according to another embodiment of the invention,

Fig. 10 is a transverse cross-sectional side elevational view of a detail of the lampshade carrier of Fig. 9,

Fig. 11 is a cutaway perspective view of the detail of Fig. 10,

Fig. 12 is a perspective view of part of the detail of Fig. 10,

Fig. 13 is a perspective view of a lampshade carrier according to a further embodiment of the invention,

Fig. 14 is a perspective view of a portion of the lampshade carrier of Fig. 13,

Fig. 15 is a perspective view of another portion of the lampshade carrier of Fig. 13,

Fig. 16 is a top plan view of the portion of Fig. 15 of the lampshade carrier of Fig. 13, and

Fig. 17 is an enlarged perspective view of a detail of the lampshade carrier of Fig. 13.

[0051] Referring to the drawings and initially to Figs. 1 to 8, there is illustrated a lamp according to the invention, which in this embodiment of the invention is a table lamp indicated generally by the reference numeral 1. The table lamp 1 comprises a lamp fitting, namely, a

lamp base 3 and a lampshade 4 which is carried on the lamp base 3 by a lampshade carrier 5 also according to the invention. A bulb holder 7 is secured to the lamp base 3 in conventional fashion for holding a conventional electrically powered light bulb 8. The lampshade 4 comprises a lower reinforcing wire ring 10 and an upper reinforcing wire ring 11 to which a sheet 12 of semi-rigid material is secured to form the lampshade 4. Wire reinforcing struts (not shown) may extend between the lower and upper rings 10 and 11. A wire mounting ring 14 for engaging the lampshade carrier 5 and supporting the lampshade 4 on the lampshade carrier 5 is located within the lampshade 4 and is carried on wire struts 15 extending downwardly inwardly from the upper ring 11. Such lampshades and lamp bases will be well known to those skilled in the art.

[0052] The lampshade carrier 5 comprises a lower lamp engaging means, namely, a bulb holder engaging ring 17 for engaging the bulb holder 7 for in turn securing the lampshade carrier 5 to the lamp base 3. Three support means, namely, three support assemblies 18 extend upwardly from the bulb holder engaging ring 17 for supporting an upper lampshade engaging means, namely, a lampshade support 19 for engaging the mounting ring 14 of the lampshade 4 for supporting the lampshade 4 on the lamp base 3. The bulb holder engaging ring 17 is formed by a sheet metal pressing provided with a central opening 20 for engaging the bulb holder 7. A threaded securing ring 21 of the bulb holder 7 engages a correspondingly threaded portion 22 of the bulb holder 7 for clamping and securing the bulb holder engaging ring 17 in the bulb holder 7. Such bulb holder securing rings and their operation will be well known to those skilled in the art.

[0053] The lampshade support 19 comprises a support ring 24 of flat stock wire of rectangular transverse cross-section for engaging the mounting ring 14 of the lampshade 4. Three inverted U-shape locating brackets 25 are welded to the support ring 24 at equi-spaced locations around the support ring 24 for locating the mounting ring 14 of the lampshade 4 on the support ring 24.

[0054] Each support assembly 18 comprises a first member 26 of flat stock wire which extends upwardly from the bulb holder engaging ring 17, and a second member 27 which is integrally formed in one piece of flat stock wire with the corresponding locating bracket 25 and extends downwardly therefrom to slideably cooperate with the first member 26. Feet 28 extending inwardly from the first members 26 engage tabs 34 extending outwardly from the bulb holder engaging ring 17, and are secured thereto by rivets 35. A clip 29 comprising a body member 30 of injection moulded resilient plastics material is engageable with the first and second members 26 and 27 for clamping and securing the first and second members 26 and 27 together with the support ring 24 at a desired height above the bulb holder engaging ring 17. A clamping bore 31 extends through the body member 30 of each clip 29 for slideably accommodating the corresponding first and second members 26 and 27 therethrough in a first orientation of the clip 29, see Fig. 7, for facilitating varying the height of the support ring 24 above the bulb holder engaging ring 17. Each clip 29 is rotatable around the corresponding first and second members 26 and 27 through 90° from the first orientation to a second orientation, see Fig. 8, with the first and second members 27 tightly clamped together within the clamping bore 31 for securing the support ring 24 at a desired height above the bulb holder engaging ring 17.

[0055] The clamping bore 31 of each clip 29 is of rectangular cross-section. Two first lugs 37 extend into the clamping bore 31 at diagonally opposite corners of the bore 31 at 180° spacings around a central axis of the clamping bore 31. Two second lugs 39 extend into the clamping bore 31 at diagonally opposite corners of the bore 31 and are also spaced apart 180° from each other around the central axis of the bore 31. The second lugs 39 are spaced apart from the first lugs 37 at 90° intervals. The first and second lugs 37 and 39 define clamping faces 40 and 41, respectively, for tightly abutting the first and second members 26 and 27 and for clamping the first and second members 26 and 27 in the clamping bore 31 at a desired relative position to each other when the clip is in the second orientation. The first and second lugs 37 and 38 also define opposite locating faces 42 and 43 for slideably engaging and accommodating the first and second members 26 and 27 through the clamping bore 31 for facilitating adjustment of the spacing between the support ring 24 and the bulb holder engaging ring 17 when the clip 29 is in the first orientation. The second lugs 39 of each clip 29 extend into the clamping bore 31 a distance such that the distance between the second clamping lugs 39 through the central axis of the clamping bore 31 is such as to permit rotation of the clip 29 between the first and second orientations with a snap action. Due to the resilience of the material of the body member 30 of each clip 29, the second lugs 39 deform to clear adjacent corners 45 of the adjacent first or second member 26 and 27 as the clip 29 is being rotated between the respective first and second orientations. The distance between the first lugs 37 through the central axis of the clamping bore 31 is less than the distance between the second lugs 39 through the central axis of the bore 31 for preventing 360° rotation of each clip 29 about the corresponding first and second members. Thus the clips 29 can only be rotated through 90° backwards and forwards between the first and second orientations.

[0056] In use, the lampshade carrier 5 is secured to the lamp base 3 by engaging the bulb holder engaging ring 17 on the portion 22 of the bulb holder 7 and clamping the bulb holder engaging ring 17 onto the bulb holder 7 by the securing ring 21. The clips 29 are rotated into the first orientation so that the first and second members 26 and 27 are slideable relative to each other through

the clamping bores 31 of the respective clips 29. The support ring 24 is raised or lowered as the case may be to the desired height above the bulb holder engaging ring 17. The clips 29 are then oriented through 90° in the direction of the arrow A from the first orientation to the second orientation for clamping the corresponding first and second members 25 and 26 in the clamping bores 31. The lampshade 4 is then placed on the lampshade carrier 5 by engaging the mounting ring 14 of the lampshade 4 on the support ring 24 with the locating brackets 25 extending through the mounting ring 14 for centrally locating the lampshade 4 on the lampshade carrier 5. Should further adjustment of the height of the support ring 24 above the bulb holder engaging ring 17 be required, the clips 29 are rotated into the first orientation in the direction of the arrow B, and the first and second members 26 and 27 are again adjusted by sliding the members 26 and 27 relative to each other through the clamping bores 31 of the respective clips 29. Once the support ring 24 is at the desired height above the bulb holder engaging ring 17, the clips 29 are again rotated through 90° in the direction of the arrow A into the second orientation for clamping the first and second members 27 in the clamping bores 31.

[0057] Referring now to Figs. 9 to 12, there is illustrated a table lamp according to another embodiment of the invention indicated generally by the reference numeral 50. The table lamp 50 is substantially similar to the table lamp 1, and similar components are identified by the same reference numerals. A lampshade carrier also according to the invention and indicated generally by the reference numeral 51 is engageable with the lamp base 3 for supporting the lampshade 4 on the lamp base 3. The lampshade carrier 51 is substantially similar to the lampshade carrier 5, and similar components are identified by the same reference numerals. The main difference between the lampshade carrier 51 and the lampshade carrier 5 is in the support assemblies 18 which support the support ring 24 above the bulb holder engaging ring 17 at a desired spacing. The support assemblies 18 each comprise the first and second members 26 and 27 which are substantially similar to the first and second members 26 and 27 of the lampshade carrier 5. In this embodiment of the invention the first and second members 26 and 27 of each support assembly 18 are secured together at desired relative positions by respective clips 53. Each clip 53 is of injection moulded plastics material having a socket 54 which engages a free end of the corresponding first member 26. The socket 54 is dimensioned to substantially define the free end of the corresponding first member 26 for engaging the first member 26 with an interference fit. An engagement bore 55 extends through each clip 53 for slideably accommodating the corresponding second member 27 therethrough. The engagement bore 55 substantially defines the transverse cross-section of the second member 27 for slideably engaging the corresponding second member 27. A securing means, namely, a grub screw 56 in a threaded bore 57 is provided for clamping the corresponding second member 27 in the engagement bore 55 at a desired position relative to the first member 26. The engagement bore 55 defines a central axis, as does the socket 54, and the respective central axes of the socket 54 and the engagement bore 55 of each clip 29 extend parallel to each other.

[0058] Use of the lampshade carrier 51 according to this embodiment of the invention is substantially similar to that of the lampshade carrier 5. The lampshade carrier 51 is secured to the bulb holder 7 as already described. With the grub screws 56 slackened the second members are slid through the corresponding engagement bores 55 of the clips 53 until the support ring 24 is at the desired height above the bulb holder engaging ring 17. The grub screws 56 are then tightened, thereby clamping the corresponding second members 27 in the clip 53, and in turn securing the first and second members 26 and 27 in the desired relative position. The lampshade 4 is then placed on the lampshade carrier 51.

[0059] Referring now to Figs. 13 to 17, there is illustrated a lampshade carrier according to another embodiment of the invention indicated generally by the reference numeral 60 for supporting a lampshade (not shown), but similar to the lampshade 4 on a lamp base (also not shown) but similar to the lamp base 3 of the table lamp 1. The lampshade carrier 60 is substantially similar to the lampshade carrier 5 and similar components are identified by the same reference numerals. However, in this embodiment of the invention the entire lampshade carrier is of injection moulded plastics material. Each first member 26 terminates in a guide means, namely, a guide ring 61 for slideably accommodating and guiding the corresponding second member 27. Each second member 27 is provided with a clip 63, which extends inwardly from the lower end of each second member 27 for engaging a selected one of a plurality of receiving means, namely, receiving openings 64 in the corresponding first member 26 for securing the respective first and second members 26 and 27 at a desired relative position with the support ring 24 supported at a desired height above the bulb holder engaging ring 17. Each clip 63 comprises a shank 65 extending from the corresponding second member 27 which terminates in a head 66. The receiving openings 64 are of keyhole shape having an upper first opening 67 for accommodating the head 66 of the clip 63 therethrough, and a lower second opening 68 of smaller size communicating with the first opening 67 for receiving the shank 65 of the clip 63 with the head 66 engaging the first member 26 and retained captive therein. As well as the locating brackets 25, locating members 69 are also provided on the support ring 24 equi-spaced between the locating brackets 25 for further improving location of the mounting ring 14 of the lampshade 4 on the support ring 24.

[0060] Use of the lampshade carrier 60 is substantially similar to that of the lampshade carrier 5. With the lampshade carrier 60 secured to the bulb holder 7 as

already described, and with the clips 63 disengaged from the receiving openings 64 of the corresponding first members 26, the second members 27 are slid through the guide rings 61 until the support ring 24 is at the desired height above the bulb holder engaging ring 17, at which stage the clips 63 are engaged in the closest receiving openings 64, and the corresponding first members 26 for securing the first and second members 26 and 27 together with the support ring 24 at the desired height above the bulb holder engaging ring 17. The clips 63 are engaged in the receiving openings 64 by entering the clips 63 through the upper first openings 67 and then urging the shanks 65 downwardly into the lower second openings 68, so that the clips 63 are retained captive by the heads 66 abutting the first members 26 adjacent the lower second openings 68.

[0061] While the lampshade carriers have each been described as comprising three support assemblies, any number of support assemblies may be provided, for example, in certain cases, it is envisaged that two support assemblies may be sufficient, which would be located at 180° intervals around the bulb holder engaging ring. Indeed, in certain cases, it is envisaged that a single support assembly may be sufficient. Needless to say, more than three support assemblies may be provided if desired.

[0062] While the lower lamp engaging means has been described as comprising a bulb holder engaging ring, any other suitable lower lamp engaging means may be provided. Indeed, in certain cases, it is envisaged that the lower lamp engaging means may be provided by a bracket for securing directly to the lamp base, for example, between the lamp base and the bulb holder, for example, on a nipple extending upwardly from the lamp base for engaging the bulb holder. It is also envisaged that other upper lampshade engaging means may be provided for supporting a lampshade, for example, it is envisaged that instead of the upper lampshade engaging means being provided by a support ring, the upper lampshade engaging means may be provided by an upwardly extending spigot which would engage a corresponding bore in a centrally located mounting member of the lampshade. Typically, the spigot would be threaded for receiving a correspondingly threaded wing nut. The type of upper lampshade engaging means will largely be dictated by the type of lampshade which is to be supported on the lamp base.

[0063] It will also be appreciated that while the lampshade carrier has been described for supporting a lampshade on a lamp base of a table lamp, it is envisaged that the lampshade carrier may be provided for supporting a lampshade on any type of lamp, whether it be a table lamp or otherwise. For example, the lampshade carrier may be provided for supporting a lampshade on a standard lamp, and it is also envisaged that the lampshade carrier may be provided for supporting a lampshade on a wall lamp or a ceiling suspended lamp. Such wall lamps and ceiling lamps would be of the type in which the bulb holder supports the bulb extending in a generally upwardly direction from the bulb holder.

[0064] While the lampshade carriers have been described as being provided as separate units, separate from both the lampshade and the lamp fitting, it is envisaged that the lampshade carriers may also be provided as forming an integral part of a lampshade, and the lampshade carriers may also be provided as forming an integral part of a lamp fitting or a lamp base, for example, if the lampshade carriers were provided as forming an integral part of a lampshade, it is envisaged that the lampshade carrier would form part of the framework of the lampshade. Alternatively, where the lampshade carrier is provided to form part of a lamp base or a lamp fitting, it is envisaged that the lampshade carrier would form an integral part of the lamp base, or the bulb holder. It is also envisaged, in certain cases, that the lampshade carrier could be provided as forming an integral part of a complete assembly of a lamp fitting and a lampshade, in which case, it is envisaged that the lower lamp engaging means together with the first members would form an integral part of the lamp base or lamp fitting, and the upper lampshade engaging means together with the second members would form an integral part of the lampshade.

[0065] While the lampshade carriers of Figs. 1 to 12 have been described as being of predominantly wire, the lampshade carriers may be of any other suitable material, for example, plastics material or the like. Indeed, in certain cases, it is envisaged that where a heavy duty lampshade carrier is provided, instead of providing the lampshade carrier of wire, the lampshade carrier may be provided of a heavier gauge steel.

[0066] It is also envisaged that while the lampshade carrier of Figs. 13 to 17 has been described as being of predominantly plastics material, the lampshade carrier of Figs. 13 to 17 could be of any suitable material, for example, steel, or indeed, in certain cases the lampshade carrier of Figs. 13 to 17 may be of wire construction.

[0067] Additionally, while the clips of the lampshade carriers of Figs. 1 to 12 have been described as being of plastics material, the clips may be of any other suitable material. In general, the material of the clips of the lampshade carrier of Figs. 13 to 17 will be of a material similar to that from which the second members of the lampshade carrier are produced.

Claims

1. A lampshade carrier for supporting a lampshade (4) on a lamp fitting (3), the lampshade carrier (1,51,60) comprising a lower lamp engaging means (17) for engaging the lamp fitting (3), and an upper lampshade engaging means (19) for supporting the lampshade (4), and at least one support means (18) extending between the upper lampshade engaging

means (19) and the lower lamp engaging means (17) for supporting the upper lampshade engaging means (19) spaced apart above the lower lamp engaging means (17), **characterised in that** each support means (18) comprises a first member (26) associated with one of the lower lamp engaging means (17) and the upper lampshade engaging means (19), and a second member (27) associated with the other of the lower lamp engaging means (17) and the upper lampshade engaging means (19), the first and second members (26,27) being co-operable with each other for supporting the upper lampshade engaging means (19) above the lower lamp engaging means (17), and being moveable relative to each other for varying the spacing between the upper lampshade engaging means (19) and the lower lamp engaging means (17), and a clip (29,53,63) for securing the first and second members (26,27) together for supporting the upper lampshade engaging means (19) above the lower lamp engaging means (17) at a desired spacing.

2. A lampshade carrier as claimed in Claim 1 **characterised in that** at least one of the first and second members (26,27) is an elongated member, and preferably, both of the first and second members (26,27) are elongated members, and advantageously, the first and second members (26,27) are slideable relative to each other, and preferably, the first and second members (26,27) extend parallel to each other, and advantageously, the first and second members (26,27) of each pair of first and second members (26,27) are of similar transverse cross-section, and ideally, the first and second members (26,27) are of rectangular transverse cross-section.

3. A lampshade carrier as claimed in Claim 1 or 2 **characterised in that** each clip (29,53,63) slideably engages at least one of the corresponding first and second members (26,27).

4. A lampshade carrier as claimed in any preceding claim **characterised in that** each clip (29) slideably engages both of the corresponding first and second members (26,27).

5. A lampshade carrier as claimed in any preceding claim **characterised in that** each clip (29) comprises a body member (30) having a clamping bore (31) extending therethrough for accommodating the corresponding first and second members (26,27) through the body member (30), the clamping bore (31) being shaped so that in a first orientation of the body member (30) the corresponding first and second members (26,27) are slideable therethrough and slideable relative to each other, and in a second orientation of the body member (30) the corresponding first and second members (26,27) are tightly clamped together in the clamping bore (31) for preventing relative sliding movement of the first and second members (26,27).

6. A lampshade carrier as claimed in Claim 5 **characterised in that** the body member (30) of each clip (29) is rotatable about the corresponding first and second members (26,27) between the first orientation and the second orientation, and preferably, the body member (30) of each clip (29) is rotatable through approximately 90° between the respective first and second orientations.

7. A lampshade carrier as claimed in Claim 5 or 6 **characterised in that** two first lugs (37) spaced apart at 180° intervals around the clamping bore (31) of each clip (29) extend into the clamping bore (31) thereof, and two second lugs (39) spaced apart at 180° intervals around the clamping bore (31) extend into the clamping bore (31), the second lugs (39) being spaced from the first lugs (37) at 90°, the first and second lugs (37,39) together defining opposite clamping faces (40,41) for engaging and clamping the corresponding first and second members (26,27) together when the body member (30) is in the second orientation, and preferably, the distance between the first and second lugs (37,39) of the clamping bore (31) of each clip (29) through the centre of the clamping bore (31) is such as to permit rotation of the body member (30) between the first and second orientations, and preferably, the distance between the second lugs (37,39) through the centre of the clamping bore (31) of each clip (29) is such that the second lugs (37,39) engage the adjacent ones of the corresponding first and second members (26,27) with a snap action as the body member (30) is being oriented between the first and second orientations, and advantageously, the distance between the second lugs (39) through the centre of the clamping bore (31) of each clip (29) is greater than the distance between the first lugs (37) through the centre of the clamping bore (31), and preferably, the first and second lugs (37,39) of each clip (29) define opposite locating faces (42,43) disposed at 90° to the corresponding clamping faces (40,41) for locating the first and second members (26,27) in the clamping bore (31) when the clip (29) is in the first orientation, and preferably, the clamping bore (31) of each clip (29) is a parallel sided bore, and advantageously, adjacent sides of the clamping bore (31) of each clip (29) are disposed at 90° to each other, and ideally, the clamping bore (31) of each clip (29) is of rectangular transverse cross-section, and preferably, at least one of the second lugs (39) in the clamping bore (31) of each clip (29) is resilient for facilitating rotation of the body member (30) between the first and second ori-

entations with the snap action, and advantageously, both of the second lugs (39) in the clamping bore (31) of each clip (29) are resilient for facilitating rotation of the body member (30) between the first and second orientations with the snap action, and preferably, the body member (30) of each clip (29) is of resilient material for facilitating rotation of the clip (29) between the first and second orientations with the snap action.

8. A lampshade carrier as claimed in any of Claims 1 to 3 **characterised in that** each clip (53) fixedly engages one of the corresponding first and second members (26,27), and slideably engages the other of the first and second members (26,27), and a securing means (56) is provided for securing the clip (53) to the one of the first and second members (26,27) which is slideably engaged by the clip (53).

9. A lampshade carrier as claimed in Claim 8 **characterised in that** an engagement bore (55) extends through each clip (53) for slideably engaging the one of the first and second members (26,27) which is slideably engaged by the clip, and preferably, the securing means (56) of each clip (53) comprises a grub screw (56) located in the clip (53) and releasably engageable with the one of the first and second members (26,27) which is slideably engaged by the engaging bore (55), and advantageously, the engagement bore (55) of each clip (53) is of transverse cross-section which substantially defines the transverse cross-section of the one of the first and second members (26,27) which is slideably engaged by the bore (55), and preferably, each clip (53) comprises a socket (54) for engaging the one of the first and second members (26,27) which is fixedly engaged by the clip (53), and advantageously, the socket (54) of each clip (53) engages the one of the first and second members (26,27) with an interference fit, and advantageously, the socket (54) and the engagement bore (55) of each clip (53) define respective axes which extend parallel to each other, and preferably, each clip (53) fixedly engages the one of the first and second members (26,27) at the free end of the said one of the first and second members (26,27).

10. A lampshade carrier as claimed in Claim 1 or 2 **characterised in that** at least one clip (63) is provided extending from one of the corresponding first and second members (26,27) for engaging a receiving means (64) in the other of the first and second members (26,27).

11. A lampshade carrier as claimed in Claim 10 **characterised in that** a plurality of spaced apart receiving means (64) are provided in the one of the first and second members (26,27) for engaging the at least one clip (63) for facilitating selective varying of the spacing between the upper lampshade engaging means (19) and the lower lamp engaging means (17), and preferably, each receiving means (64) comprises a receiving opening (64) in the one of the first and second members (26,27), and preferably, each receiving opening (64) is of keyhole shape having a first opening (67) and a second opening (68) communicating with the first opening (67), the transverse width of the second opening (68) being less than that of the first opening (67) for facilitating retention of the clip (63) in the receiving opening (64), and preferably, each clip (63) comprises a shank (65) extending from the one of the first and second members (26,27), the shank (65) terminating in a head (66) which is of size for facilitating engagement and disengagement of the clip (63) with the receiving opening (64) through the first opening (67), and for preventing withdrawal of the clip (66) from the receiving opening (64) through the second opening (68).

12. A lampshade carrier as claimed in Claim 10 or 11 **characterised in that** one of the first and second members (26,27) terminates in a guide means (61) for slideably engaging the other of the first and second members (26,27), and preferably, the guide means (61) is provided on the first member (26), and advantageously, the guide means (61) is provided adjacent the free end of the first member (26), and ideally, each guide means (61) comprises a guide ring.

13. A lampshade carrier as claimed in any of Claims 10 to 12 **characterised in that** each clip (63) is provided on the second member (27), and preferably, each clip (63) is provided towards the free end of the second member (27), and advantageously, each clip (63) is fixedly mounted on the corresponding second member (27).

14. A lampshade carrier as claimed in any preceding claim **characterised in that** each first member (26) extends from the lower lamp engaging means (17), and preferably, each first member (26) extends upwardly from the lower lamp engaging means (17), and advantageously, each second member (27) extends from the upper lampshade engaging means (19), and preferably, each second member (27) extends downwardly from the upper lampshade engaging means (19), and preferably, the upper lampshade engaging means (19) is adapted for engaging a mounting ring (14) of a lampshade, and preferably, the upper lampshade engaging means (19) comprises a support ring (24) for engaging the mounting ring (14) of the lampshade (4).

15. A lampshade carrier as claimed in any preceding

claim **characterised in that** the upper lampshade engaging means (19) is integrally formed with the lampshade (4).

16. A lampshade carrier as claimed in any preceding claim **characterised in that** the lower lamp engaging means (17) is adapted for engaging a bulb holder (7) of the lamp fitting (3), and preferably, the lower lamp engaging means (17) comprises a bulb holder engaging ring (17).

17. A lampshade carrier as claimed in any preceding claim **characterised in that** the lower lamp engaging means (17) is integrally formed with the light fitting (3).

18. A lampshade carrier as claimed in any preceding claim **characterised in that** the lower lamp engaging means (17) and the upper lampshade engaging means (19) and the first and second members (26,27) are of steel, and preferably, the first and second members (26,27) are of flat stock steel, and advantageously, the lower lamp engaging means (17) and the upper lampshade engaging means (19) and the first and second members (26,27) are of wire, and alternatively, the lower lamp engaging means (17) and the upper lampshade engaging means (19) are of plastics material, and the first and second members (26,27) are of plastics material, and preferably, the lower lamp engaging means (17) and the first members (26) are integrally injection moulded in one piece, and the upper lampshade engaging means (19) and the second members (27) are integrally injection moulded in one piece, and the clips are integrally injection moulded with the second members, and preferably, each clip (29,53,63) is of plastics material.

19. A lampshade comprising the lampshade carrier (5) as claimed in any preceding claim, and preferably, the lampshade carrier (5) forms an integral part of the lampshade (4).

20. A lamp fitting comprising the lampshade carrier (5) as claimed in any of Claims 1 to 18, and preferably, the lampshade carrier (5) forms an integral part of the lamp fitting (3).

21. A lamp comprising a lamp fitting (3) and a lampshade (4), the lampshade (4) being supported on the lamp fitting (3) by a lampshade carrier (5) as claimed in any of Claims 1 to 18.

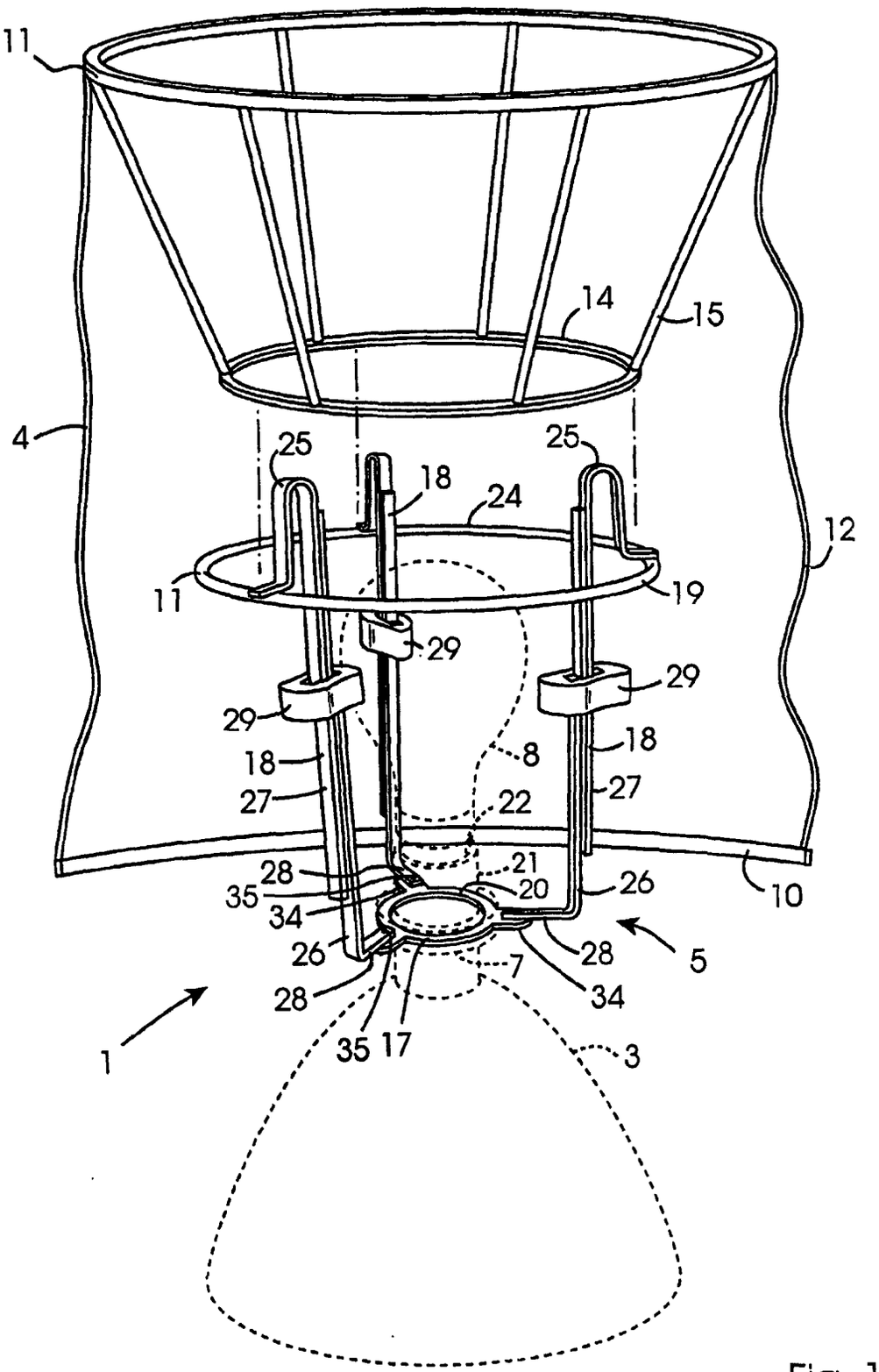
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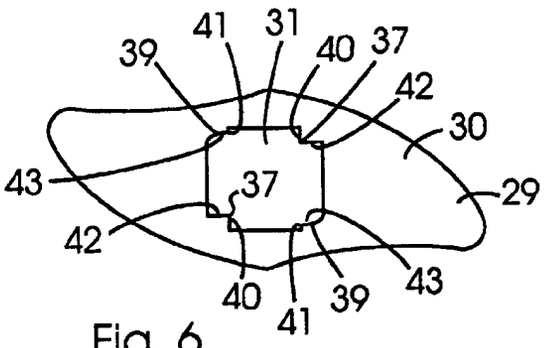
Fig. 1



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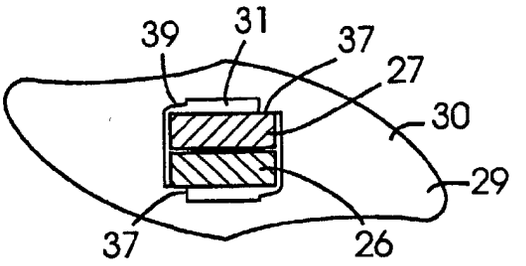


Fig. 8

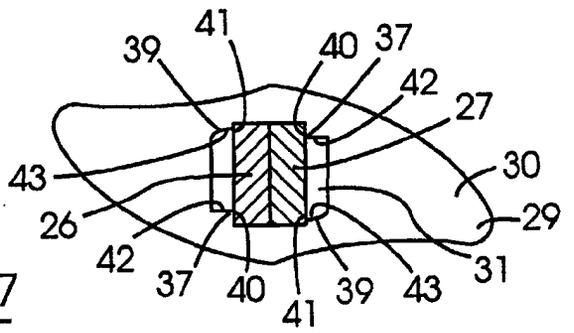


Fig. 7

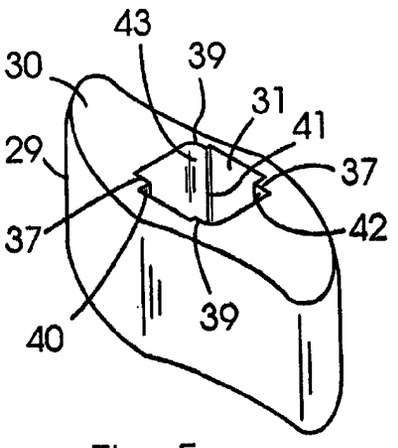


Fig. 5

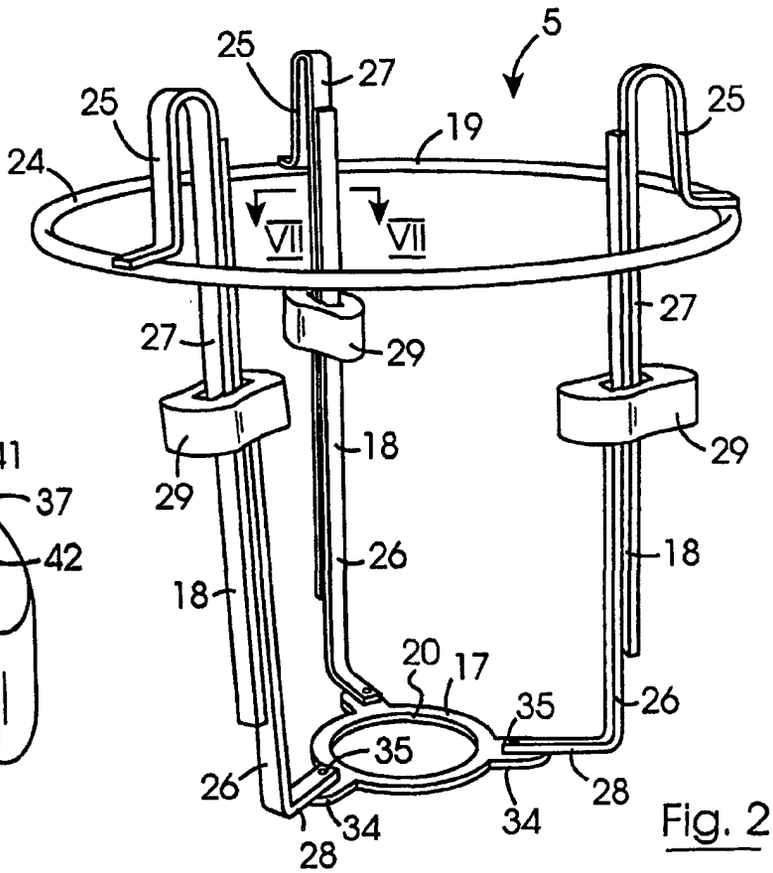


Fig. 2

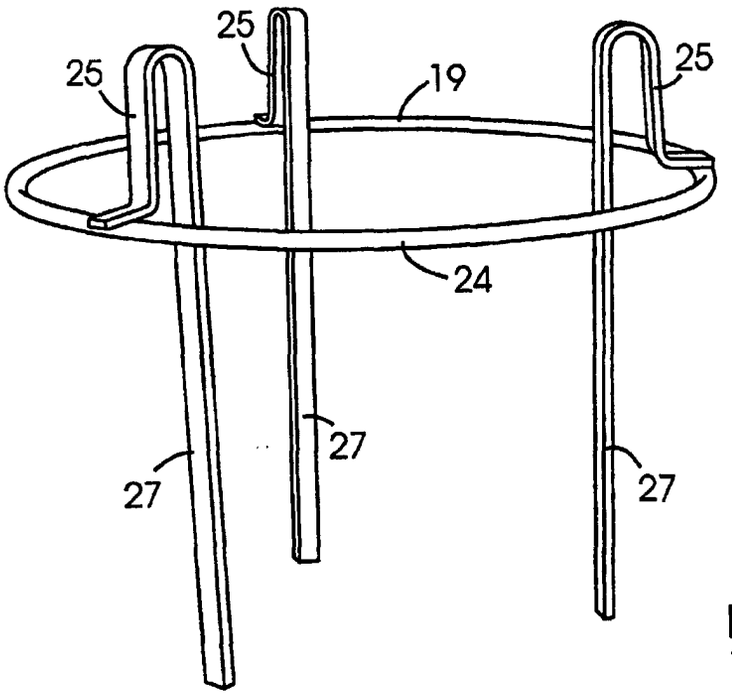


Fig. 4

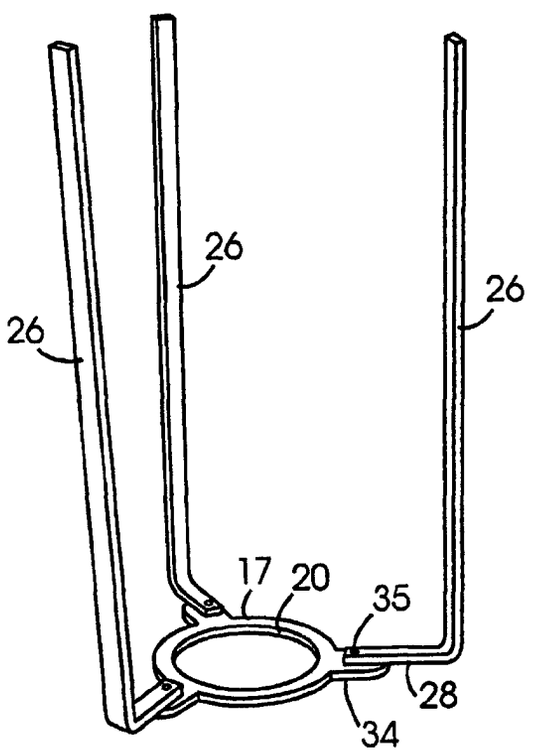


Fig. 3

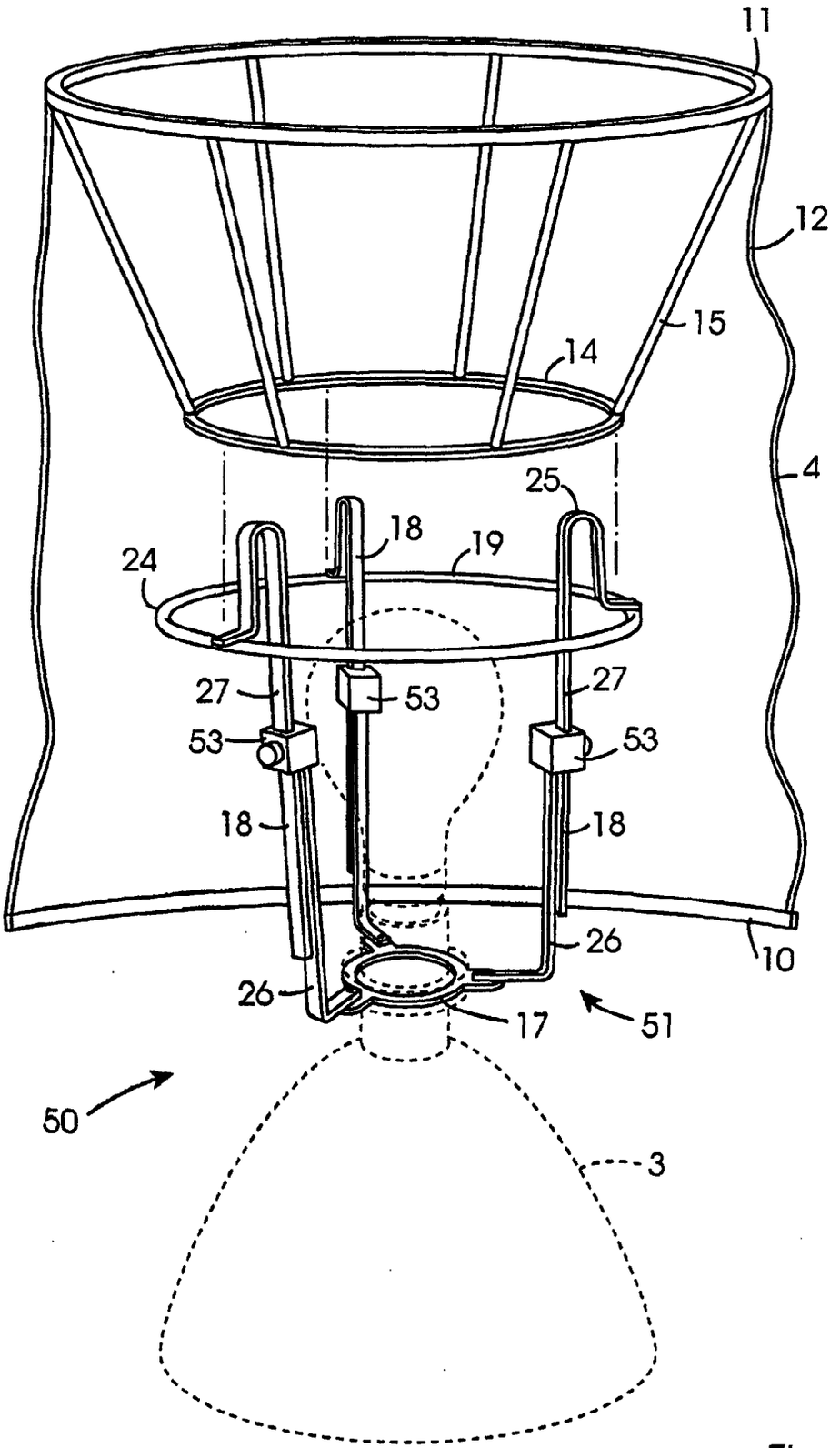
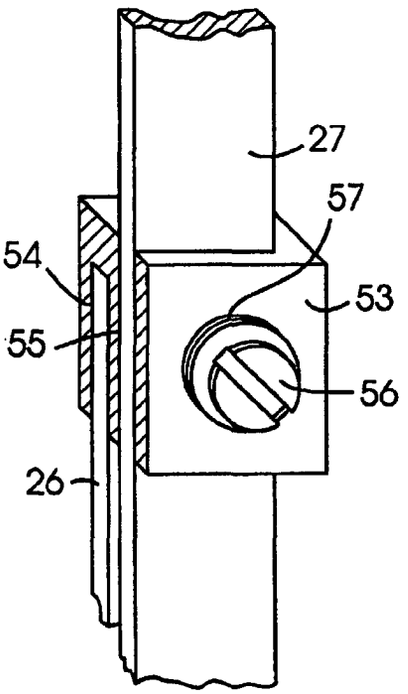


Fig. 9



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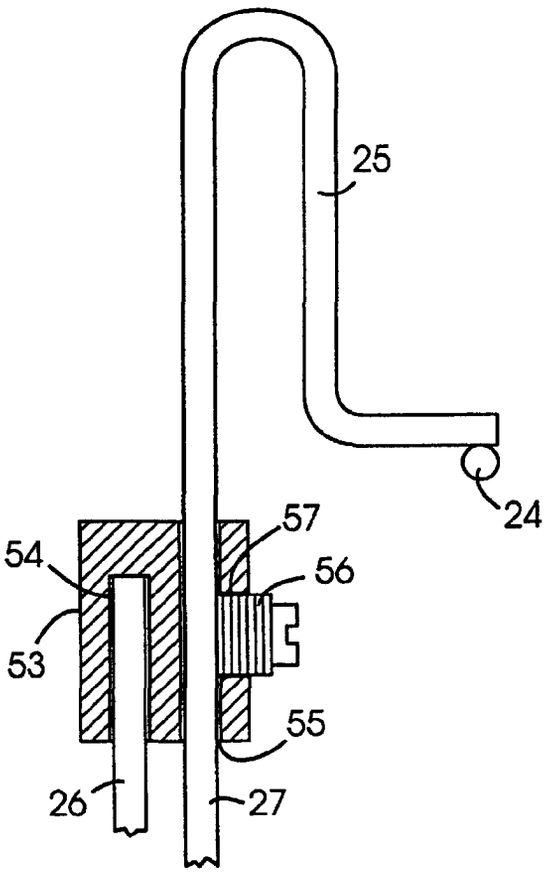

Fig. 10

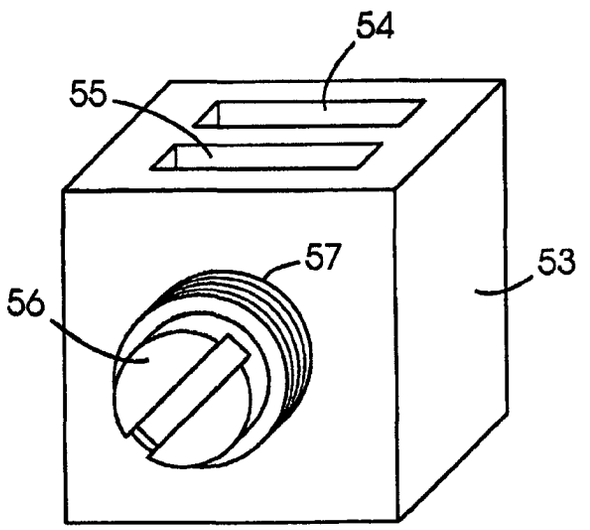

Fig. 12

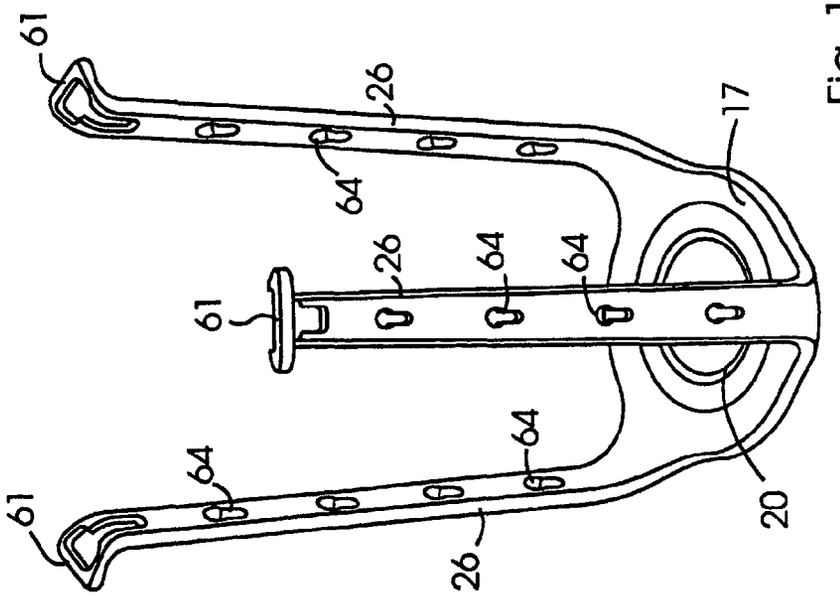
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Fig. 14

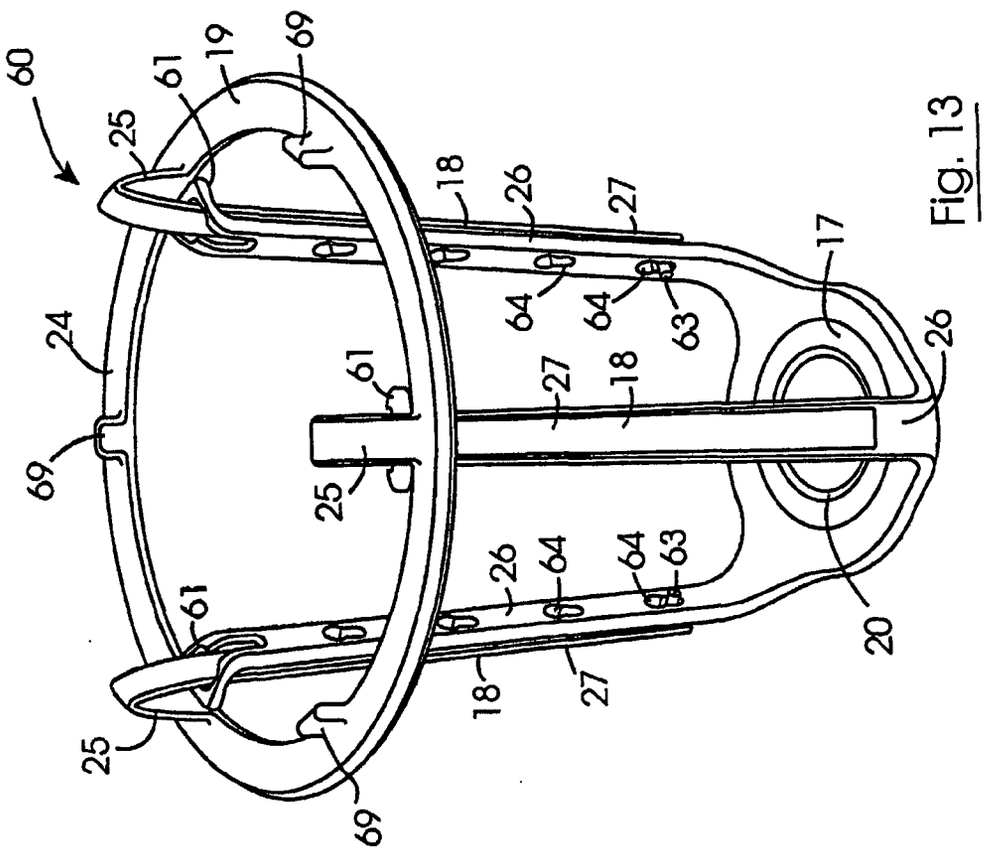
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Fig. 13

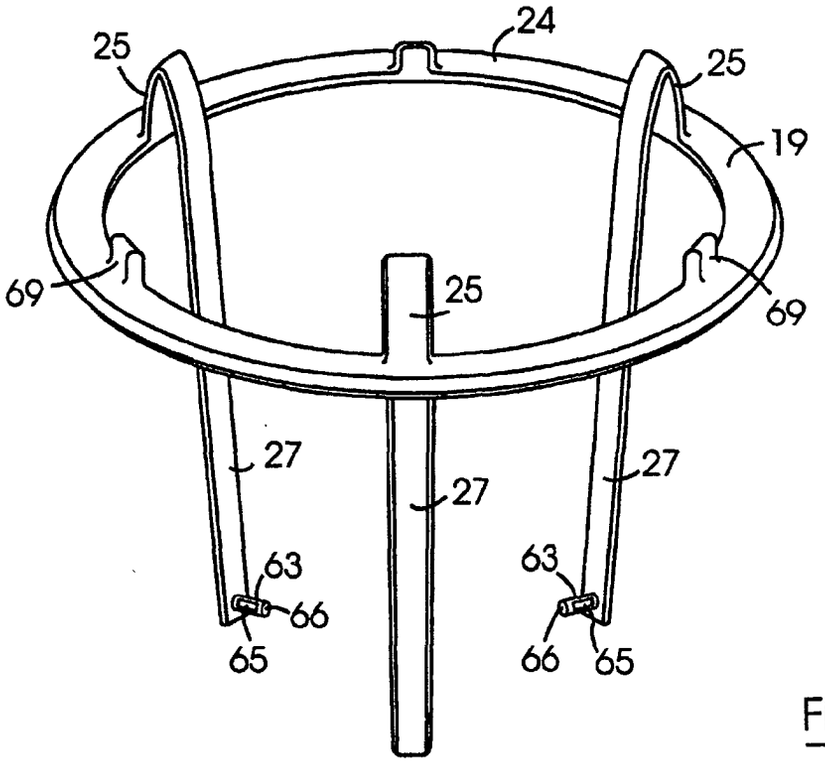
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Fig. 15

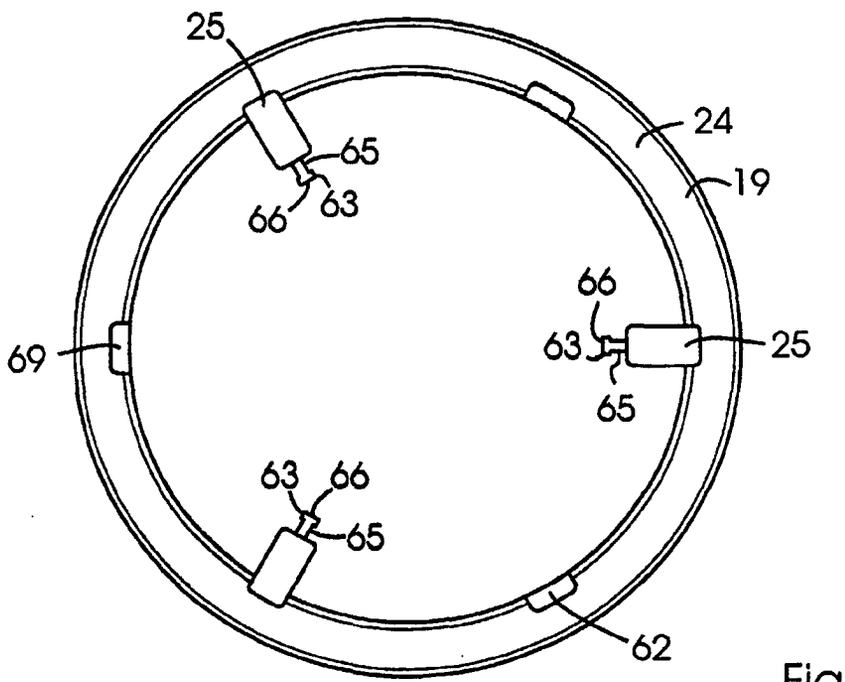
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Fig. 16

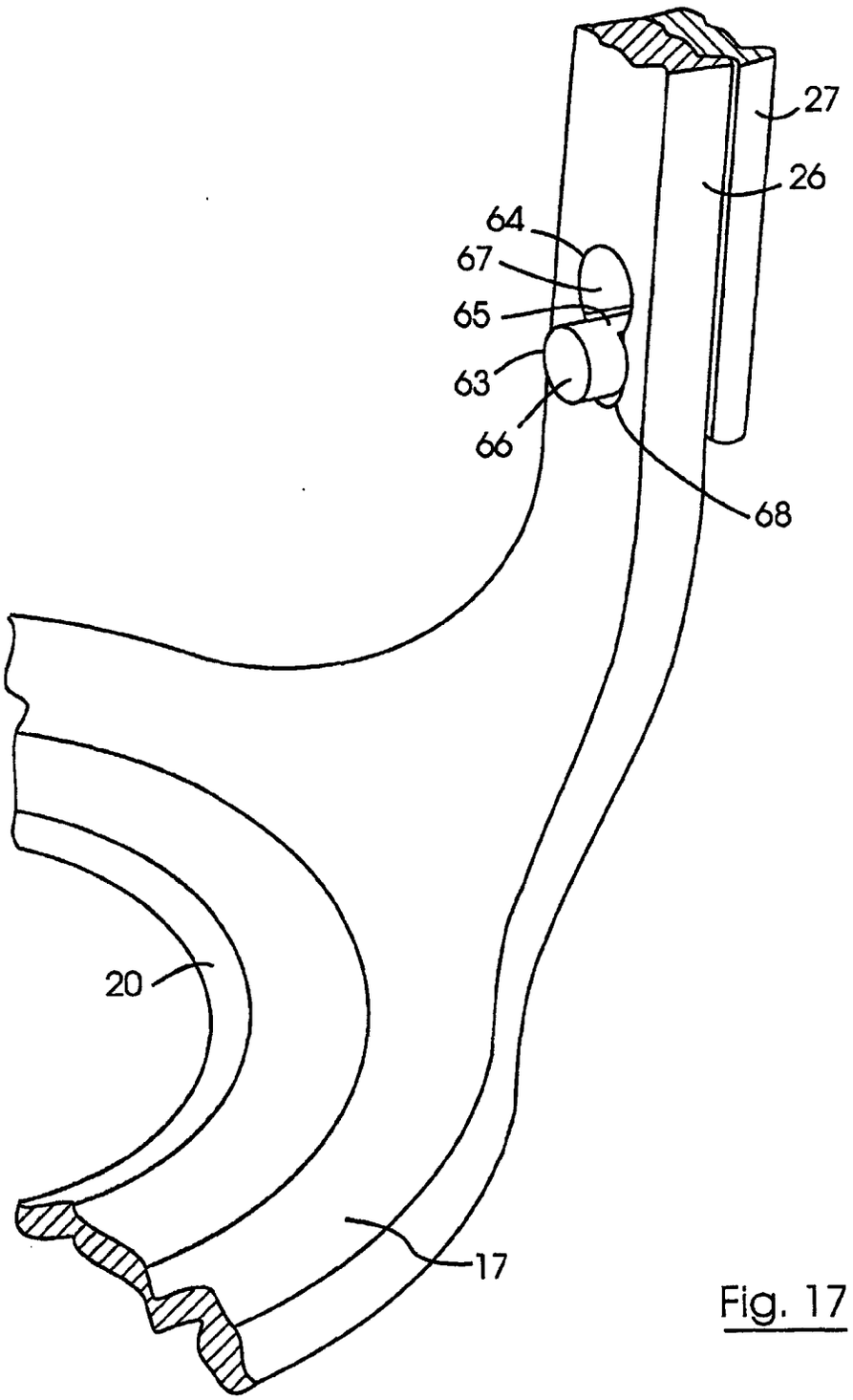

Fig. 17