June 20, 1967 G. JOHNSON 3,327,281

SELF-ADJUSTING FLUORESCENT LAMP HOLDER ASSEMBLY

Filed April 26, 1965

FIG. 1.

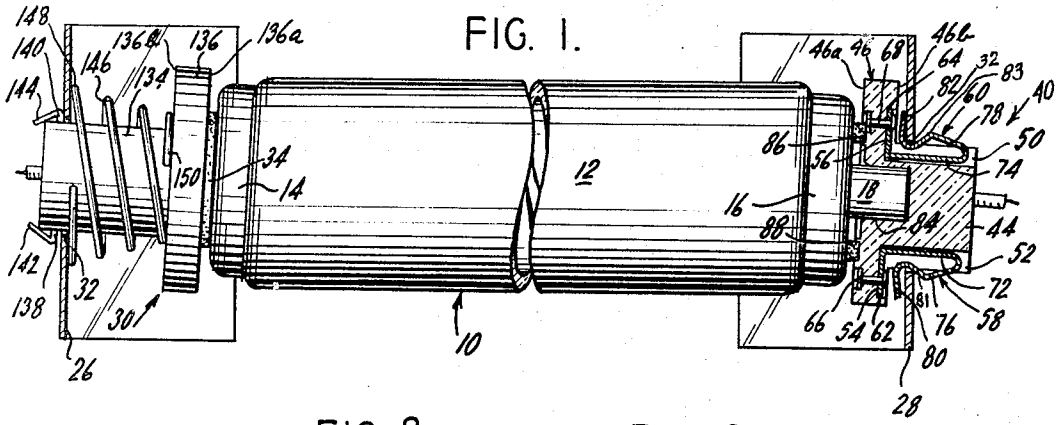



FIG. 3.

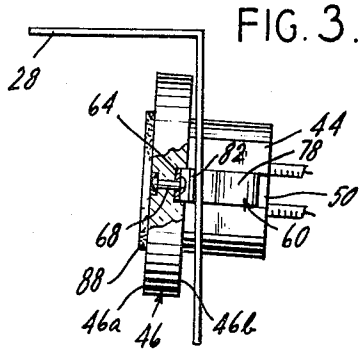



FIG. 2.

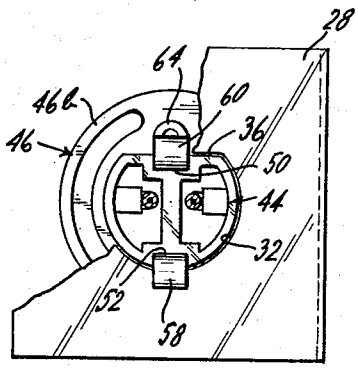



FIG. 6.

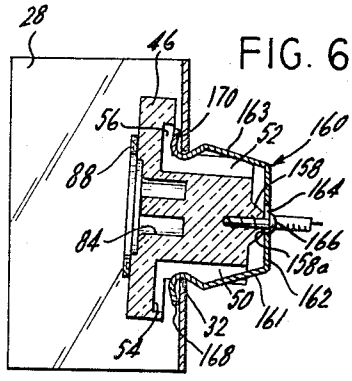
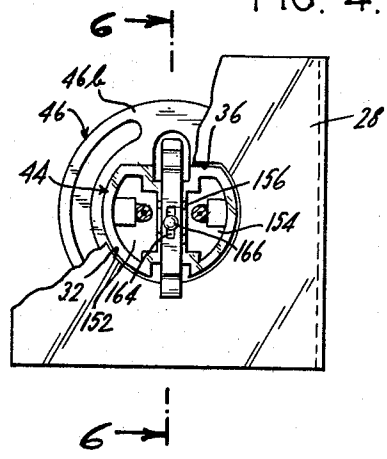



FIG. 4.



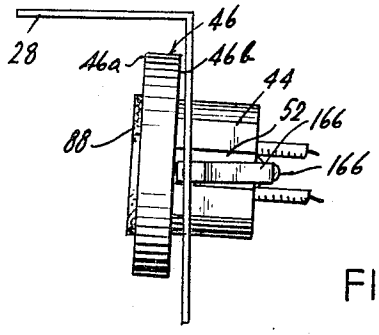




FIG. 5.

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3,327,281

# SELF-ADJUSTING FLUORESCENT LAMP HOLDER ASSEMBLY

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13 Claims. (Cl. 339—56)

The present invention relates to improvements in lamp holders for double-ended gaseous discharge lamps of the fluorescent type, and in particular relates to lampholder assemblies of this type provided with improved weather sealing means to adapt the assemblies for outdoor use.

The invention has particular application to lampholders of the "butt-on" type in which the socket for receiving the end of the lamp is co-axial with the lamp body and the lamp body is mounted perpendicularly to the wall of a lamp fixture or other support surface. One of such lampholders is compressible, and the other is stationary or non-compressible, the lamp being mounted between the lampholders and being maintained in mounted position by the spring tension of the compressible lampholder. A butt-on lampholder of this type is shown in U.S. Patent No. 3,116,098 issued to E. R. Kulka on Dec. 31, 1963.

In outdoor installations of such a lamp assembly, it has been found desirable to provide a resilient sealing gasket on each of the lampholders. Such sealing gasket is in the nature of a ring surrounding the socket portion of the lampholder and positioned to make flush engagement with the head of the inserted lamp to provide a seal which protects the conducting elements of the socket and the lamp terminals contained therein from air, moisture, dust and the like.

While an efficient seal is provided where the front faces of the lampholders and the sealing rings thereon are properly aligned and in truly parallel confronting relationship to each other, difficulties are encountered in commercial installations where the lampholders are often mounted out of perfect alignment or with their faces at slight angles to each other. In addition, it has been found that the fluorescent lamps are often manufactured and distributed with their heads slightly askew and not perfectly aligned with the axis of the lamp so that the heads will not make flush engagement with the face of an otherwise properly positioned lampholder.

The limited universal movement of the spring-biased compressible lampholder assures that a good seal will be obtained even when the end surface of the lampholder is not initially parallel to the plane of the sealing ring, since the movable portion of the compressible lampholder will automatically adjust itsef to distribute the forces on the gasket or ring evenly thereabout. However, a problem is encountered in attempting to provide a similarly efficient seal at the other end of the lamp since the stationary lampholder is fixed and immovable relative to the fixture wall. If the respective end of the lamp is therefore not precisely parallel to the sealing ring of the stationary lampholder, a poor seal will result, permitting adverse weather conditions to affect the conducting elements.

It has been proposed to utilize two confronting compressible lampholders in a single assembly to eliminate the aforementioned sealing problem. However, this solution has not proved feasible in actual practice since both hands of the operator are required to insert a lamp between two compressible lampholders. Since the distance between the faces of the confronting lampholders is less than the length of the lamp, it is necessary for the operator to compress one of the lampholders with one hand, while the other hand holds the lamp and compresses the opposite lampholder therewith. This is a difficult operation in many installations, and with a long lamp, it may be impossible. In addition, many fixtures are provided with an access opening large enough to admit only a single hand.



Accordingly, it is a primary object of the present invention to provide a non-compressible lamp holder for a fluorescent lamp which is mounted on a fixture wall and has limited universal movement with respect to said wall for distributing forces evenly about a gasket disposed between said lamp and said holder to provide an efficient seal thereebtween.

An additional feature of the invention resides in the fact that the lamp holder body is integrally molded from a single piece of material.

A further object of the present invention is to provide a fluorescent lamp holder in which there is eliminated all mounting screws, retainer rings, and the like, and which employs a novel arrangement of spring clips for holding the lamp holder in place and for providing limited universal movement of the holder.

A further object of the invention resides in the provision of a lamp holder that is simple in construction, easy to install, attractive in appearance, relatively simple and inexpensive to manufacture, and which is highly efficient in use.

Additional objects and advantages of the present invention will become apparent from a consideration of the following detailed description when taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a side elevational view, with parts broken away and shown in section, of a lamp assembly consisting of a compressible lampholder and a stationary lampholder made in accordance with the present invention, the lampholders being shown mounted on a fixture with a lamp supported therebetween;

FIG. 2 is a rear elevational view, with parts broken away, of the stationary lampholder of FIG. 1 shown on a fixture wall which is partially broken away;

FIG. 3 is a top plan view, partially in section of the stationary lampholder shown in FIGS. 1 and 2;

FIG. 4 is a rear elevational view, with parts broken away, of a second embodiment of a stationary lamp holder made in accordance with the present invention, showing the lampholder mounted on a fixture wall which is partially broken away;

FIG. 5 is a top plan view of the lamp holder shown in FIG. 4; and

FIG. 6 is a sectional view of the lampholder taken along line 6—6 of FIG. 4.

With continuing reference to the accompanying drawings in which like reference numerals designate similar parts, the reference numeral 10 generally designates a gaseous-discharge lamp of the high-output, rapid-start type which does not require starters. The lamp may be of any conventional type such as the type having pin terminals, but for purposes of illustration there is shown herein a lamp having at each end recessed terminal wires of generally known type, being illustrated for example in U.S. Patent No. 2,716,739 issued to Eugene Lemmers on Aug. 30, 1955 and U.S. Patent No. 2,742,621 issued to John M. Pistey on April 17, 1956.

The lamp 10 includes an elongated glass tube 12 provided with an internal phosphor coating and containing mercury vapor. The glass tube 12 has hollow heads or shells 14 and 16 at the ends thereof, each of which heads carries projecting male terminal parts, such as 18, which are hollow and in each of which are recessed a pair of metal wire terminals (not shown). These wire terminals extend into the interior of the lamp tube 12 and are connected to the respective lamp electrodes therein (not show). The lamp 10 is intended to be mounted in a lampholder assembly between a pair of lampholder sockets

which serve to connect the pairs of terminal wires within an electrical energizing circuit.

The lampholder assembly of the present invention includes a compressible lampholder **30** and a non-compressible lamp holder **40** adapted to be mounted on opposite sides of a fixture to hold the lamp **10** therebetween. The lamp holders **30** and **40** may be provided with respective L-shaped mounting brackets **26** and **28** adapted to be secured to a fixture, or they may be mounted directly in the end walls of the fixture. The mounting brackets are substantially identical so that only bracket **28** will be described. Bracket **28** is provided with a mounting opening **32** being generally circular in shape but having a flat surface **36** at one side thereof to prevent rotation of the mounted lamp holder therein.

The compressible lamp holder **30**, as described more fully in the aforementioned Kulka Patent No. 3,116,098, includes an integrally molded body made of electrically-insulating material such as urea plastic and formed with a shank or base portion **134** and a head portion **136**. The head portion **136** is of enlarged circular shape and has flat front and rear surfaces **136***a* and **136***b*. The flat rear surface **136***b* defines a shoulder at the junction of the head portion **136** with base portion **134**.

The shank or base portion **134** is of the same general configuration as the mounting opening **32** in bracket **26** and is sized to fit closely through this opening so that the compressible lamp holder **30** is slidably and non-rotatably mounted in the bracket **26** but can tilt, within limits, in all directions.

A pair of spring clips are mounted within opposed longitudinal slots (not shown) of base **134**, and terminate in outwardly extending portions **138** and **140** having respective integral angular end portions **142** and **144**. The outwardly extending portions **138** and **140** are adapted to engage bracket **26**.

Disposed about base portion **134** is a strong helical coil spring **146**. Spring **146** is of conical shape having a relatively large end **148** engageable with bracket **26** and a relatively small end **150** engaging the shoulder **136***b*. The spring **146** urges the body of compressible lamp holder **30** inwardly of bracket **26** and holds the outwardly extending portions **138** and **140** against bracket **26**.

Compressible lamp holder **30** is easily installed by aligning shank portion **134** with the opening **32** in bracket **26** and pressing therethrough against the force of spring **146** with the angularly inwardly extending portions **142**, **144** being depressed by cam action so as to move toward each other sufficiently to clear the sides of the opening and permit the insertion of base portion **134** through the opening. Once spring clip end portions **142**, **144** have passed the opening **32**, the resilience of the spring arms causes the ends of the arms to again diverge until the outwardly extending portions **138**, **140** overlap the rear surface of bracket **26** adjacent the opening. When the body is released after insertion of the base portion **134**, the spring **146** will bear against the shoulder **136***b* forcing the head portion **136** away from the bracket **26** and the outwardly extending portions **138**, **140** of the clips into engagement with bracket **26**.

The front surface surface **136***a* of compressible lamp holder **30** is provided with a resilient annular gasket **34** surrounding a central socket recess in holder **30** which receives the lamp terminal portion therein. The gasket **34** may be made of rubber or the like and may be cemented in place on front surface **136***a*. Gasket **34** is adapted to be compressed between head **14** of lamp **10** and holder **30** to provide a seal therebetween to protect the electrical contacts from adverse weather conditions when the assembly is mounted outdoors.

Since the compressible lamp holder **30** has a limited universal movement, as previously described, it will automatically align itself with a lamp **10**, if the axis of lamp **10** is off-center with respect to the axis of holder **30**, thereby distributing the forces evenly throughout gasket **34** so that the gasket provides an effective seal between holder **30** and the lamp **10**.

In accordance with the present invention, a non-compressible lamp holder **40** is provided for the other end of the lamp and has limited universal movement with respect to its support for similarly aligning itself with a fluorescent lamp in order to compress a gasket evenly therebetween so that the gasket, in turn, provides an effective seal. More specifically, holder **40** includes a molded body made of electrically insulating material such as a urea plastic and formed with a shank or base portion **44** and an integral head portion **46**. The head portion **46** is of enlarged circular shape and has flat front and rear surfaces **46***a* and **46***b*. The flat rear surface **46***b* defines a shoulder at the junction of the head portion **46** with base portion **44**.

The base portion **44** is of the same general configuration as the mounting opening **32** of bracket **28**, and the base portion is sized to closely fit through said opening so the non-compressible lamp holder **40** is non-rotatably mounted in the bracket **28**. The base portion **44** is provided with a pair of diametrically-opposed longitudinal grooves **50** and **52**. Formed in the head portion **46** are recesses **54** and **56** which respectively communicate with the grooves **50** and **52**.

Mounted on lampholder **40** are spring clips **58** and **60** which are sized to fit within the respective grooves **50** and **52** and communicating recesses **54** and **56**. The spring clips **58** and **60** have flange portions **62** and **64** which seat in recesses **54** and **56** and are secured therein by respective rivets **66** and **68** or other suitable means. The clips **58** and **60** further include integral arms **72** and **74** extending perpendicularly and rearwardly from flange portions **62** and **64**. Said arms are bent back at their ends forming a reentrant angle, and are integral with respective integral legs **76** and **78** which extend forwardly along arms **72** and **74** and are inclined outwardly relative thereto. The legs **76** and **78** at their free ends are formed with inwardly bent bight portions **81** and **83** terminating in upturned end portions **80** and **82**.

Clips **58** and **60** are formed of spring metal and the legs **76** and **78** are biased away from their respective arms **72** and **74**, so that said legs normally project outwardly of slots **50** and **52**. The legs are so formed that when the rear end of base portion **44** is inserted into bracket mounting opening **32** and the lampholder body is slid rearwardly through said openings, the inclined portions of said legs engage the edges of said mounting opening, camming the legs into slots **50** and **52** to permit passage of body portion **44** through said opening. When the bight portions **81** and **83** reach the mounting opening, the legs **76** and **78** are urged outwardly of the slots **50** and **52**, the bight portions engaging and gripping opposite sides of the mounting opening **32**. The bight portions **81** and **83** are formed with inclined leading surfaces which engage the edge of said mounting opening and cause the end portions **80** and **82** to press firmly against the forward wall surface of bracket **28** to hold the lampholder **40** in mounted position. In this mounted position, the lampholder head portion **46** is spaced from the supporting wall of bracket **28** and is parallel thereto, although it may be moved from this parallel position for adjustment, as will be described.

It is to be noted that the spring clips **58** and **60** do not maintain rear surface **46***b* of head portion **46** in abutment with bracket **28**, as in the prior art type of non-compressible holders, but actually maintain surface **46***b* spaced from the wall of the bracket **28** and provide pivotal movement of the holder relative to the bracket. Accordingly, if any off-center forces are applied to the lampholder **40**, as by a fluorescent lamp **10** which is not coaxially aligned with the holder **40**, the holder will tend to pivot until the forces are equalized (i.e., until the axis of the non-compressible holder is aligned with the lamp axis). Spring clips **58** and **60** permit such pivoting movement of holder

40 by flexing accordingly. Thus, the lamp holder 40 may be moved in any direction, the limit of such movement being reached when the edge of surface 46*b* abuts the wall of bracket 28.

As shown in FIG. 1, a socket recess 84 is formed centrally in the body of the stationary lamp holder 40 and is adapted to receive therein the terminal part 18 of lamp 10. Electrical contact members are disposed in socket recess 84 in position to make electrical engagement with terminal part 18. A concentric circular recess 86 surrounds socket recess 84 and receives an annular gasket 88 which may be made of rubber and affixed therein as by gluing. Gasket 88 projects beyond front surface 46*a* of head 46 and is adapted to be compressed between lamp head 16 and holder 40 to provide a seal therebetween.

The lamp 10 can easily be installed with one hand in the lamp holder assembly in sealing engagement therewith. The terminal projection carried by head 14 of the lamp 10 is positioned in the socket recess (not shown) of the compressible lamp holder 30 which is pressed inwardly against the force of spring 146 thereby allowing the lamp to be tilted until the opposite terminal projection 18 is aligned with the socket recess 84. The lamp 10 is then released and the spring 146 presses the terminal projection 18 into the recess 84, making firm engagement with the electrical contacts. Due to the fact that compressible lamp holder 30 can move, within limits, in any direction, the holder 30 will align itself with the axis of the lamp and exert an evenly distributed force on gasket 34 thereby compressing said gasket about its entire circumference between holder 30 and lamp 10 to provide an effective seal therebetween. Additionally, in accordance with the present invention, the bowed portions of spring clips 58 and 60 will flex in accordance with the direction of the forces applied thereto to align the axis of holder 40 with the axis of lamp 10 and thereby compress gasket 88 evenly between holder 40 and the lamp 10 to provide an effective seal therebetween.

Accordingly, a non-compressible fluorescent lamp holder has been provided which is adapted to be mounted on a fixture wall by a novel mounting means providing limited universal movement of the lamp holder with respect to the wall. In this manner the holder will align itself with the lamp to compress a gasket evenly therebetween and protect the electrical connections between the lamp and the holder from the elements when the fluorescent fixture is mounted outdoors.

A second embodiment in accordance with the invention is illustrated in FIGS. 4–6 and includes a non-compressible lamp holder 40 of the type described above, to which a spring clip 160 is connected to mount the holder 40 in the bracket 28 and provide limited universal movement of the holder with respect to the bracket.

More particularly, the rear surface of the base 44 is provided with recesses 152 and 154 disposed on either side of a central partition 156, as shown in FIG. 4. The partition 156 includes an integral centrally located projection 158 which extends beyond the rear surface of base 44 and is provided with a flat face 158*a* which supports spring clip 160.

Spring clip 160 is sized to fit loosely in grooves 50 and 52 and includes a substantially vertical central portion 162 having an elongated slot 164 therein. Spring clip 160 is loosely connected to the body of lamp holder 40 by a screw 166, the shank of which projects through slot 164 and is threadably engaged in projection 158. The head of screw 166 is spaced from surface 158*a* a distance in excess of the thickness of the spring clip 160 so that lamp holder 40 is movable relative to the clip 160, said movement being limited by the length of slot 164. The clip 160 further includes arms 161 and 163 formed integrally with the ends of the central portion 162. Arms 161 and 163 are loosely received in grooves 50 and 52 and are inclined outwardly and then sharply inwardly, defining a bight terminating in upturned portions 168 and 170. The arms 161 and 163 are arranged to flex inwardly upon application of force thereto so that when base portion 44 is inserted into mounting opening 32 of bracket 28, the arms 161 and 163 will engage opposed edge portions of the mounting opening 32. The arms 161 and 163 will yield sufficiently so that the upturned portions 168 and 170 will engage the bracket 28, as shown in FIG. 6.

As noted above, the only connection between the spring clip 160 and the lamp holder 40 is by means of the screw 166. Accordingly, the lamp holder 40 will be capable of tilting upwardly and downwardly relative to bracket 28 with the shank of screw 166 sliding between the ends of slot 164. Additionally, the resiliency of upturned portions 168 and 170 will allow movement of the lamp holder 40 about a vertical axis until the edge of surface 46*b* abuts the wall of bracket 28. Thus, lamp holder 40 will have limited universal movement with respect to the bracket 28. Accordingly, if the axis of the fluorescent lamp 10 is not aligned with the axis of the lamp holder 40, the lamp holder will align itself, turning in the required direction by virtue of its universal mounting on bracket 28, to provide an effective seal between the lamp and the holder.

While preferred embodiments of the invention have been shown and described herein it will be obvious that numerous omissions, changes and additions may be made therein without departing from the spirit or scope of the invention.

What I claim is:

1. A non-compressible fluorescent lampholder comprising a body having a head portion and a shank portion adapted to be received in a mounting opening in a plate, a socket recess in said body opening through the face of said head portion and adapted to receive the terminal portion at one end of a fluorescent lamp for connecting the lamp in an electric circuit, a sealing gasket on said head portion surrounding said socket recess and adapted to be compressed between the inserted lamp and said holder to protect the socket recess and lamp terminal portion from adverse weather conditions, and mounting means connected to said body for non-slidably mounting of said body on said plate for tilting movement in any direction, said mounting means comprising spring clip means including an upturned portion adjacent the free ends thereof spaced from the rear end of said head portion and adapted to engage the edge of the opening and extend outwardly therefrom to maintain the rear end of the head portion spaced from the plate, said spring clip means providing pivotal movement of the body whereby said body may be tilted in any direction to provide for the even compression of said gasket.

2. A non-compressible fluorescent lampholder as defined in claim 1, wherein said spring clip means further includes an outwardly inclined portion connected to said upturned portion by an inwardly bent bight, whereby said bight urges the upturned portion into abutment with said plate.

3. A non-compressible lampholder adapted to be mounted in a mounting opening of a support plate for supporting one end of a fluorescent lamp having end heads carrying terminal portions, said lampholder comprising a body having an enlarged head portion and a shank portion of reduced cross-sectional area sized to be received in said mounting opening, a socket recess formed in said body and opening through the face of said head portion for reception of the terminal portion at said one end of the fluorescent lamp, a sealing gasket on said head portion surrounding said socket recess and adapted to be compressed between the head of the inserted lamp and said holder to provide a seal about the socket recess and inserted lamp terminal portion, spring clip means mounted on said body and including retaining portions normally spring biased radially outward of said shank portion, said shank portion being insertible

into said support plate mounting opening and movable longitudinally therein to a mounted position in which the retaining portions of said spring clip means engage and grip opposed edge portions of said mounting opening and hold the lampholder resiliently with the head portion thereof slightly spaced forwardly of said plate and parallel thereto, said spring clip means being sufficiently resilient to permit limited pivotal movement of said shank portion within said mounting opening whereby said sealing gasket may be aligned with the respective head of the inserted lamp.

4. A non-compressible lampholder adapted to be mounted in a mounting opening of a support plate for supporting one end of a fluorescent lamp having end heads carrying terminal portions, said lampholder comprising a body having an enlarged head portion and a shank portion of reduced cross-sectional area sized to be received in said mounting opening, a socket recess formed in said body and opening through the face of said head portion for reception of the terminal portion at said one end of the fluorescent lamp, a sealing gasket on said head portion surrounding said socket recess and adapted to be compressed between the head of the inserted lamp and said holder to provide a seal about the socket recess and inserted lamp terminal portion, a pair of diametrically-opposed longitudinal slots in said shank portion, spring clip means mounted on said body and including a pair of flexible spring arms in registry with the respective longitudinal slots and sized to be received therein, each of said spring arms being inclined upwardly and forwardly, and having free ends forming retaining portions located adjacent said head portion and spaced therefrom, said retaining portions being normally biased outwardly of said slots and projecting radially from said shank portion.

5. A non-compressible lampholder adapted to be mounted in a mounting opening of a support plate for supporting one end of a fluorescent lamp having end heads carrying terminal portions, said lampholder comprising a body having an enlarged head portion and a shank portion of reduced cross-sectional area sized to be received in said mounting opening, a socket recess formed in said body and opening through the face of said head portion for reception of the terminal portion at said one end of the fluorescent lamp, a sealing gasket on said head portion surrounding said socket recess and adapted to be compressed between the head of the inserted lamp and said holder to provide a seal about the socket recess and inserted lamp terminal portion, a pair of diametrically-opposed longitudinal slots in said shank portion, flexible spring clip means mounted on said body and including a pair of flexible spring arms in registry with the respective longitudinal slots and sized to be received therein, said spring arms having forward free ends carrying retaining portions normally spring biased radially outward of said slots and projecting outwardly of said shank portion, said shank portion being insertible into said support plate mounting opening and movable longitudinally therein to a mounted position, said spring arms being depressed into said longitudinal slots to permit passage of said shank portion through said mounting opening until said retaining portions move into registry with the edge of said mounting opening at said mounted position and said spring arms are biased out of said slots so that said retaining portions engage and grip opposed edge portions of said mounting opening and hold the lampholder resiliently with the head portion thereof slightly spaced forwardly of said plate and parallel thereto, said spring arms being sufficiently resilient to permit limited pivotal movement of said shank portion within said mounting opening whereby said sealing gasket may be aligned with the respective head of the inserted lamp.

6. A non-compressible lampholder according to claim 5 in which said spring clip means also includes a pair of stationary arms carrying the respective flexible spring arms and formed at a reentrant angle therewith, and means mounting said stationary arms within the respective longitudinal slots.

7. A non-compressible lampholder according to claim 5 in which said spring clip means includes a transverse portion connecting the rear ends of said spring arms and extending across the rear end of said shank portion, a longitudinal slot formed in said transverse portion, and a member extending through said slot and secured to said shank portion and providing a slide connection between said transverse portion and said shank portion.

8. A non-compressible lampholder according to claim 5 in which each of said spring arms includes a rear, outwardly and forwardly inclined portion normally projecting outwardly of said slots and said retaining portion includes an inwardly-extending bight terminating in an upturned end portion, the bights gripping opposed edge surfaces of the mounting opening in the mounted position of said lampholder and pressing said upturned end portions against the forward surface of said support plate adjacent said mounting opening.

9. A fluorescent lampholder assembly for outdoor use comprising plate means having spaced apart, aligned confronting openings therein, a compressible lampholder slidably mounted in one of said openings for movement toward and away from the other opening and a non-compressible lampholder mounted for tilting movement in the other of said openings for receiving and holding a lamp between said lampholders, gasket means on said lampholders adapted to be compressed between said respective lampholders and the lamp to provide seals about the ends of said lamp, said non-compressible lampholder comprising a body having a shank portion and an integral head portion, and a plurality of resilient members connected to said body and extending outwardly into engagement with said plate means and mounting said body in said other opening for non-slidable pivotal movement relative to said plate means and for positioning the rear surface of said head portion in space relation to said plate means, whereby said non-compressible lampholder may be pivoted in any direction to compress said gasket evenly between said non-compressible holder and the end of the lamp received therein.

10. A fluorescent lampholder assembly as defined in claim 9, wherein each of said resilient members includes an upturned portion adjacent the free end thereof, an outwardly inclined portion and an inwardly bent portion located between the upturned portion and the inclined portion, whereby said upturned portions engage the edges of said other opening and extend through said opening and outwardly of the front thereof into abutting engagement with said plate means to provide said pivotal mount.

11. A fluorescent lampholder assembly for outdoor use comprising plate means having spaced apart, aligned confronting openings therein, a compressible lampholder slidably mounted in one of said openings for movement toward and away from the other of said openings, and a non-compressible lampholder mounted for tilting movement in the other of said openings for receiving and holding a lamp between said lampholders, each of said lampholders being provided with a central socket recess having electrical contact means therein adapted to engage the terminals of a lamp to connect the lamp in an electric circuit, gasket means on each of said lampholders adapted to be compressed between the associated lampholder and a lamp to provide a seal therebetween to protect the electrical contact means from adverse weather conditions, said non-compressible lampholder comprising a body having a shank portion and an enlarged head portion, said shank portion having a pair of grooves therein, spring clip means disposed in each of said grooves, each of said spring clip means having one end connected to said body and including an outwardly bowed portion and an upturned portion adjacent the free end, spaced from the rear surface of said enlarged portion, said outwardly bowed portion being de-

pressible to permit said shank and said spring clip means to be inserted into said other plate opening until said upturned portion engages said plate means to non-slidably and pivotally retain said non-compressible lampholder in said opening, whereby said non-compressible lampholders may be tilted in any direction to align the axis of the lampholder with the axis of a lamp and evenly compress the gasket associated with said body.

**12.** A non-compressible lampholder as defined in claim **11**, wherein said enlarged portion is provided with a pair of recesses respectively communicating with said grooves, each of said spring clip means having an end portion extending perpendicular to said shank and being received in said recess, and means securing said end portion within said recess.

**13.** A non-compressible lampholder as defined in claim **11**, wherein said outwardly bowed portions are connected



by a central portion having an elongated slot, means extending through said slot into the rear surface of said shank to connect said spring clip means loosely to said body for movement of said body with respect to said spring clip means.

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