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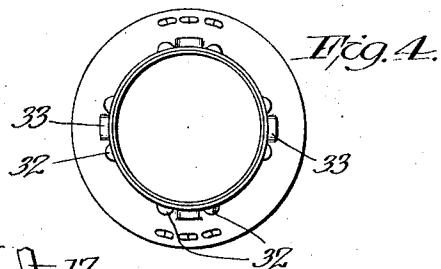
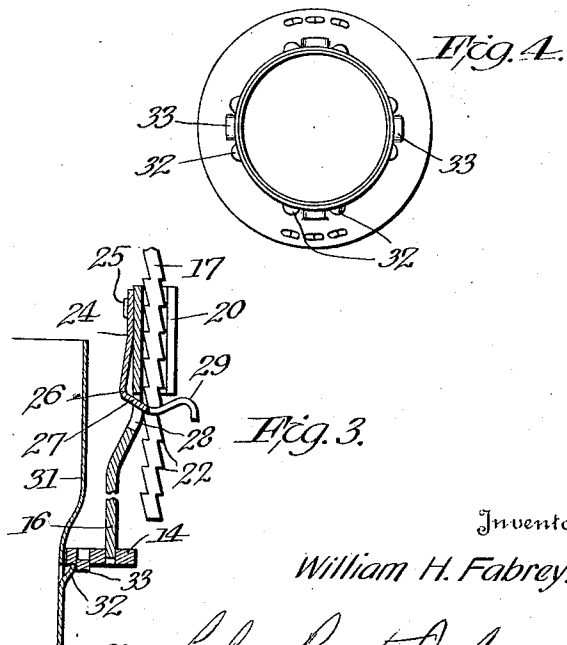
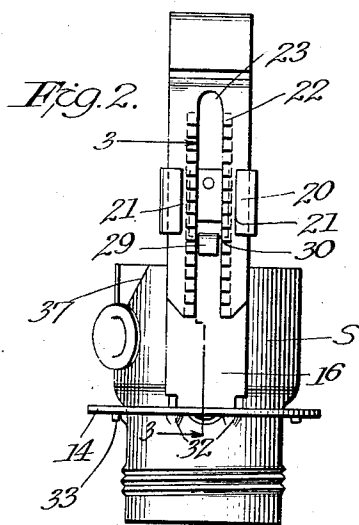
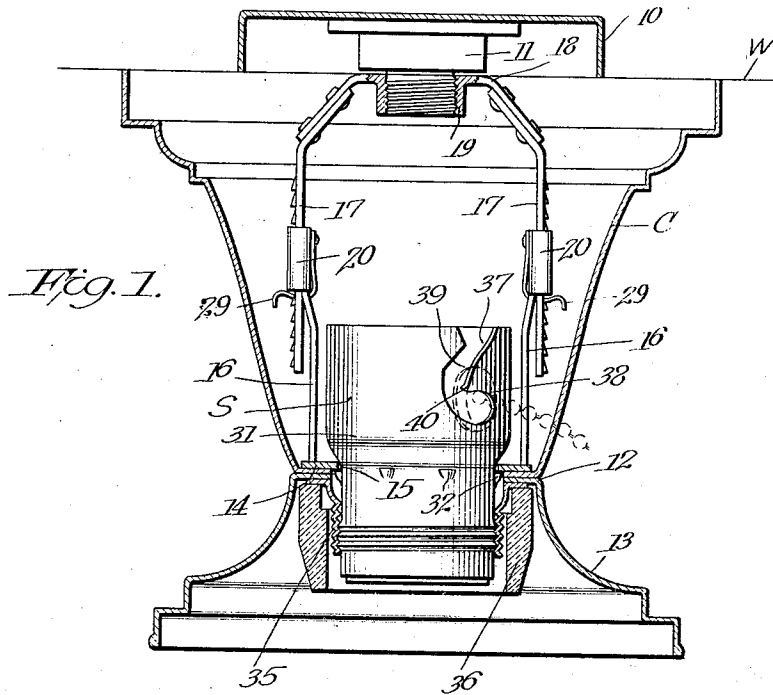
W. H. FABREY

1,880,952

LAMP SOCKET AND ADJUSTABLE SUPPORT THEREFOR

Filed May 14, 1928

2 Sheets-Sheet 1



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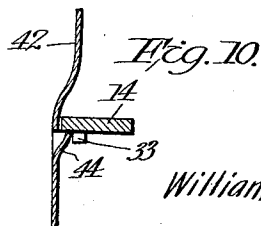
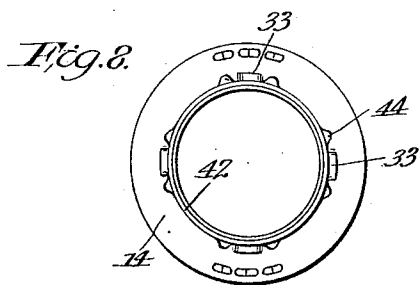
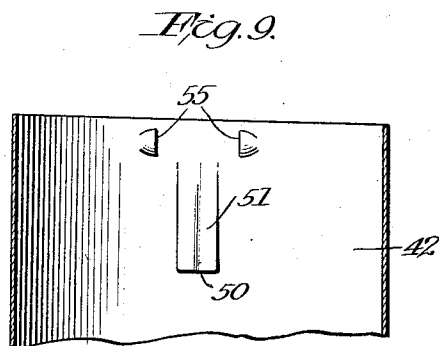
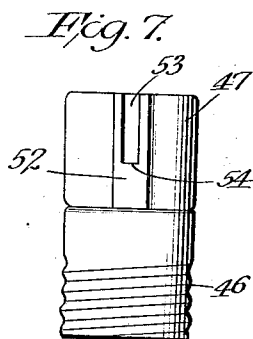
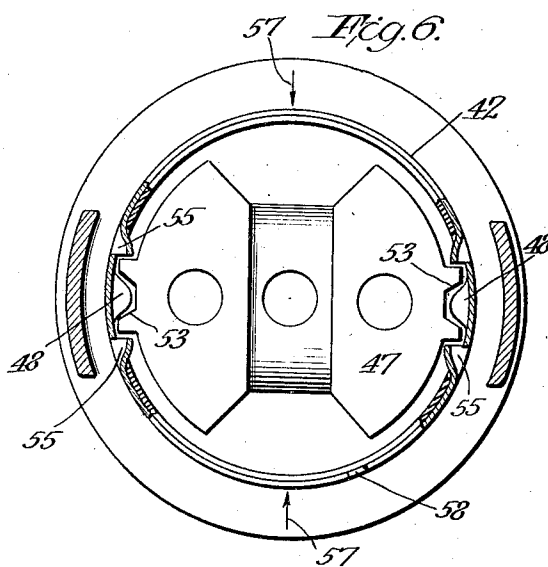
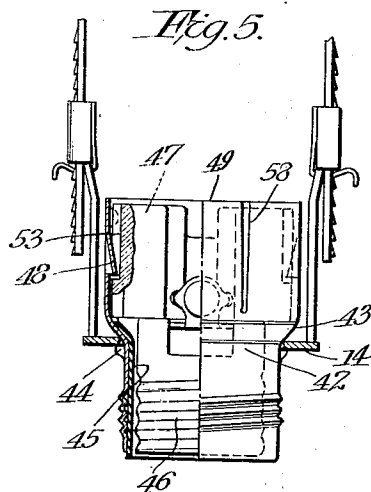
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LAMP SOCKET AND ADJUSTABLE SUPPORT THEREFOR

Filed May 14, 1928

2 Sheets-Sheet 2



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LAMP SOCKET AND ADJUSTABLE SUPPORT THEREFOR

Application filed May 14, 1928. Serial No. 277,518.

The present invention relates to electric light fixtures and more particularly to a device for mounting an electric lamp socket upon a wall, ceiling, or the like.

An object of the invention is to provide a socket holding device adapted to receive a socket having a metallic shell and which may be readily adjusted to adapt the same to a wall or ceiling canopy which encloses the device, whereby the canopy may be supported thereon without the necessity for independently attaching the same to the wall or ceiling.

A further object of the invention is to provide a socket holder or support of readily adjustable construction and which is therefore adaptable to canopies of various types and sizes. As is well-known, canopies vary in depth and it is desirable in mounting the socket, particularly with a fixture which serves also to support the canopy, that the mounting or holding instrumentality be adjustable so as to position the socket and its holder at a distance from the wall or ceiling corresponding to the depth of the canopy.

A still further object of the invention is to provide an improved socket construction which may be rigidly and permanently secured to the mounting device without the necessity for adjustment of the socket.

More particularly, the invention seeks to provide a socket shell construction formed for fixed, and preferably permanent, attachment to the mounting device and which is formed so that the interior parts are releasably and detachably connectable with the shell whereby these parts may be removed from the mounting device although the shell is permanently attached thereto.

I am aware that there have heretofore been developed mounting devices for sockets comprising an annulus having means, such as an upwardly projecting arm, adapted to extend over the socket to retain the interior parts therein or over a laterally extending por-

tion of the socket such as the chain exit. The present invention seeks to simplify devices of this character by forming the socket shell itself and the interior parts so that they are releasably connected and thus dispensing with the necessity for employing a retaining means for the interior parts upon the mounting device proper.

The invention comprises broadly an element such as an annulus, adapted to receive therein an electric lamp socket having a metallic shell with an intermediate shoulder which abuts the annulus so as to limit movement of the socket in one direction there-through.

The socket shell is preferably formed with an out-struck shoulder adapted to prevent withdrawal of the shell from the annulus and thus permanently secure the shell to the annulus, which is formed with upstanding arms adapted to cooperate with corresponding arms upon a mounting bracket adapted to be secured to an outlet stud or the like. The invention also comprises means for automatically locking the annulus arms in adjusted position upon the bracket arms so that the socket and annulus may be quickly fixed in position.

These and other features and objects of the invention will become clearer as the description proceeds in connection with the preferred embodiment shown in the accompanying drawings, wherein

Figure 1 is a vertical sectional view of an assembled unit.

Figure 2 is a side elevational view with the canopy removed.

Figure 3 is a sectional view on the line 3-3 of Figure 2.

Figure 4 is a bottom plan view of the unit illustrated in Figure 2.

Figure 5 is a part elevational and part sectional view, the mounting device having associated therewith a modified form of socket of the keyless type.

Figure 6 is a plan view partly in section.

Figure 7 is a side elevational view of the interior socket parts removed from the shell.

Figure 8 is a bottom plan of the unit illustrated in Figure 5.

Figure 9 is a vertical sectional view taken through the socket shell, showing more clearly the retaining means for the interior socket parts, and

Figure 10 is a fragmentary vertical sectional view showing the formation of the shell to retain the same against withdrawal from the annulus.

Referring to the drawings for a more detailed description, 10 indicates the conventional type of outlet having a fixture securing means, such as a stud 11, the outlet being set within a wall or ceiling W and being concealed by a canopy C which, as illustrated, is of the conventional type having an intermediate inturned flange 12, and an inverted cup-shaped portion 13 which may receive a reflector or globe. The socket mounting device comprises an element having a central opening to receive a socket shell such as the annulus 14 having a central opening 15 into which the metallic shell S of a socket is inserted. The annulus has a supporting portion such as one or more upstanding arms 16 adapted to cooperate with parts or arms 17 of a substantially inverted U-shaped bracket, the crosshead 18 of which has a threaded aperture 19 adapted to receive the stud 11.

The arms 16 and 17 are formed with complementary guiding means such as the lugs 20 arranged, in the present instance, upon the arms 16 and having their ends 21 bent toward one another and juxtaposed to form a channel receiving the arms 16. The arms 16 and 17 are also provided with complementary locking means whereby, as the annulus is moved along the bracket arms 17, it may be locked automatically in selected position. This locking means in the present instance takes the form of a series of teeth 22 formed along each edge of a slot 23 extending longitudinally of each arm 17. These teeth are formed by deflecting each edge of the slot 23 and thus two series of teeth 22 are provided upon each arm 17. To cooperate with these teeth each of the annulus arms 16 is provided with a yielding detent formed by a flat piece of spring metal 24 riveted at 25 to the inner face of the arm 16. The detent is bent at 26 to provide a laterally extending portion 27 which extends through an opening 28 in the arm 16. The laterally extending portion 27 of the detent is reduced to provide teeth engaging shoulders 30 and a manually engageable finger portion 29 which projects through the slot 23 in the bracket arm 17. Each of the shoulders 30 upon the detent cooperates with one of the series of teeth 22 and the natural resiliency of the metallic strip 24 tends to urge the

shoulders into engagement with these teeth. As the annulus 14 with its arms 16 is moved upwardly along the bracket arms the detent shoulders 30 spring automatically above the top of the horizontally aligned tooth and thus prevent the annulus from moving downwardly under the weight of the socket and other parts unless the shoulders are disengaged from the teeth by inward pressure upon the finger portions 29. The lugs 20 guide the annulus and its arms 16 along the bracket arms and resist any lateral movement of the annulus and its socket on the bracket.

The socket shell S has the usual intermediate shoulder 31 which rests upon the annulus around its central opening, and, beneath the annulus, portions of the shell are struck out to provide a plurality of out-struck shoulders 32 (Figures 3 and 4) which resist movement of the shell upwardly in the annulus. Consequently, the circumferential shoulder 31 and the small out-struck shoulders 32 permanently secure the socket shell and annulus together. Rotation of the shell within the annulus may be prevented by depressing portions 33 from the annulus and suitably arranging these portions with relation to the shoulder 32, for instance, as illustrated in Figure 4, which shows the depressions 33 between adjacent socket shoulders 32, so that any rotation of the shell will be obstructed by engagement of shoulders 32 and 33.

The canopy may be supported from the device by the clamping ring 35 threaded upon the socket shell and carrying a sleeve 36 of porcelain or other finishing or dielectric material. This ring serves to clamp the inturned flange 12 of the canopy against the underface of the annulus 14 and thereby support the canopy from the bracket arms 17.

In order to complete the device, it is simply necessary to provide means for retaining the interior parts of the socket against movement in the socket shell. In devices of this nature which have heretofore been developed, it has been customary to form upon the annulus 14 a suitable means such as an upstanding arm to extend over the top of the shell or over a lateral projection from the interior parts, and thus dispense with the usual shell cap which is objectionable in a unit of this character.

The present invention seeks to simplify the construction of the mounting device by forming the socket shell so that it will serve to retain the parts therein and thus render unnecessary the provision of such means upon the mounting bracket. In Figure 1, the shell S is formed with a slot 37 inclined downwardly from the upper edge of the shell and then substantially circumferentially directed at 38 to form a horizontal seat for the chain guide or exit 39 which is rigidly secured to the interior parts. With such a construction it is simply necessary to insert the parts and to

a longitudinally slotted or bifurcated arm arranged to extend away from the stud, teeth formed on the arm along an edge of the slot, and projecting away from the longitudinal plane of the arm, and an adjustable support on said arm having a detent engageable with said teeth and extending through the slot in said arm.

5 In a device of the class described, a bracket having a head portion adapted to be attached to an outlet stud and provided with a longitudinally slotted arm arranged to extend away from the stud, teeth on the arm along an edge of the slot formed bilaterally deflecting the arm along transverse lines whereby the teeth extend away from the longitudinal plane of the arm, an adjustable support on the arm having a detent movable toward and from the arm face, said teeth having inclined wedging undersurfaces whereby to permit free movement of a cooperating detent in one direction.

6 In a device of the class described, a bracket having a head portion adapted to be secured to an outlet stud, and provided with an arm adapted to extend away from the outlet stud, said arm being formed with a longitudinal slot, and having a series of teeth formed along an edge of the slot and deflector away from the edge along lines extending transversely of the arm without completely breaking through the web of the arm, whereby to project away from the face of the arm, and an adjustable socket support having a detent movable toward and from the face of the arm.

7 In a device of the class described, a bracket having a head portion adapted to be secured to an outlet stud, and provided with an arm adapted to extend away from the outlet stud, said arm being formed with a longitudinal slot, and having a series of teeth formed along an edge of the slot and deflected away from the edge along lines extending transversely of the arm without breaking completely through the web of the arm, an adjustable socket support on the arm having a detent member movable toward and from the face of the arm, said teeth having inclined wedging adjacent surfaces whereby to permit free movement of a detent in one direction.

8 In a device of the class described, a bracket having a head portion adapted to be attached to an outlet stud and an arm arranged to extend away from the stud, said arm being longitudinally bifurcated to form a longitudinally extending slot and teeth on the arm along an edge of the slot, said teeth being formed by deflecting laterally the material of the arm along lines extending transversely of the arm.

9 In a device of the class described, a bracket having a head portion adapted to be attached to an outlet stud and an arm ar-

ranged to extend away from the stud, said arm being longitudinally bifurcated to form a longitudinally extending slot and teeth on the arm along an edge of the slot, said teeth being formed by deflecting laterally the material of the arm along lines extending transversely of the arm without breaking completely through the web of the arm.

In testimony whereof I have hereunto set my hand.

WILLIAM H. FABREY.

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give the same a slight rotation to carry the chain exit into the circumferentially directed portion 38 of the slot wherein the chain exit is held by the slot formation against upward movement of the interior parts is resisted. The corner 40 may be bent inwardly to facilitate entrance of the chain exit into its seat. To remove the parts it is simply necessary to press the interior parts upwardly and at the same time to rotate the same slightly so that the throat guide will follow the curve of the slot 37.

Referring to Figures 5 to 10 inclusive, the mounting device has assembled therewith a keyless socket, the shell 42 of which has the usual intermediate shoulder 43 resting upon the annulus 14 and a plurality of shoulders 44 struck out from the shell beneath the annulus to resist upward movement of the shell. Rotation of the shell within the annulus is prevented by means of the depressed portions 33 upon the annulus which are suitably disposed to engage the shoulders 44 struck out from the shell as illustrated in Figure 8. Within the shell is arranged a liner 45 of suitable insulating material and the interior parts or mechanism which include, as is customary, the threaded socket portion 46 and dielectric material 47. The parts 47 of dielectric material are received within the shell with suitable clearance to permit compression of the shell (Figure 6) and the shell and parts are formed with complementary portions which are adapted to releasably interconnect when the parts are inserted, whereby to resist a substantially upward movement or rotation of the interior parts. The shell has diametrically opposed in-struck portions 48 spaced downwardly from the upper edge 49 of the shell; these in-struck portions terminate in downwardly facing shoulders 50 and have lateral faces 51. To receive the in-struck portions 51 the ports of dielectric material are formed with vertically disposed ribs 52, each rib having a longitudinally extending groove 53 terminating in a lower end wall 54. The interior parts are inserted in the shell with the grooves 53 aligned with the in-struck portions 51, and, to assist in obtaining this alignment, the shell has a plurality of spaced in-struck shoulders 55 facing one another circumferentially of the shell and disposed at opposite sides of the in-struck portions 51 above the latter. To obtain the proper alignment of the grooves 53 with the in-struck portions 51 it is simply necessary to insert the ribs 52 between the facing shoulders 55 and thereafter to press the parts downwardly. When the parts are inserted (Figure 5) the lower ends 50 of in-struck portions 51 will spring over the lower end wall of each groove 53 and thus resist upward movement of the parts within the shell. The in-struck portions being bodily positioned within the grooves 53 will resist rotation of the parts

within the shell. Rotation will also be prevented by the guiding shoulders 55 which are disposed, as illustrated in Figure 6, at opposite sides of the ribs 52.

To remove the parts from the shell it is simply necessary to compress the shell inwardly at points intermediate the complementary engaging parts 51, 53 above described. These points and the direction of compression are indicated by the arrows 57 in Figure 6. Compression of the shell as indicated by the arrows, which is facilitated by a slot 58, will cause displacement outwardly from above walls 54 of the terminals or ends 50 of in-struck portions 51 on the shell and after this displacement the socket parts may be pressed upwardly and withdrawn from the shell.

Obviously, numerous modifications may be made in the structure described without departing from the invention which is defined in the following claims.

What I claim is:

1. A device of the class described comprising an annulus, means for supporting said annulus, a socket shell projecting partially through said annulus and having a reduced neck portion merging with a larger body portion at a circumferentially extending shoulder which limits movement of the shell in one direction through the annulus, a shoulder struck out from the shell body at the opposite side of the annulus from said first mentioned shoulder and opposing movement of the shell in the opposite direction, said annulus having a projecting means cooperable with said shoulders to limit rotative movement of the shell within the annulus.
2. A device of the class described comprising an annulus, means for supporting said annulus, a socket shell projecting partially through said annulus and having a reduced neck portion merging with a larger body portion at a circumferentially extending shoulder which limits movement of the shell in one direction through the annulus, a shoulder struck out from the shell body at the opposite side of the annulus from said first mentioned shoulder and opposing movement of the shell in the opposite direction, said annulus having a portion cooperating with said struck out shoulder on the shell to limit rotative movement of the shell within the annulus.
3. In a device of the class described, a bracket having a head portion adapted to be attached to an outlet stud, a longitudinally slotted or bifurcated arm on said bracket arranged to extend away from the stud, and teeth on the arm along an edge of the slot, said teeth being deflected laterally away from said edge.
4. In a device of the class described, a bracket having a head portion adapted to be attached to an outlet stud and provided with