

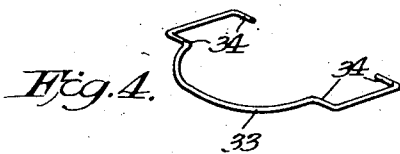
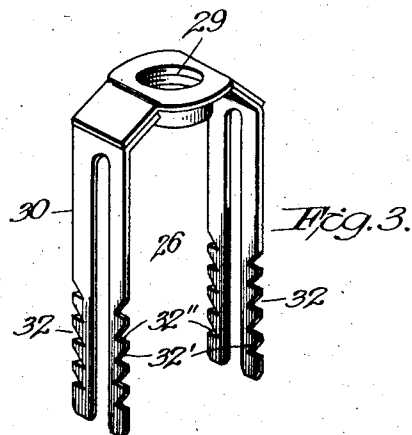
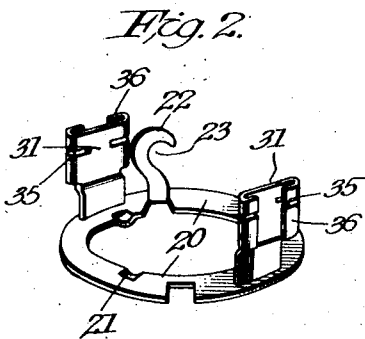
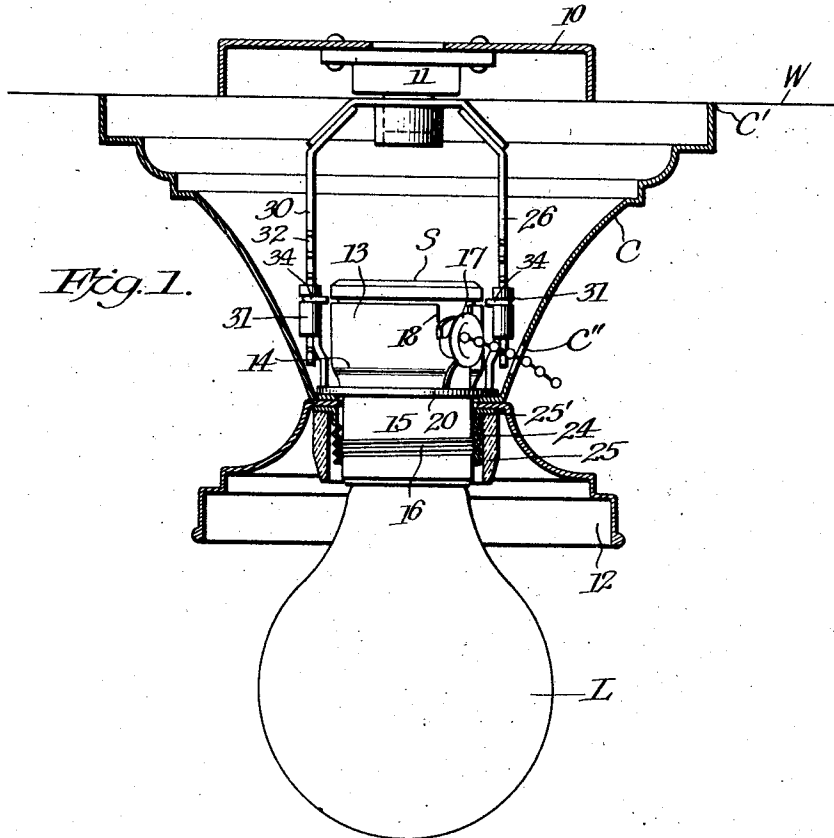
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LAMP SOCKET SECURING MEANS FOR ELECTRIC FIXTURES

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LAMP-SOCKET-SECURING MEANS FOR ELECTRIC FIXTURES.

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The present invention relates to electric light fixtures and more particularly to a device for retaining an electric lamp socket in association with a wall or ceiling canopy or the like.

An object of the invention is to provide an improved holding device adapted to accommodate a socket having the usual metallic shell and to support the same and a wall or ceiling canopy.

A further object of the invention is to provide a socket holder and support of adjustable construction which is 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 means for automatically locking the securing parts of the holder in position after the same have been adjusted, such means being preferably of a yielding character, whereby it may be readily released, if necessary.

Another object of the invention is to provide a support of simple, readily adjustable construction adapted to be cheaply manufactured and sold at a relatively small cost, and which, because of its construction, may be quickly assembled and installed in association with the socket, canopy and other parts of the usual fixture.

The invention comprises an element, which may be termed a ring or annulus, adapted to receive therein an electric lamp socket having the usual metallic shell with an intermediate shoulder which abuts the annulus so as to limit movement of the socket in one direction therethrough. This element or annulus is of a nature adapted to abut on one side an in-turned flange such as is provided in the usual wall canopy and on its other side is formed with means adapted to engage a portion of the socket such as a lateral extension thereon, thereby restraining the socket against movement out of the ring or against rotation therein. This engaging means in the preferred form of the invention is an upstanding hook having a laterally and downwardly directed inlet or entrance

whereby it is adapted to take over a lateral socket projection such as a chain exit in the usual pull type of socket. The ring is provided with one or more lugs adapted to cooperate with a bracket which may be fitted upon an outlet stud, the bracket having one or more arms to cooperate with the lugs and to permit adjustment of the ring longitudinally of the arm or arms corresponding to the depth of the canopy between its wall engaging portion and the flange which abuts the ring. The invention also includes means adapted to secure the annulus in position upon the bracket arms, such means including complementary parts upon the arms and annulus adapted to be interengaged and adapted to yield to permit adjustment. The device is preferably provided with a suitable means, such as a collar threaded upon the socket, to clamp the canopy flange between the ring and collar and thereby support the canopy as well as the socket from the bracket.

The above and other objects and features of the invention which are more closely related to the details of construction will become clearer as the description proceeds in connection with a preferred embodiment illustrated in the accompanying drawings, wherein:

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

Figure 2 is a perspective of the socket engaging annulus,

Figure 3 is a perspective of the bracket for supporting the annulus, and

Figure 4 is a perspective of the spring clip for locking the annulus and bracket together in adjusted position.

Referring to the drawings for a more detailed description, 10 indicates the conventional type of outlet box having a stud 11 therein, the outlet box being set into a wall W and as is customary, being concealed by a canopy C which, as illustrated, is of the conventional type having an intermediate in-turned flange 11 with an inverted cup-shaped portion 12 which may receive a reflector or globe.

The present invention relates to the holding means for the canopy C and for the lamp socket S which, as illustrated, is of the usual type having a metallic shell 13 with an intermediate shoulder 14 and a reduced lower portion 15 formed with threads 16. In the present instance, there is illustrated a socket of

the "pull" type having a chain guide or exit 17 constituting a lateral projection extending through an opening 18 in the shell from the operating parts of the socket; the top 19 of these parts projects through the upper end of the shell which is not provided with a cap.

The socket is fitted within a receiving element 20 which for purposes of nomenclature may be termed an annulus, although this term as used throughout the specification and claims, is to be interpreted to cover any element performing the defined functions of the element 20. The annulus may be provided with suitable depressed portions 21 adapted to engage corresponding depressions (not shown) in the canopy flange 11 to assist in locking the ring against rotating movement. For engagement with the socket the ring may be provided with suitable means to engage the socket and prevent movement of the same out of the ring and also rotative movement of the socket. This means preferably takes the form of an upstanding hook 22 having a laterally and downwardly directed entrance 23 whereby when the hook is fitted over a lateral projection on the socket, such as the chain exit 17, it will prevent the interior parts of the socket with which the projection is connected, from moving upwardly in the shell and out of the ring and also will prevent the entire socket including the shell from similarly moving or from rotating within the ring. In other words, the single engaging hook 22 resists relative movement between the ring and socket, and unites the two parts as a complete composite rigid part of the fixture.

As will be observed, the ring is of sufficient size to engage or abut the flange 11 of the canopy which is preferably secured to the ring and socket so as to be supported with the socket from the wall W by the same means which supports the socket. The canopy securing means illustrated, is a collar 24 having an insulating shell 25 and threaded upon the reduced end 15 of the socket, the collar having an outwardly projecting flange 25' adapted to abut the under-surface of the canopy flange and thereby clamp the flange between the annulus 20 and the flange 25' of the collar. The collar 24, as will be observed, thus serves as a means to assist the hook 22 in securing the lamp shell within the annulus 20.

The canopy and socket with the mounting ring 20 are carried by a bracket, generally designated by the reference character 26, and provided with means, such as the threaded opening 29, for engaging the stud 11 to be supported thereby. The bracket is formed with depending means, such as the pair of arms 30, for engaging cooperating means upon the ring, such as the lugs 31 whereby to support the latter with the canopy and lamp socket. Each arm is bifurcated to provide longitudinally extending portions having suitable means formed thereon to co-

operate with complementary means on the annulus 20 to assist in locking the annulus in adjusted position. This means, in the present instance, is provided by a series of teeth 32, each having an upwardly and outwardly inclined under surface 32' and a top substantially horizontal surface 32''. To cooperate with the teeth 32, the annulus may be provided with a suitable yielding or resilient engaging means adapted to engage the teeth automatically when the annulus is adjusted on the bracket, and thereby hold the annulus in selected position. For this purpose, a spring means, such as the U-shaped spring wire clip 33, has its end portions bent to provide right angularly disposed portions 34 adapted to cooperate with the teeth 32. The portions 34 are arranged to project through slots 35 formed on each of the lugs 31, the latter being provided with edge portions 36 turned over the body of the lug to form slots on the lugs, which receive the bracket arms and resist lateral or tilting movement of the annulus as it is adjusted on the bracket. As the annulus is forced upwardly along the arms when the device is being assembled, the portions 34 of the spring clip will yield sufficiently as they slide along the inclined under surfaces 32' of the teeth 32 to permit this upward adjustment. Whenever it is necessary manually to release the spring means from the teeth 32 for the purpose of permitting downward movement of the annulus, the ends of the spring clip may be spread apart to cause the portions 34 to clear the top surfaces 32'' of the teeth. It will be observed that the spring clip and teeth 32 constitute complementary interengaging means upon the annulus and arms for the purpose of locking automatically the parts in adjusted position, one of the complementary means being yieldable to permit disengagement of the locking parts and automatic locking of the parts together as the annulus is moved upwardly.

As will be understood, the ring and its socket may be adjusted longitudinally of the arms on the supporting bracket so that the distance between the ring and the wall W substantially corresponds to the distance between the canopy flange and the upper edge C' of the canopy which, of course, should fit closely against the wall. Should the arms be of such length that they interfere with the canopy, they may be bent laterally and upwardly or the obstructing portions may be cut off.

In assembling the structure, the bracket 26 with the socket and ring will be first mounted upon the stud 11 and after the socket chain has been passed through the opening C'' of the canopy, the latter will be clamped in position by the collar 24.

Obviously, numerous modifications of the illustrated structure will suggest themselves

to one skilled in the art for embodying the inventive idea herein explained and defined in the following claims, and it will be understood that the details of construction have been explained solely for purposes of description and not to define the invention.

I claim:—

1. An electric fixture comprising a bracket adapted to be secured to an outlet stud and having an arm adapted to extend away from said stud, an annulus adapted to receive therein and seat an electric lamp socket having a shell, means on said annulus adapted to engage the socket and restrain the same against movement out of the annulus, and means for mounting the annulus on said arm for adjustment longitudinally of the same.

2. An electric fixture comprising a bracket adapted to be secured to an outlet stud and having an arm adapted to extend away from said stud, an annulus adapted to receive therein an electric lamp socket having a shell, an upstanding arm on said annulus adapted to engage the socket and restrain the same both against movement out of the annulus and against rotation therein, and means for mounting the annulus on said bracket arm for adjustment longitudinally of the same.

3. An electric fixture comprising a bracket adapted to be secured to an outlet stud and having an arm adapted to extend away from said stud, an annulus adapted to receive therein an electric lamp socket having a shell, means on said annulus adapted to engage the socket and restrain the same against movement out of the annulus and means for mounting the annulus on said arm for adjustment longitudinally of the same, said last mentioned means comprising a lug on said annulus adapted slidably to engage said arm, and means for securing the lug and arm together against relative movement between the same, said securing means comprising a yielding spring finger and a series of teeth adapted to be engaged by said finger.

4. An electric fixture comprising a bracket adapted to be secured to an outlet stud and having an arm adapted to extend away from said stud, said bracket arm having a series of teeth thereon, an annulus adapted to receive therein an electric lamp socket having a shell, an upstanding arm on said annulus adapted to engage the socket and restrain the same against movement out of the annulus and means for mounting the annulus on said bracket arm for adjustment longitudinally of the same, said last mentioned means comprising a lug on said annulus adapted slidably to engage said bracket arm, and yieldable means associated with the annulus adapted releasably to engage the bracket teeth and lock the annulus automatically in adjusted position.

5. An electric fixture comprising a bracket adapted to be secured to an outlet stud and

having an arm adapted to extend away from said stud, an annulus adapted to receive therein an electric lamp socket having a shell, an upstanding arm on said annulus adapted to take over a lateral projection on the socket and restrain the same against movement out of the annulus, and means for mounting the annulus on said arm for adjustment longitudinally of the same.

6. An electric fixture comprising a bracket adapted to be secured to an outlet stud and having an arm adapted to extend away from said stud, an annulus adapted to receive therein an electric lamp socket having a shell, an upstanding hooked arm on said annulus adapted to engage a lateral projection on the socket and restrain the same against movement out of the annulus and means for mounting the annulus on said arm for adjustment longitudinally of the same, said last mentioned means comprising a lug on said annulus adapted slidably to engage said arm, and means for securing the annulus and arm together against relative movement between the same, said last mentioned means comprising longitudinally spaced teeth associated with the arm and yieldable means on the annulus for engaging said teeth.

7. An electric fixture comprising an annulus adapted to receive therein an electric lamp socket having a shell with the usual intermediate shoulder, said annulus being adapted to abut said shoulder and having an upstanding hooked arm provided with a laterally and downwardly directed inlet adapted to fit over a lateral projection on a socket and resist movement of the same out of the annulus.

8. An electric fixture comprising an annulus adapted to receive therein an electric lamp socket having a shell with the usual intermediate shoulder, said annulus being adapted to abut said shoulder and having an upstanding hook provided with a laterally and downwardly directed inlet adapted to fit over a lateral projection or a socket and resist movement of the same out of the annulus, and a bracket adapted to be secured to an outlet stud, said bracket having an arm adapted to extend away from the stud, a lug on said annulus engaged with said arm for adjustment longitudinally thereof, and yieldable means for securing the lug to the arm against relative movement therebetween.

9. An electric fixture comprising an annulus adapted to receive therein an electric lamp socket having a shell with the usual intermediate shoulder, said annulus being adapted to abut said shoulder and having an upstanding hook provided with a laterally and downwardly directed inlet adapted to fit over a lateral projection or a socket and resist movement of the same out of the annulus, and a bracket adapted to be secured to an outlet stud, said bracket having an arm

adapted to extend away from the stud, a lug on said annulus engaged with said arm for adjustment longitudinally thereof, said lug being formed with edge portions turned over the body thereof to provide a channel receiving said arm, teeth formed on said arm and spaced longitudinally thereof, and yieldable spring fingers associated with said annulus to engage said teeth and thereby secure the annulus in adjusted position. 10

In testimony whereof I have hereunto set my hand.

HENRY E. NICKERSON.