June 30, 1936. D. G. SAAF 2,046,184

FIXTURE SUPPORT

Filed July 23, 1932

Fig. 1.

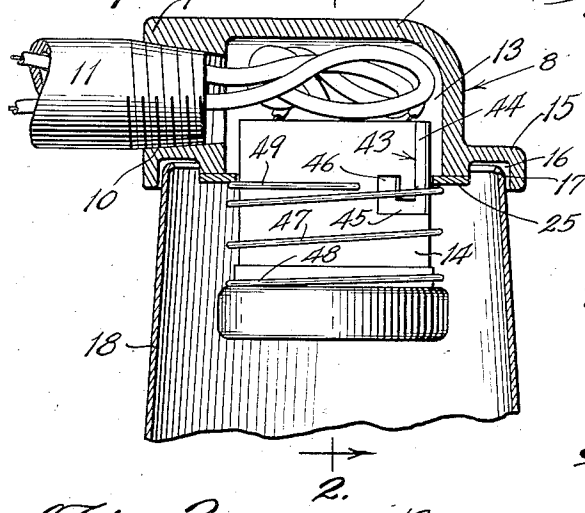


Fig. 3.

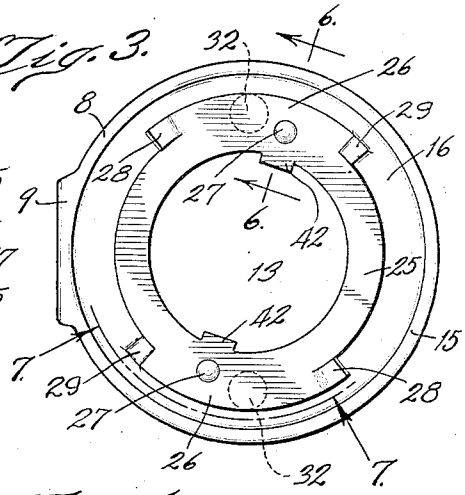


Fig. 2.

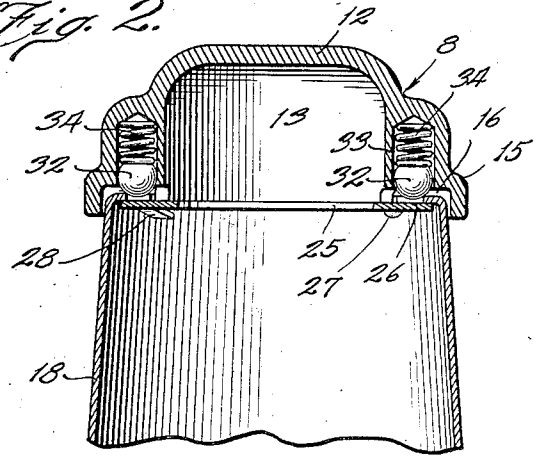


Fig. 4.

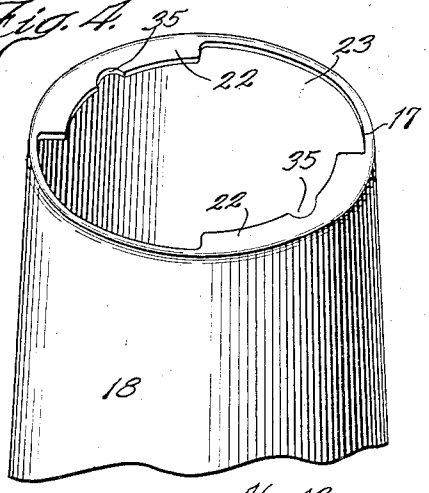


Fig. 5.

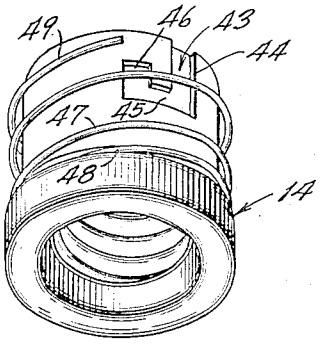


Fig. 6.

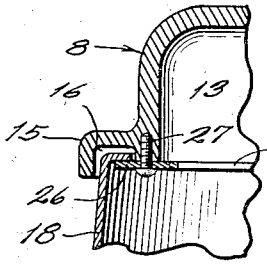
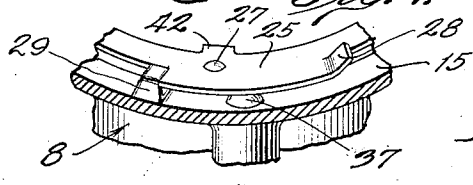


Fig. 7.



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FIXTURE SUPPORT

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Application July 23, 1932, Serial No. 624,207

2 Claims. (Cl. 240—90)

More particularly this invention relates to means for detachably supporting a lamp socket and a lighting fixture associated therewith.

It is an object of the invention to provide a new and improxed fixture support embodying means for detachably mounting a lighting fixture holder.

Another object is to provide a fixture support with a novel and improved means for detachably mounting a lamp socket.

A further object is to provide such a support having means for detachably securing a lamp socket and a fixture holder thereto without the use of tools.

Other objects will become readily apparent from the following detailed description taken in connection with the accompanying drawing, in which:

Fig. 1 is a fragmentary section through a preferred form of the invention.

Fig. 2 is a fragmentary section along the line 2—2 of Fig. 1, with the socket removed.

Fig. 3 is a view looking upward at Fig. 1 with the fixture holder and socket removed.

Fig. 4 is a fragmentary perspective view of the upper end of the lighting fixture.

Fig. 5 is a perspective view of the socket.

Fig. 6 is a fragmentary section along the line 6—6 of Fig. 3.

Fig. 7 is a fragmentary perspective section of a portion of the lighting fixture attaching means along the line 7—7 of Fig. 3.

While there is illustrated in the drawing and will hereinafter be described in detail a preferred form of the invention, it is to be understood that I do not intend to limit the invention to the specific construction and arrangement shown, it being contemplated that various changes may be made by those skilled in the art without departing from the spirit and scope of the invention as expressed in the appended claims.

In the form of the invention illustrated in the drawing, a support or hood 8 is provided with a boss 9 having a threaded opening 10 therein for attaching the said member to the end of a conduit 11. The boss 9 is located for reception of a horizontal conduit but it will be readily appreciated that the support 8 may be adapted for mounting as a pendant by providing a threaded aperture in the top thereof. The member 8 has a central portion 12 provided with a wire and socket-receiving recess 13 in which a lamp socket 14 is positioned, and has an annular flange 15 projecting from its lower edge which is formed with an annular groove 16 to receive the upper end 17 of a tubular holder 18 of a lighting fixture.

The lighting fixture holder is arranged to be detachably secured to the support 8 with its upper end in the groove 16, and as illustrated most clearly in Fig. 4, the upper end of the holder is provided with a plurality of inwardly projecting arcuate flanges 22 separated by cut-away portions 23. A ring or annular plate 25 having a shape corresponding to that of the opening in the holder is secured to the lower surface of the support 8 and provided with projecting flanges 26 extending into the groove 16. Preferably this ring is secured permanently to the support and as disclosed herein is riveted to the support by means of screw devices 27 which are threaded into the support and then upset. As will be readily apparent the holder may be secured to the support by inserting the upper end 17 thereof into the groove 16 with the cut-away portions 23 coinciding with the ring flanges 26, and thereafter rotating the holder relatively to the support so as to interengage the flanges 22 and 26. The advance ends 28 of the flanges 26 are bent outwardly, as illustrated in Fig. 7, so as to facilitate the interengagement of the flanges, and abutments 29 are formed on the flange 15 in the groove 16 to limit the relative rotary movement of the holder with respect to the support.

In order to prevent looseness, and to secure the holder in its installed position, yieldable means is preferably provided for securing the flanges 22 and 26 in engagement. As illustrated herein, this means is disclosed as comprising a pair of balls 32 positioned in bores 33 in the member 10 and urged downwardly by means of coiled springs 34. When the holder is in its attached position as shown in Fig. 2, these balls are arranged to fit partly into notches or recesses 35 in the flanges 22 of the holder and serve as detent devices for yieldably securing the holder in that position. In order to avoid looseness the recesses 35 are preferably of such a size that the balls are not permitted to engage the flanges 26 when the holder is installed.

The support 8 is adapted not only to support the lighting fixture, but also the lamp socket 14 which is secured to the support detachably so as to facilitate wiring of the socket. In the preferred form of the invention illustrated in the drawing, this socket is generally cylindrical in shape and fits somewhat freely in the opening through the ring 25. In order to secure the socket in the position illustrated in Fig. 1, the socket and ring 25 are provided with interengaging means which is arranged to hold the socket in place and which is disengageable for the purpose of removing the

socket. Thus the ring **25** is herein provided with a plurality of inwardly projecting portions or lugs **42**, the socket **40** being provided with correspondingly positioned somewhat J-shaped slots **43** into which the lugs fit so that by first inserting the socket **14** with the lugs **42** passing through the vertical portions **44** of the J-slots, the socket may thereafter be rotated slightly to pass the lugs through the horizontal portions **45** of the J-slots and into locking portions **46** thereof. A coiled spring **47** carried by and secured to the socket at its lower end **48** is so proportioned that its upper end **49** engages the ring **25** and yieldably holds the socket in place.

The provision of yieldable means such as the spring pressed balls which engage in recesses or notches in the holder flanges facilitates the installation of the holder and at the same time serves as a holding means for securing the holder against rotary movement in its installed position, and also against the ring so as to prevent looseness. Thus it is merely necessary to insert the upper end of the holder in the annular recess of the support and thereafter, by turning the holder relatively to the support, the flanges on the holder and ring are interengaged, the abutments **29** limiting the rotary movement of the holder so that the balls enter the notches in the holder flanges. The means for securing the socket detachably to the support is equally simple and effective and facilitates the installation of the socket and the connection of the wires thereto. It is apparent that when the socket has been installed the upper end walls of the locking portions **46** of the slots in the socket serve as abutments which engage the lugs **42** on the ring, and the side walls of the locking portions of the slots serve as a means for preventing rotary movement of the socket relatively to the support. The coiled spring **47** effectively maintains the abutments on the socket in engagement with the lugs on the ring and secures the socket in its installed position. Thus the invention provides a simple and effective means for securing the fixture and the socket detachably to the support so that they may be removed readily without the use of any tools.

I claim as my invention:

1. A device of the character described comprising, in combination, a support having an opening therein, means on said support forming a plurality of projections extending into said opening, a substantially cylindrical lamp socket for screw base lamps having a plurality of J-shaped slots in its side surface opening to the rear end and arranged to receive said projections so that the socket may be secured to the support by a longitudinal movement in one direction followed by a rotary movement and a slight longitudinal movement in the opposite direction, and a coiled spring surrounding said socket and secured at one end thereto and arranged to engage said support to hold the socket with said projections in the locking portions of said slots so as to prevent rotary movement of the socket when a screw base lamp is inserted or removed.

2. A device of the character described comprising, in combination, a support having a socket receiving recess, a ring secured to said support having a plurality of flanges extending inwardly into said recess, a cylindrical lamp socket for screw socket lamps having an annular flange at its lamp receiving end and J-slots in its sides opening to the other end interengageable with said inwardly extending ring flanges for detachably securing the socket to the support and a coiled spring surrounding said socket and engaging said annular flange and said ring to hold the ring flanges in the locking portions of said slots.

DIRK G. SAAF.