Feb. 16, 1937. G. ARRAS 2,070,877

FIXTURE SUPPORT

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Fig. 1

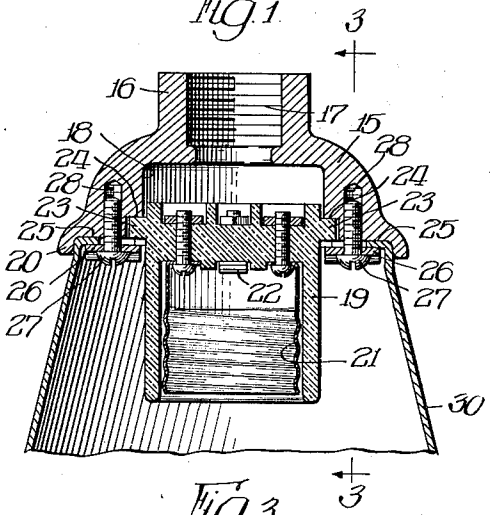


Fig. 2

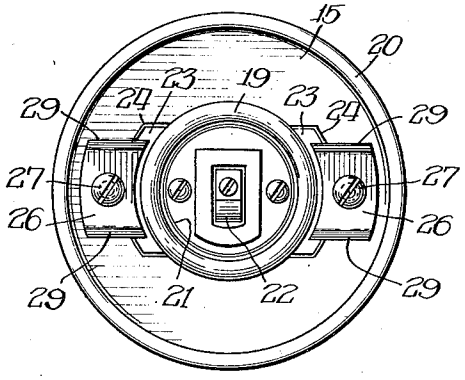


Fig. 3

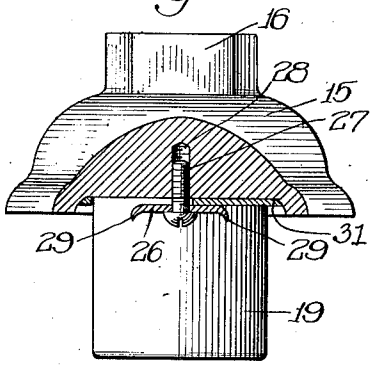


Fig. 4

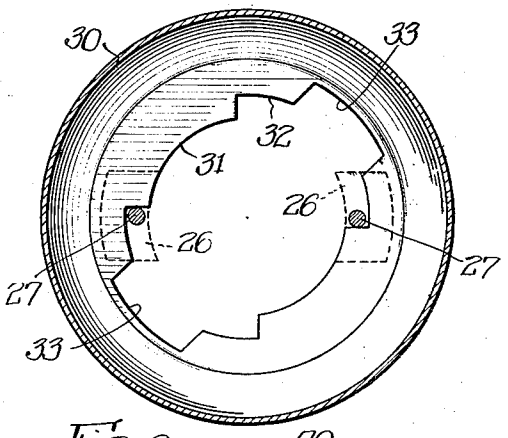


Fig. 5

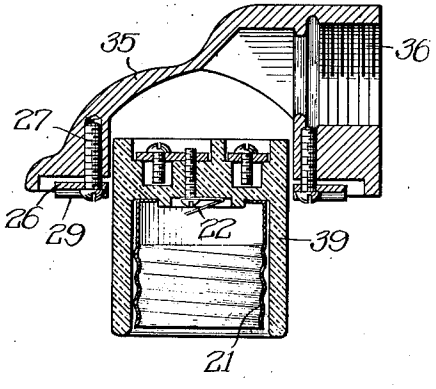
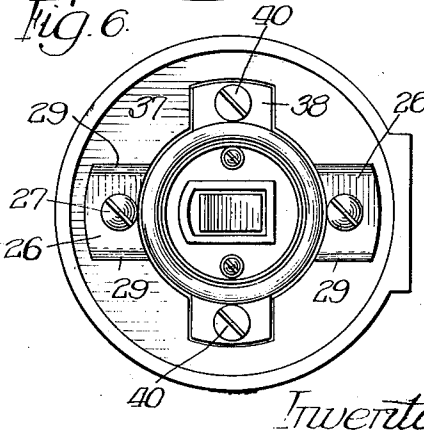


Fig. 6



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Fig. 7

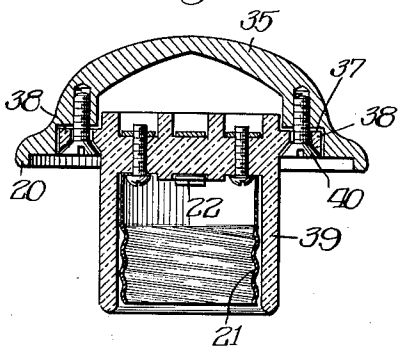


Fig. 8

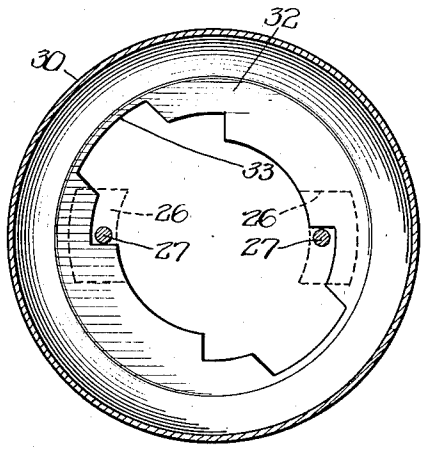


Fig. 9

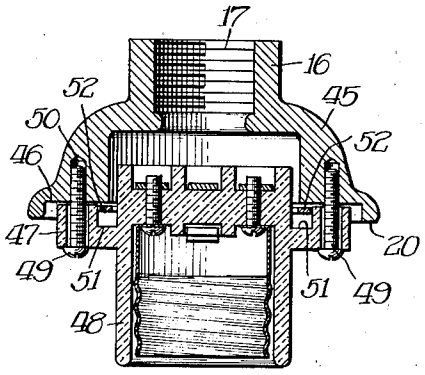


Fig. 10

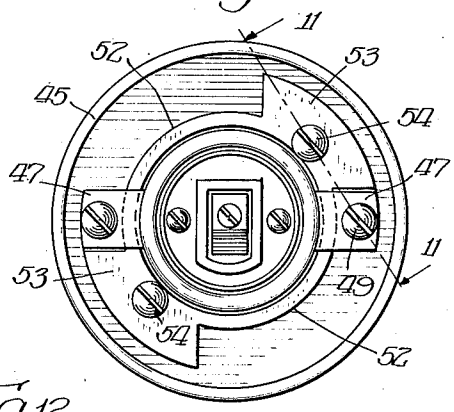


Fig. 11

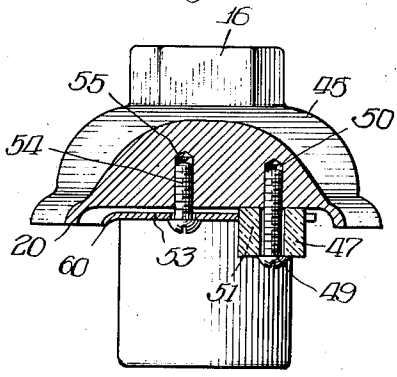
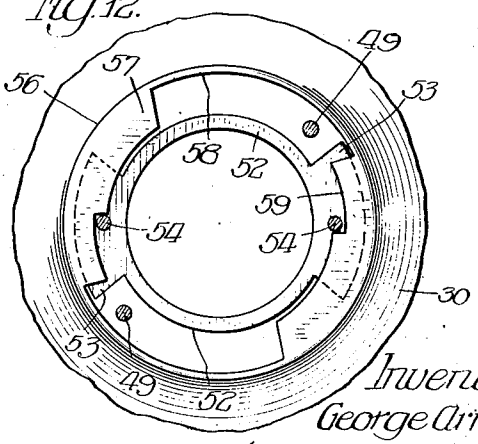


Fig. 12.



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Patented Feb. 16, 1937 2,070,877

UNITED STATES PATENT OFFICE

2,070,877

FIXTURE SUPPORT

George Arras, Chicago, Ill.

Application April 16, 1932, Serial No. 605,669

5 Claims. (Cl. 240—143)

This invention relates in general to fixture supports and has more particular reference to a combined socket and shade holder for electric lamps.

One of the principal objects of the invention is in the provision of a support for a lamp socket and for detachably securing a lamp shade or reflector thereto.

A further object of the invention is in the provision of a combined socket and shade holder in which the base of the shade is inserted over the socket or over securing means attached to the support and is given a partial rotation for locking it in a fixed and predetermined position with respect to the holder.

Other objects of the invention will appear hereinafter, the preferred forms of the invention being illustrated in the accompanying drawings.

In the drawings, Fig. 1 is a section of a fixture support illustrating one application of this invention;

Fig. 2 is a view of the under side of the holder with the shade omitted;

Fig. 3 is a section taken on the line 3—3 of Fig. 1;

Fig. 4 is a plan view at the top or upper end of the shade;

Fig. 5 is a section of a modification;

Fig. 6 is a bottom plan view of the structure of Fig. 5;

Fig. 7 is a section of the structure shown in Fig. 5 and at right angles thereto;

Fig. 8 is a top view of a shade as shown in Fig. 4 but at right angles thereto;

Fig. 9 is a section; and Fig. 10 a bottom view of another modification;

Fig. 11 is a section taken on the line 11—11 of Fig. 10; and

Fig. 12 is a top view of a shade or reflector as applied to the form shown in Fig. 9.

In erecting, changing or repairing electric fixtures it is desirable to have a lamp socket carried by a suitable support and to provide means for the ready attachment and removal of a shade or reflector with respect not only to the support but also to the socket.

The present invention provides a socket which is normally upheld by a support by means of fastening screws inserted either through projections on the socket itself, or through small holding plates which retain the socket in place, and a reflector shade, or shade holder which has a perforation in its base adapting it to be inserted over the socket and its projections with notches or projections in the flange of the base for engaging either under the projections of the socket itself, or under the clamping plates by which the socket is secured in the holder. In applying a shade holder of this kind it is customary to provide a notch embracing slightly more than 90° in the base so that the shade holder may be set at either limit of the notch and for either of two attaching devices, thus providing means for setting it in any one of four right angle positions and engaging it with the same fastening means.

Referring now more particularly to the drawings, a support 15 has an angular head 16 and an internal threaded portion 17 for attaching it at the end of a pipe, an internal recess 18 for receiving a lamp socket 19 and an overhanging or depending flange 20.

In the socket 19 is a lamp receiving shell 21, a central contact 22 and the ordinary fastening means for holding such parts in place. At the outside of the socket and near one end are opposite projections 23 adapted to be seated in a recess 24 in the holder 15 so that the outer face of these projections 23 is substantially flush with the contact face 25 of the holder.

A pair of opposite clamping plates 26 having rounded inner and outer edges are disposed to overlap the edges of the recesses 24 and also to overlap the socket projections 23 and are held in place by screws 27 threaded into openings 28 in the support 15. The opposite edges 29 of each plate 26 are turned outwardly to admit a shade holder more easily thereunder.

A shade holder 30 which is also understood to include a shade, reflector, and the like, has an inwardly turned flange 31 at its top or base in which are opposite notches 32 adapted to embrace an angle of slightly more than 90°, as shown more clearly in Fig. 4, to partially overlap the clamping plates 26 and the extremities of the notches engaging the fastening screws 27 at either limit of movement of the shade. Also extending from each notch 32 is a recess 33 of such a size and shape that the entire opening in the base or end of the shade holder will pass not only over the socket but also over the clamping plates 26 so that in order to engage the shade holder it is necessary only to apply the shade holder over the socket and the clamping plates 26, to give the shade holder a partial turn in either direction and if the screws 27 are not drawn up tight in their openings the notches 32 will engage under the plates 26, thus confining the shade holder in place, and in which it may be tightly fastened by thereafter drawing up the clamping plate 26 by means of the screws 27. To

release the shade holder, this operation is reversed.

A somewhat similar construction is shown in Figs. 5 to 8 except that the holder **35** has a side attachment opening **36** and recesses **37** for receiving somewhat larger projections **38** of a lamp socket **39**. Through these projections **38** separate fastening screws **40** are inserted directly into the holder **35** leaving the clamping plates **26** and their fastening screws **27** free for separate engagement with the shade holder **30** which may be adjusted or set at either limit of its slot **32** so that the shade holder may be set in any one of four angular positions at 90° from each other. In this form the socket may be held rigidly in connection with the holder at all times and the clamping plates **26** engage only the shade holder.

A somewhat different form of clamping device is shown in Figs. 9 to 12 and comprises a support **45** having a flat contact face **46** adapted to engage projections **47** of a lamp socket **48** held tightly in place by screws **49** threaded into openings **50** of the support **45**. At the under side of each projection **47** is an under cut recess **51** adapted to receive a thin connecting rim **52** which joins opposite clamping plates **53**, the under cut recesses **51** being provided to permit the free and independent movement of the clamping plates away from the surface **46** of the support **45** between the lamp socket projections **47**. For attaching the clamping plates **53** to the support **45**, fastening screws **54** are inserted therethrough into an opening **55** of the support, and as shown more clearly in Fig. 11, the fastening screws **54** may be loosened or tightened independently of the socket fastening screws **49** but the clamping plates **53** cannot be entirely disengaged without removing the socket screws **49**.

A shade holder **56** for this form of the invention has a base **57** with a large notch **58** which will embrace one of the clamping plates **53** and a socket projection **47** and with a notched portion **59** at one end of the recess for engaging one of the socket screws **49**. As this shade holder is adapted to be turned in one direction only, one edge **60** of each of the clamping plates **53** is upturned so that the shade holder will slide easily thereunder. This shade holder may be adjusted in either one of two opposite positions, both engaged by the clamping plates **53** and the fastening screws **54**.

In all of these forms the shade holder is engaged and disengaged without removing the lamp socket and in the forms shown by Figs. 5 to 12 the lamp socket may be tightly attached at all times. To remove the clamping plates of the form shown in Figs. 9 to 12, it is necessary to loosen the socket from its engagement with the support in order to apply and remove the shade holder and to clamp it tightly in place. The socket in each case is fixed in position in its holder and the shade holder is moved relatively thereto in a direction to engage it under the clamping plates and thereafter to tightly lock it in place.

I claim:

1. The combination with a support; of a socket mounted therein having side projections; fastening means independent of the socket including clamping plates; and a shade having notches and projections in its base insertable over the socket and the plates and movable in either direction to engage its projections between the plates and the support.

2. The combination with a support; of a lamp socket having projections and means to secure it by the projections in the support; clamping plates connected in the support and movable independently of the socket projections; and a shade insertable over the socket and its projections and over said plates and rotatable in the support to engage under the clamping plates.

3. The combination with a lamp socket having lateral projections, of a support therefor having recesses to receive the projections, means engaging the projections for securing the socket in the support, clamping plates outside of the socket and means for securing them to the support, and a shade having an opening in its base insertable over the socket and over the clamping plates and having parts engageable between the plates and the support when it is rotated relatively thereto.

4. In a fixture support, a supporting member, a lamp socket seated in the member, clamping means comprising plates extending outside of the socket and having fastening screws threaded into the member, and a shade having an opening in its base insertable over the socket and the clamping means, with a recess forming notched projections which engage below the plates in either direction of rotation of the shade relative to the member, the screws of the clamping means engaging and limiting the projections in the base in both directions of rotation thereof.

5. A structure in accordance with claim 4, in which the opposite edges of the clamping plates are turned outwardly so that the edges of the shade will engage more freely thereunder when the shade is rotated for such engagement.

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