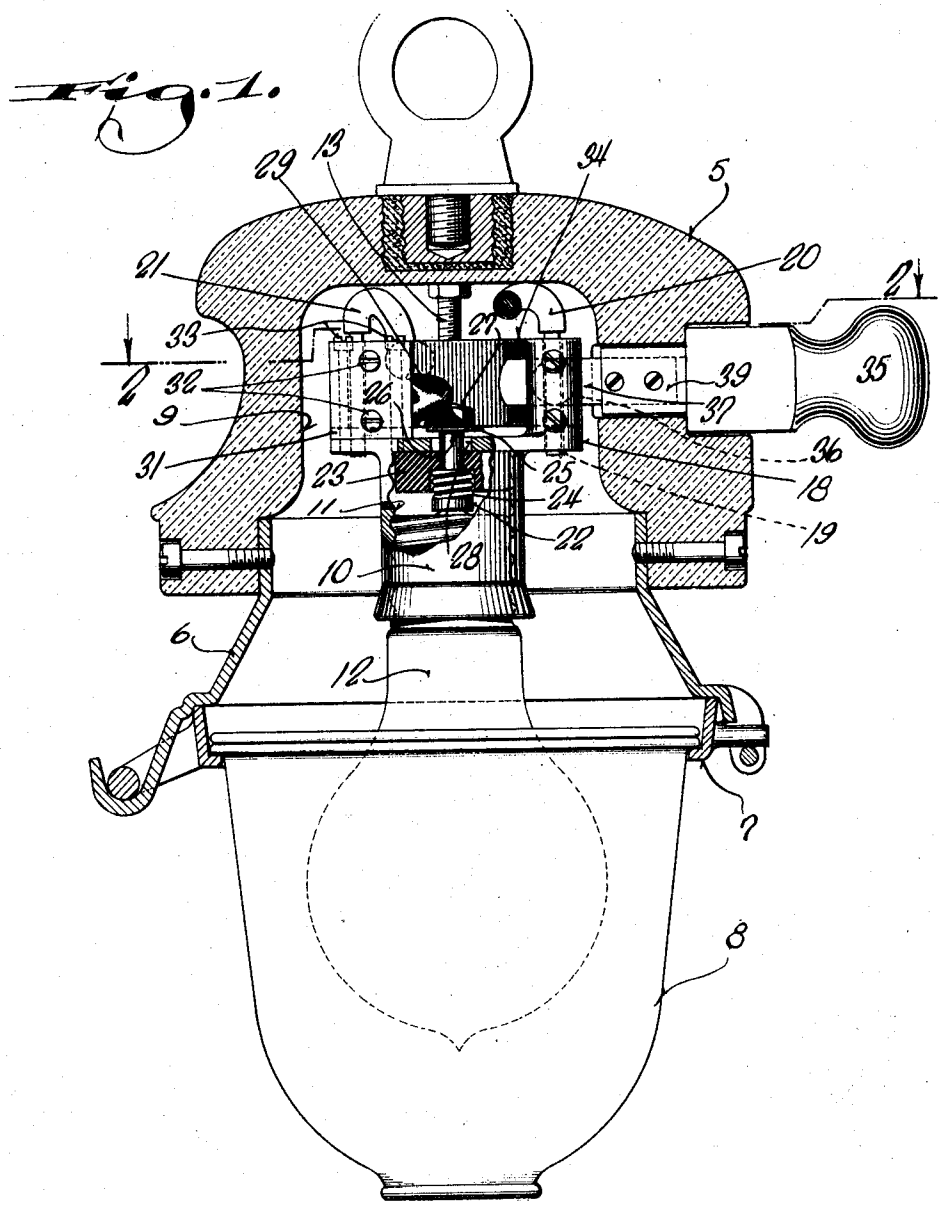
Aug. 23, 1932. A. G. STEINMAYER 1,873,500

LIGHTING FIXTURE

Filed Oct. 4, 1926 2 Sheets-Sheet 1

Fig. 1.



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Fig. 2.

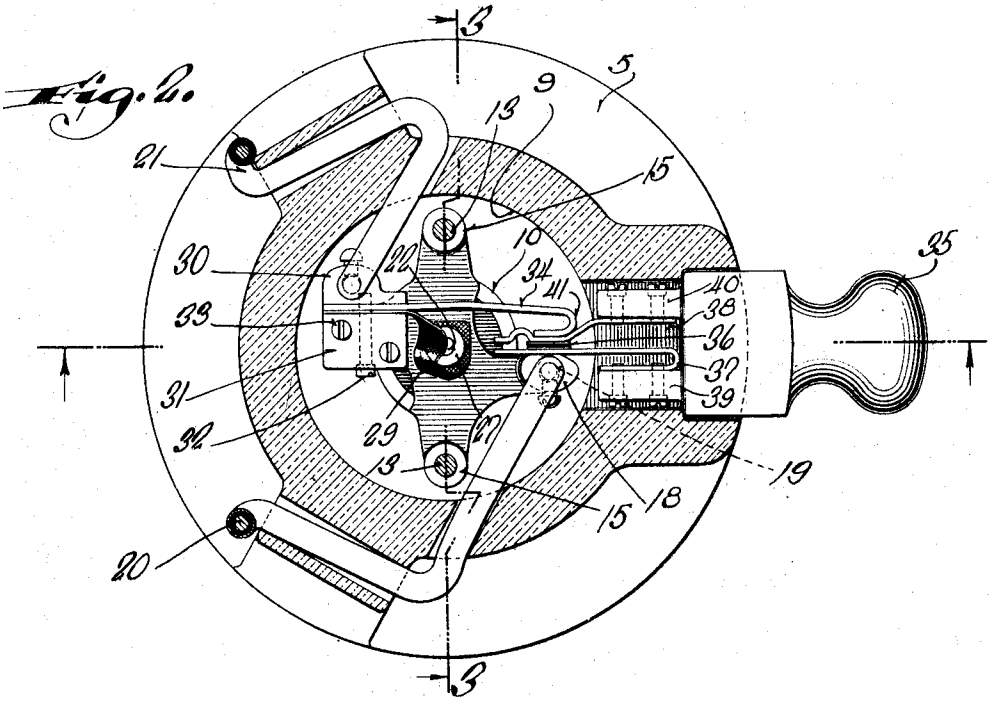
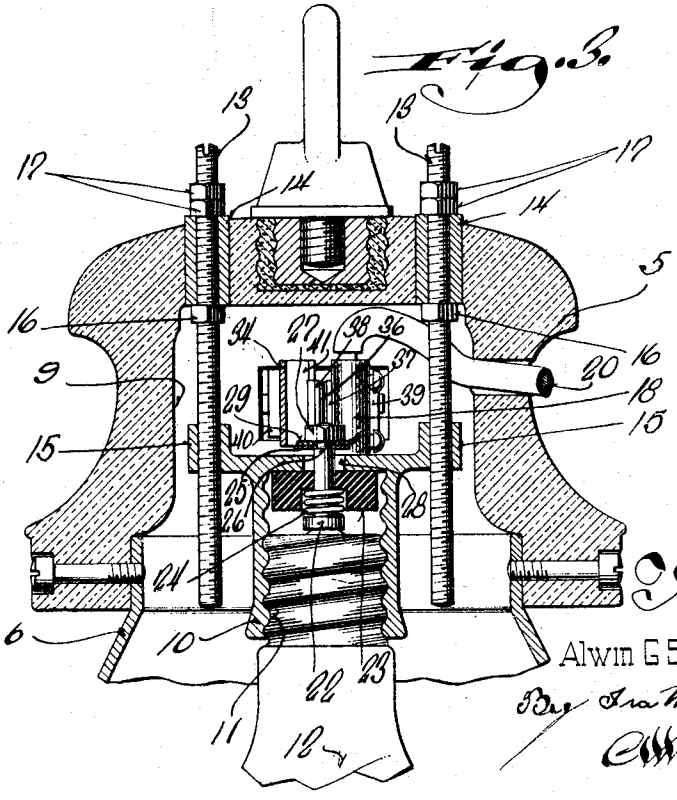


Fig. 3.



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Patented Aug. 23, 1932

1,873,500

UNITED STATES PATENT OFFICE

ALWIN G. STEINMAYER, OF MILWAUKEE, WISCONSIN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO LINE MATERIAL COMPANY, OF SOUTH MILWAUKEE, WISCONSIN, A CORPORATION OF DELAWARE

LIGHTING FIXTURE

Application filed October 4, 1926. Serial No. 139,413.

This invention relates to certain new and useful improvements in lighting fixtures and refers more particularly to that type of fixture particularly adapted for use in series circuits, such as commonly employed in street lighting.

Fixtures of this type now in use are objectionable in that they have numerous mechanical joints which frequently cause considerable interference and disturbances to radio reception due to their failure, and this invention has as an object the provision of an improved fixture of the character described which is so constructed as to prevent the broadcasting therefrom of radio energy of a character to be disturbing to nearby radio receivers.

Another object of this invention resides in the provision of an improved fixture of the class described wherein the lamp receptacle is formed entirely of metal thus greatly increasing the strength thereof.

Another object of this invention resides in the provision of an improved fixture of the character described, wherein the usual means for maintaining the circuit closed upon failure of the lamp, is independent of the lamp receptacle.

A more specific object of this invention resides in the provision of an improved lighting fixture especially adapted for use in series circuits which includes an all metal lamp receptacle, having a lamp short circuiting means held in inactive position by a cut-out film and which is inserted through the side of the housing or body member.

And a further object of this invention resides in the provision of an improved lighting fixture for use in series circuit which has means whereby the mechanical connections or joints are reduced to a minimum and which is provided with means whereby the lamp may be removed without disturbing the cut-out film carrying plug, and vice versa.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the hereindisclosed invention may be made as come within the scope of the claims.

In the accompanying drawings, I have illustrated one complete example of the physical embodiment of my invention constructed according to the best mode I have so far devised for the practical application of the principles thereof, and in which:

Figure 1 is a view, partly in section and partly in elevation, taken on the plane of line 1—1 of Figure 2;

Figure 2 is a cross sectional view taken on the plane of the line 2—2 of Figure 1, and

Figure 3 is a sectional view taken through Figure 2 on the plane of the line 3—3.

Referring now more particularly to the accompanying drawings in which like numerals designate like parts throughout the several views, the numeral 5 designates a lamp hanger or housing preferably formed of porcelain or other suitable insulating material and having a refractor holder 6 suitably secured thereto and provided with means 7 for removably suspending or retaining a refractor 8.

The housing 5 is apertured, as at 9, to provide a cup-shaped recess in which a lamp receptacle 10 is adjustably mounted. The receptacle 10, which is formed entirely of metal is interiorly threaded, as at 11, to receive the threaded base of a lamp 12. Longitudinal adjustment of the receptacle is obtained by supporting the same from two threaded studs 13 entering the housing through bushings 14 in which they are rotatable, the bushings being cemented or otherwise secured in the roof of the housing. The lower ends of the studs are threaded in a pair of lugs 15 carried by the receptacle and nuts 16 on the studs abut the inner ends of the bushings to prevent upward movement of the receptacle. Downward movement of the studs and receptacle is prevented by nuts 17 adapted to bind against the upper ends of the bushings.

Hence it will be seen that to adjust the position of the receptacle, it is necessary only to loosen nuts 17 and turn the studs, which have their outer ends screw slotted, to thread

the same into or out of the lugs 15 and raise or lower the receptacle, as desired.

By making the receptacle 10 entirely of metal, preferably brass or other material having a high coefficient of conductivity, many of the undesirable joints are eliminated as will be readily seen. The receptacle has a terminal lug 18 cast integral therewith which is provided with an aperture 19 to receive one side of a line 20 adapted to be electrically connected with the threaded shell or outside terminal of the lamp through the body of the receptacle. The other lamp terminal, which is the center contact, is adapted to be electrically connected with the other side of the line 21 through a plunger or contact 22 mounted in an insulating block 23.

The construction involving the plunger 22 consists of a spring 24 confined between the enlarged head of the plunger forming the contact portion thereof and the insulating block 23, to yieldably urge the contact head into engagement with the center lamp contact. Outward movement of the plunger is limited (when the lamp is removed) by a contact washer 25 impinged between a shoulder 26 and a nut 27 threaded on the reduced upper end of the plunger. The upper end of the plunger is passed through an aperture 28 in the receptacle of a diameter greater than that of the plunger but smaller than the diameter of the washer 25. When the lamp is in place, no contact will be made between the plunger and the receptacle body except through the lamp filament and when the lamp is removed, the washer engages the receptacle body at the periphery of the aperture to maintain the circuit closed.

The plunger 22 is electrically connected with the line 21 through a flexible or ribbon conductor 29 having one end impinged between washer 25 and nut 27 and its other end electrically connected with a terminal block 30 to which the line 21 is secured. The terminal lug 18 being integral with the receptacle body, it is necessary that the other side of the service line and its terminal block be insulated from the receptacle. Hence the terminal block 30 is secured to an insulator block 31, by screws or other means 32, and the insulator block is secured to the receptacle by screws 33. The adjacent end of the flexible conductor 29, together with one end of a spring contact member 34, to be later described, is impinged between the terminal 30 and insulator block 31.

Thus it will be seen that with a lamp in place, the center contact thereof moves the plunger against its spring 24 and raises the washer 25 out of engagement with the receptacle body. The current then passes from line 20, through terminal lug 18, through the body of the receptacle 10 to the outside or threaded terminal of the lamp, through the lamp filament, not shown, and out of the center contact, through the plunger 22, the flexible conductor 29 and out to the other side of the line 21 through the contact block 30.

Means, now about to be described, are provided to electrically bridge the lines 20 and 21 and insure maintaining the circuit closed upon failure of the lamp, said means being carried by a plug 35 adapted to be inserted into the housing through an aperture therein. A cut-out film or pellet 36 is mounted between a pair of spring contact clips 37 and 38 secured to projections 39 and 40 carried by the plug 35 as illustrated, the cut-out pellet normally insulating the clips 37 and 38 from each other by being punctured to bridge the clips upon disruption of the lamp filament. The position of the aperture through which the plug 35 is inserted is such that the ends of the contact clips 37 and 38 engage between the contact lug 18 and the end 41 of the spring member 34 to normally electrically disengage the same.

From the foregoing description taken in connection with the accompanying drawings, it will be apparent to those skilled in the art to which an invention of this character appertains that I have provided a lighting fixture for use in series circuits in which the joints have been reduced to a minimum to eliminate interference with radio reception and in which the cut-out film is carried by means entirely apart from the receptacle so that the same may be removed without disturbing the lamp.

What I claim as my invention is:

1. A street lighting fixture comprising a body member, a lamp receptacle formed of conductive material and adapted to receive an incandescent lamp, means adjustably mounting the lamp receptacle within the body member, a terminal lug extended from the receptacle, lines connectible with a source of electrical energy, means connecting one line with the lug and consequently with the receptacle whereby it is connected with the lamp filament through the receptacle, a terminal member carried by the receptacle and insulated therefrom to which the other line is electrically connected, means connecting the terminal member with the other side of the lamp filament, spring means carried by the terminal member and yieldably urged into engagement with the lug, and a film cut-out normally maintaining said spring means spaced from the lug and out of electrical connection therewith.

2. A lighting fixture of the character described comprising a hollow insulating supporting body, a unitary metal lamp receptacle adjustably mounted within the body, a lug formed integral with the receptacle and projecting from one surface thereof, means carried by said lug for attaching a supply line thereto whereby one side of the filament of a lamp received in the receptacle is con-

nected with the supply line through the body of the receptacle, a second lug projected from said surface of the receptacle but insulated therefrom, means carried by said second lug for attaching a second supply line thereto, means electrically connecting said second lug with the other side of a filament of the lamp received in the receptacle, and a spring blade carried by one of said lugs with its free end yieldably urged to engagement with the other lug, said free end of the spring blade being normally insulated from said other lug by an electric cut-out which breaks down upon failure of the lamp.

In testimony wheereof I hereunto affix my signature.

ALWIN G. STEINMAYER.