July 7, 1931. F. B. NIGHTINGALE 1,813,863

HANGER FOR SUSPENSION LIGHTING FIXTURES

Filed May 27, 1930

FIG. 1.

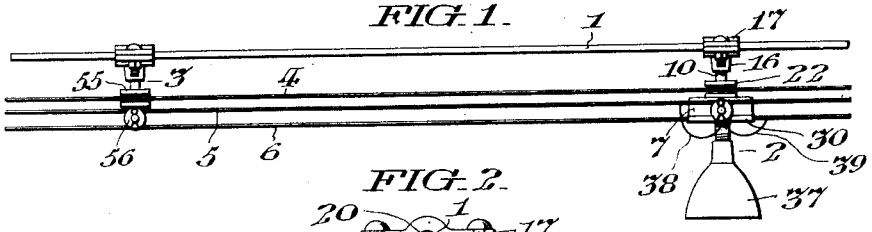



FIG. 2.

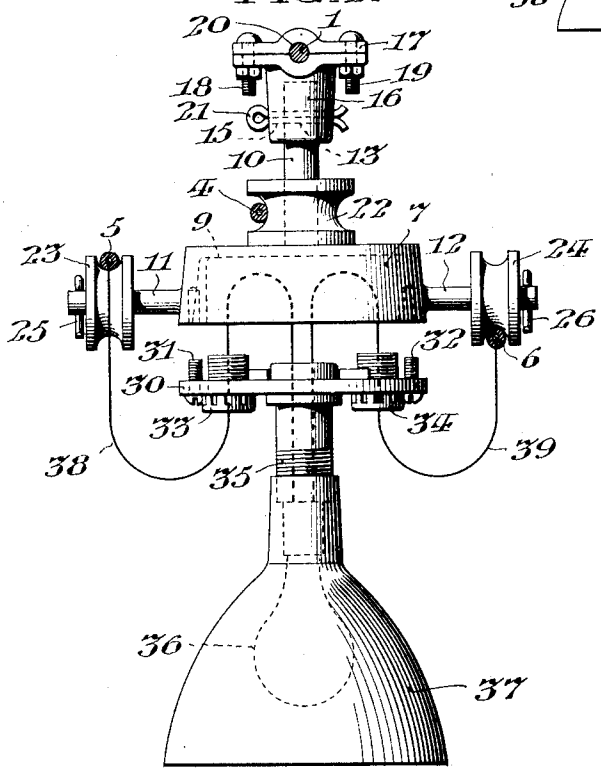
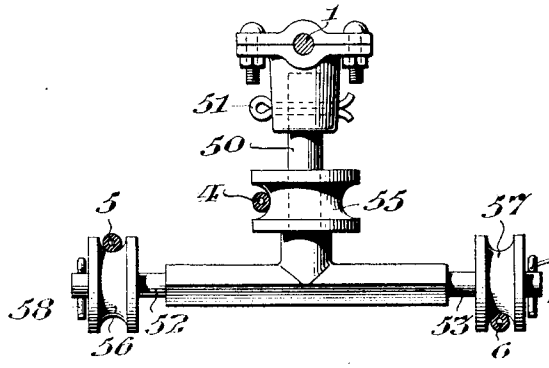



FIG. 3.




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# UNITED STATES PATENT OFFICE

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## HANGER FOR SUSPENSION LIGHTING FIXTURES

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My invention relates particularly to that class of portable electric lighting fixtures that include a suspended lamp and reflector that may be employed in lighting out-of-door places, such as tennis courts, bowling greens, auto parks, or any open-air places where artificial lighting is desired, and is especially directed to a portable hanger having line wire supporting means and affording protective means for the connections between said line wires and the suspended lamp.

The principal objects of my invention are to provide a hanger of the type contemplated, comprising a weather-proof housing that may be employed as a junction box if desired, through which the electric lamp connecting leads may pass and the electrical connections be adequately protected from weather conditions.

Other objects of my invention are to provide a hanger formed of relatively separable sections or parts that may be readily assembled, taken apart and replaced or conveniently adjusted, and of such simplified construction as to be economical to manufacture.

Further objects of my invention are to provide wire spacing hangers of a type similar to the lamp supporting hanger that may cooperate therewith to maintain the line wires properly supported and spaced with respect to said lamp supporting hanger that may cooperate therewith to maintain the line wires properly supported and spaced with respect to said lamp supporting hanger.

My invention comprehends such a hanger provided with clamping means by which it may be readily engaged with or disengaged from a messenger wire or supporting cable, or by which it may be longitudinally adjusted along said wire or cable.

Specifically stated, the form of my invention as hereinafter described comprises an inverted housing detachably connected with a supporting clamp structure, and provided with means carrying a plurality of porcelain insulators with which service wires may be attached and thereby supported, and a cap or bottom cover plate detachably engaged with said housing to close the chamber therein and provided with insulating bushings through which connecting leads may pass from the line wires to a lamp carried by said cap or bottom cover plate and disposed in a reflector also attached to said cap.

My invention also includes all of the various novel features of construction and arrangement as hereinafter more definitely specified.

In the accompanying drawings, Figure 1 is a side elevational view showing assembled a lamp hanger and two associated wire spacing hangers suitably disposed along a messenger wire or supporting cable and carrying the line wires that are adapted to supply electric current to the lamp on said lamp hanger; Fig. 2 is a front elevational view of a lamp hanger including the reflector and the lamp therein shown in dotted lines, certain parts of the structure being slightly separated for convenience of illustration; Fig. 3 is a front elevational view of the wire spacer which is arranged to be associated with the lighting fixture to maintain the line wires properly spaced.

In said figures, the suspended messenger wire or cable 1 conveniently supports the lighting fixture 2 and the wire spacers 3, and said fixture 2 and spacers 3 carry the line wires 4, 5 and 6, all as indicated in Figure 1.

As shown in Fig. 2, the lighting fixture comprising the hanger is provided with the housing 7 affording the chamber 9 and having the upwardly projecting stem 10 and the laterally projecting arms 11 and 12. The stem 10 is provided with an aperture 13 which registers with an aperture 15 in the grooved body 16 of the clamp having the grooved keeper 17 which when engaged with the clamp body 16 by the bolts 18 and 19 provides an aperture 20 formed by the grooves therein through which the suspended messenger wire or cable 1 extends. Said stem 10 is provided with an insulator 22 and the arms 11 and 12 are respectively provided with insulators 23 and 24 held thereon by cotter-pins 25 and 26 respectively.

The housing 7 is inverted so that the chamber 9 opens downwardly and may be closed by the closure comprising the cap or cover plate 30 which may be conveniently attached

to the housing by the screws 31 and 32 extended into suitably provided threaded sockets, and said closure is provided with the insulation bushings 33 and 34 and has the depending threaded conduit 35 to which may be attached the lamp 36 and reflector 37, said lamp being provided with the connecting leads 38 and 39 extending upwardly through the conduit 35 into the chamber 9 out through the bushings 33 and 34 to connection with the line wires 5 and 6.

It will be obvious that by the structure thus contemplated the connections that may be made within the chamber 9 are weather-proof and that the connections 38 and 39 may be continuous or a splicing may be effected within the chamber 9, if desired, and the housing thereby forms a junction box.

The wire spacer shown in Fig. 3 is provided with a clamp structure such as shown supporting the lamp fixture in Fig. 2, and suspended therefrom is the inverted T-shaped frame comprising the stem 50 connected with the clamp structure by the cotter-pin 51 and having the arms 52 and 53, the stem 50 being provided with the insulator 55 and the arms carrying the insulators 56 and 57 respectively retained thereon by the cotter-pins 58 and 59.

Like the lighting fixture, the wire spacers are attached by their clamps to the suspended messenger wire or cable 1, and the line wires 4, 5 and 6 are attached to the insulators 55, 56 and 57 on the stem 50 and arms 52 and 53 respectively.

It will be obvious that the connecting wires, cut in about three-foot lengths, may be attached to the socket terminals and extended through the conduit 35 into the chamber 9 in the housing 1, then out through the insulated bushings 33 and 34 and connected with the line wires 5 and 6.

My invention is advantageous in that the lighting fixture and its associated wire spacers may be readily attached to or detached from the suspended messenger wire or cable, or may be adjusted longitudinally thereon as desired, and the connections for the lamp may be readily made or adjusted and be protected from detrimental weather conditions.

I do not desire to limit my invention to the precise details of construction and arrangement as herein set forth, as it is obvious that various modifications may be made therein without departing from the essential features of my invention as defined in the appended claims.

Having thus described my invention, I claim:

1. A suspension lighting fixture comprising a hanger having a housing opening downwardly and provided with a supporting stem and line wire supporting means, means connecting said stem with a messenger wire or suspended cable, a closure plate for said opening provided with apertures, and a lamp depending from said closure having connecting wires leading into said housing, through said apertures and arranged to be respectively connected with the line wires carried by said supporting means.

2. A suspension lighting fixture comprising a hanger having a housing opening downwardly and provided with a supporting stem and line wire supporting means, a clamp connecting said stem with a messenger wire or suspended cable, a closure plate for said opening provided with apertures having insulation bushings, and a lamp depending from said closure having connecting wires leading into said housing, through said apertures and arranged to be respectively connected with the line wires carried by said supporting means.

3. A suspension lighting fixture comprising a hanger having a housing forming a chamber opening downwardly, and having a supporting stem and line wire supporting arms, insulators removably carried by said arms, a clamp removably attached to said stem and arranged to be engaged with a suspended messenger wire or cable, a readily adjustable closure for said chamber provided with insulated apertures, and an electric lamp carried by said closure and having connecting leads extending into said chamber, through said apertures and arranged to be connected with the line wires carried by said supporting arms.

4. A suspension lighting fixture comprising a hanger having a housing forming a chamber opening downwardly, and having a supporting stem and line wire supporting arms, insulators removably carried by said arms, a clamp removably attached to said stem and arranged to be engaged with a suspended messenger wire or cable, a readily adjustable closure for said chamber provided with insulated apertures and having a depending conduit, an electric lamp carried by said conduit and having connecting leads extending through said conduit, into said chamber and out through said apertures and arranged to be connected with the line wires carried by said supporting arms, and a reflector carried by said conduit and embracing said lamp.

5. A suspension lighting fixture comprising a hanger having a housing affording a chamber opening downwardly and having a supporting stem and line wire supporting arms, and a closure for said chamber provided with insulated apertures and having a depending conduit.

6. A suspension lighting fixture comprising a hanger having a housing affording a chamber opening downwardly and having a supporting stem and line wire supporting arms, and a closure for said chamber provided with insulated apertures and having a

depending conduit, and an attaching structure comprising a clamp body detachably engaged with said stem, and having an adjustable keeper by which it may be secured to a messenger wire or cable.

7. The combination with a suspended wire or cable, of a suspension lighting fixture comprising a hanger having a housing affording a chamber opening downwardly and having a supporting stem and line wire supports, insulators on said stem and supports, a closure for said chamber provided with apertures and having a depending conduit, an attaching clamp detachably engaging said hanger with said suspended wire or cable, line wire spacers associated with said suspension lighting fixture and comprising an attaching clamp, an inverted T-shaped structure having insulators on the stem and arms thereof, line wires attached to the insulators on said fixture and spacer, and a lamp carried by said fixture having connecting leads extended through said conduit, into said chamber and out through said apertures and connected with said line wires.

In witness whereof, I have hereunto set my hand this twenty-first day of May, A. D. 1930.

FRANCIS BYRON NIGHTINGALE.