

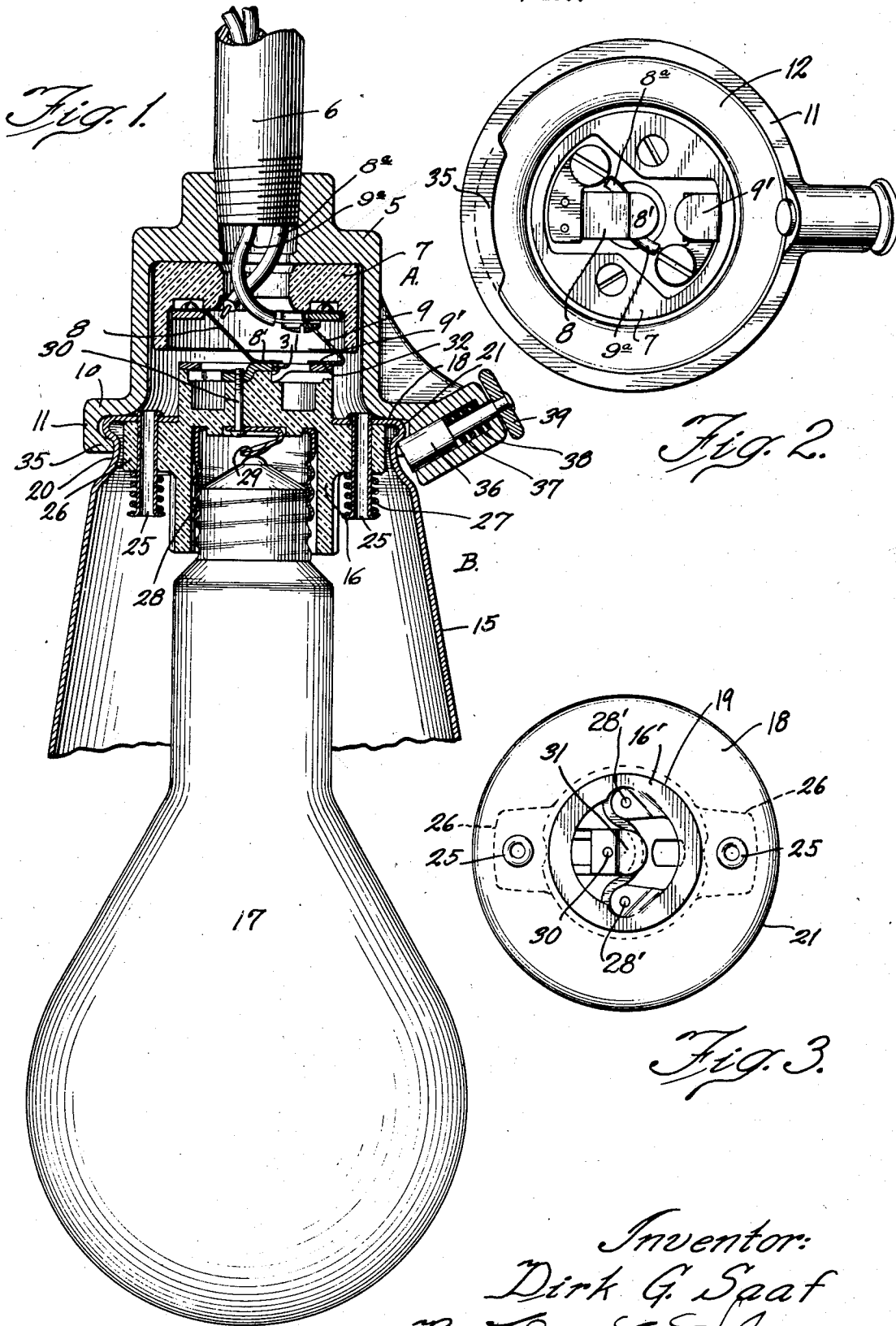
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LIGHTING FIXTURE

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LIGHTING FIXTURE

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The invention relates more particularly to lighting fixtures having parts readily detachable to facilitate installation, cleaning and replacement. It is an object of the invention to provide a new and improved fixture of this character embodying a supporting means and a detachable reflector and lamp holding means so that the reflector and lamp may be readily detached as a unit from the supporting means.

Another object is to provide a novel lighting fixture wherein the reflector holder and lamp socket are detachable as a unit from the supporting structure, together with new and improved means for securing the detachable unit to the supporting structure.

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 vertical central section through a preferred form of the invention.

Fig. 2 is a view looking at the bottom of the supporting structure.

Fig. 3 is a view looking at the top of the detachable unit.

While I have shown in the drawing and shall herein describe in detail a preferred embodiment of the invention, it is to be understood that I do not thereby intend to limit the invention to the specific form and arrangement shown, but aim to cover all modifications and alternative constructions falling within the spirit and scope of the invention as expressed in the appended claims.

As illustrated in the drawing, the invention comprises generally a supporting structure or unit A and a detachable unit B, the supporting structure comprising an inverted cup-shaped member 5 adapted at its upper end for connection to a conduit 6, although it is to be understood that various forms of attaching or mounting means may be provided as the particular type of installation may require. A wiring base 7 is secured within the member 5 and carries resilient contacts 8 and 9 to which line wires 8^a and 9^a are connected. As illustrated most clearly in Fig. 2, the contact 8 has its projecting end 8' positioned centrally of the member 5 and the contact 9 has its projecting end 9' disposed radially therefrom. The lower end of the member 5 is preferably provided with a flange having an outwardly extending portion 10 and a downwardly extending portion 11 forming an annular recess 12 into which the upper end of the unit B is adapted to fit.

In the preferred form of the invention, the detachable unit B comprises a tubular holder 15 which may be adapted at its lower end for supporting a reflector or other device (not shown), a lamp socket 16 and a lamp 17. The holder has an inwardly extending flange 18 at its upper end leaving a circular opening 19 through which a cylindrical portion 16' of the lamp socket projects. The wall of the holder 15 is preferably crimped inwardly at 20 so as to provide an annular flange or bead 21 which fits into the recess 12 of the supporting member 5.

The socket 16 is preferably mounted on the holder 15 in a yieldable manner. As illustrated most clearly in Fig. 1, tubular rivets 25 extend through apertures in the flange 18 of the holder and through ears 26 formed integrally with the socket. These rivets are upset at their upper and lower ends, coiled springs 27 being inserted between the lower ends of the rivets and the ears 26. The socket 16 has the customary screw threaded contact 28 and a resilient center contact 29, the center contact being connected by means of a screw device 30 to a contact 31 positioned centrally of the upper end of the socket so as to be engageable with the wiring base contact 8'. The contact 28 is suitably connected to a ring contact 32 carried adjacent the periphery of the upper end of the socket by screw devices 28' (Fig. 3) so as to be engageable with the wiring base contact 9' irrespective of the angular position of the holder.

For the purpose of securing the unit B detachably to the supporting structure A, an intumed ledge 35 may be formed on the supporting member 5 so as to underlie a portion of the bead 21. This ledge and head form interengaging means functioning as a hinged joint which is readily separable when the detachable unit is swung away from its normal installed position to permit complete removal of the detachable unit from the supporting structure. A latch device is preferably provided on the opposite side of the supporting member. As illustrated herein a locking member or pin 36 is slidably mounted in an inclined bore 37, and is normally spring pressed outwardly by means of a coiled spring 38, the outward movement of the pin being limited by a disk-like operating handle 39. The end of the pin 36 projects into the recess 12 so as to underlie the bead 21, the angle at which the bore 37 is positioned being such that when the unit B is installed as illustrated in Fig. 1 it is necessary to withdraw the pin 36 manually before the ad-

jacent edge of the holder 15 may be swung downwardly.

In installing the detachable unit B it is merely necessary to tip the detachable unit while inserting a portion of the bead 21 over the ledge 35 and thereafter swinging the unit so that the bead at the opposite side of the holder passes up over the end of the pin 36, the pin yielding against the force of the spring. The contacts 31 and 8' are positioned so that they engage each other during this operation and similarly the contacts 32 and 9' engage each other, the contact 32 being preferably in the form of a ring so as to engage properly with the contact 9' irrespective of the angular position of the unit B with respect to the supporting structure A about a vertical axis.

It will be readily apparent that by withdrawing the pin 36, the unit B, comprising the holder 15 and the parts secured thereto, may be readily detached from the supporting structure. This not only facilitates installation of the supporting structure, since the wires may then be drawn into the member 5 and properly attached to the contacts 8 and 9, but thereafter the fixture holder and lamp socket may be readily detached for purposes of cleaning or replacement.

I claim as my invention:

1. A lighting fixture comprising a supporting unit and a detachable reflector unit, said supporting unit comprising an inverted cup-shaped member and a wiring base in said member having wiring terminals and a pair of yieldable contact members, said reflector unit comprising a tubular holder having an annular flange at its upper end adapted to be positioned against the lower portion of the supporting unit, a lamp socket permanently carried on said holder and having a portion projecting upwardly therefrom provided with contacts adapted to engage the contact members of said wiring base to establish a circuit when the holder is installed in operative position, and means for detachably securing the holder to the supporting unit including a spring pressed pin slidably mounted on the supporting member adapted to engage under the flange of the holder, said pin yielding when the holder is inserted and being withdrawable manually to detach the holder.

2. A lighting fixture comprising a supporting unit and a detachable reflector unit, said supporting unit comprising an inverted cup-shaped member and a wiring base in said member having circuit terminals, and a pair of yieldable contact members, said reflector unit comprising a tubular holder having an annular flange at its upper end adapted to be positioned against the lower portion of the cup-shaped member, a lamp socket permanently carried on said holder and having a portion projecting upwardly therefrom provided with contacts adapted to engage the contact members of said wiring base to complete the circuit therebetween when the holder is installed in operative position, and means for detachably securing the holder to the cup-shaped member including means extending from the lower edge of said supporting member arranged to engage under said flange at one side of said holder so as to form a hinged joint readily sep-

arable when the holder is swung away from its normal installed position to permit complete removal of the holder from the cup-shaped member, and a latch device comprising a spring pressed pin slidably mounted on the opposite portion of the cup-shaped member adapted to engage under the flange of the holder.

3. A lighting fixture comprising a supporting unit and a detachable unit, said supporting unit comprising a supporting member and a wiring base on said member having circuit terminals and a pair of laterally spaced contact members connected thereto, said detachable unit comprising a tubular holder adapted to be positioned against the lower portion of the supporting member, a lamp socket permanently carried on said holder and having a portion projecting therefrom provided with laterally spaced contacts adapted to engage the contact members of said wiring base to complete the circuit therebetween when the holder is installed in operative position, and means for detachably securing the holder to the supporting member comprising interengaging means on said supporting member and holder arranged to form a hinged joint readily separable when the holder is swung away from its normal installed position to permit complete removal of the holder from the supporting member, and a latch device comprising a spring pressed pin slidably mounted on the supporting member adapted to engage under the flange of the holder, said pin yielding when the holder is inserted and being withdrawable manually to detach the holder.

4. A lighting fixture having, in combination, a supporting unit comprising an inverted cup-shaped housing and a wiring base in said housing provided with a pair of readily engageable contacts, a detachable unit comprising a tubular holder and a lamp socket permanently secured to said holder and having contacts adapted to engage said wiring base contacts to complete a circuit for the fixture when said detachable unit is secured to said supporting unit, and means for securing the detachable unit to the supporting unit comprising interengaging means on said units at one side thereof forming a hinged joint, and a latch device opposite said joint.

5. A lighting fixture having, in combination, a supporting unit comprising an inverted cup-shaped housing and a wiring base in said housing provided with a pair of readily engageable contacts, a detachable unit comprising a holder and a lamp socket secured permanently to said holder and having contacts adapted to engage said wiring base contacts when said detachable unit is secured to said supporting unit to complete a circuit between said units, said contacts being readily disengageable when the detachable unit is removed, and means for securing the detachable unit to the supporting unit comprising interengaging means on said units at one side thereof forming a hinged joint readily separable when the holder is swung from its normal installed position to permit the complete removal of the detachable unit from the supporting unit, and a latch device opposite said joint automatically engaged when the holder is swung to its operative installed position.

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