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ELECTRIC LIGHT FIXTURE

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This invention relates to electric light fixtures which employ a metal suspension crown from which the lamp receptacle, reflector, etc. are supported, said metal crown being usually attached to the end of a supporting arm. Electric light fixtures of this type are very commonly used for street-lighting and similar purposes.

In electric light fixtures of this type the suspension crown is usually provided with a screw-threaded opening in its upper end which screw threads onto the downturned end of the supporting arm and the manufacture of such fixtures thus involves bending the supporting arm to give it the down-turned end and then providing the arm with the exterior screw threads and also providing the crown with the interior screw threads to receive the screw threads on the down-turned end of the arm.

One of the objects of my present invention is to provide an improved electric light fixture of this type which has a novel suspension crown that is attached to the supporting arm in a novel way. In my improvement the supporting arm is unthreaded and the suspension crown is provided with an opening in one side through which the unthreaded end of the arm is inserted, suitable means being provided for locking the crown to the arm. A fixture having this construction is not only less expensive to manufacture than similar fixtures now being made but the work of installing the fixture is simplified.

In order to give an understanding of the invention I have illustrated in the drawing a selected embodiment thereof which will now be described after which the novel features will be pointed out in the appended claims.

Fig. 1 is a view of an electric light fixture embodying my invention;

Fig. 2 is a fragmentary sectional view through the suspension crown and the supporting arm;

The electric light fixture herein shown is of that known type which comprises a porcelain head 1, sometimes referred to as a receptacle head, which supports the lamp receptacle or lamp socket 2 into which the lamp 3 is screwed and which also supports the reflector 4. This receptacle head is usually secured to and suspended from a suspension crown which in turn is secured to and carried by the end of a supporting arm.

In the construction herein shown the suspension crown is indicated at 5 and it is formed with a chamber 6 which is open at the bottom of the suspension crown and which receives the neck 7 of the head 1, said neck being secured in the chamber 6 in any usual way.

My improved suspension crown is formed with the hollow dome portion 8 and the latter is provided with an opening 9 in one side adapted to receive the end 10 of the supporting arm 11 by which the electric light fixture is supported. The arm 11 is unthreaded and is preferably in the form of a tube. The suspension crown is mounted on the arm 11 by simply inserting the end 10 of the arm through the opening 9 and into the interior of the dome, thereby obviating the necessity of making either the arm or the suspension crown with screw threads and also obviating the operation of screwing one part to the other.

The suspension crown is preferably provided with means to interlock with the end 10 of the arm 11 in order that the crown may be supported firmly by the arm. For this purpose the dome portion 8 of the suspension crown is provided with a boss or inwardly-extending projection 12 which sets into the end 10 of the tubular arm 11 as best seen in Fig. 2.

The suspension crown is locked to the arm 11 by means of a locking screw 13 which screw threads through the top of the dome and which is shown as having a pointed end 14 adapted to enter an aperture 15 formed in the arm 11. If desired, the dome may also be additionally locked to the arm 11 through a set screw 16 which may be screwed through a flange portion 17 of the dome which surrounds the opening 9.

In installing electric light fixtures of this type it is customary to provide an insulator which is associated with the arm 11 in some way and which has an opening to receive the cable 18 which carries the wires 19 (one of which is shown in Fig. 1) of the lamp circuit. In the present embodiment of my invention I utilize the locking screw 13 as an insulator supporting member. This screw is shown as having an elongated shank 20 which is bent at an angle as shown best in Fig. 1 and the end of which carries the insulator 21 through which the cable 18 extends.

The clamping screw 13 is shown as provided with a lock nut 22 which engages the dome 8 and which locks the screw in adjusted position.

In Fig. 1 the supporting arm is shown as secured to a pole 23 but it will be understood that this arm might be attached to and carried by any suitable support. Where the arm 8 is secured to a pole 23 it is more or less common practice to provide the pole with one or more insulators 24 through which the cable 18 extends. Such cable usually leads to the line wires carried by the pole 23. The arm 11 is shown as mounted in a foot

member 25 which is attached to the pole and said arm is shown as being braced by the usual brace construction 26.

The improved construction herein shown has the advantage that the supporting arm is simply a piece of straight unthreaded tube instead of a tube or rod which has to be bent at one end and then provided with screw threads, and the operation of connecting the suspension crown to the arm involves simply slipping the end of the arm through the aperture 9 and over the projection 12 and then tightening the clamping screw 13.

I claim:

1. An electric light fixture comprising a porcelain head for supporting a lamp socket, a suspension crown from which said head is supported, said crown having an opening in one side and having an inwardly-directed projection on the opposite side opposite said opening, a supporting arm extending through said opening and on which the crown is mounted, said supporting arm having a recess in its end to receive said projection, and means to lock the crown to the arm.

2. An electric light fixture comprising a porcelain head for supporting a lamp socket, a suspension crown from which said head is supported, said crown having an opening in one side and having an inwardly-directed projection on the opposite side opposite said opening, a tubular supporting arm extending through said opening and having its end embracing said projection, and means to lock the crown to the arm.

3. An electric light fixture comprising a porcelain head for supporting a lamp socket, a suspension crown from which the head is supported, said crown having an opening in one side, a supporting arm extending through said opening and on which the crown is mounted, a pin having screw-threaded engagement with said crown and adapted to lock the arm to said crown, and an insulator carried by said pin.

4. An electric light fixture comprising a porcelain head for supporting a lamp socket and provided with a neck, a suspension crown from which said head is supported, said crown having a chambered portion to receive said neck and also having a hollow dome portion provided with an opening in one side wall thereof, a supporting arm on which the crown is mounted, said arm extending through said opening and across the dome portion of the crown, the interior of said dome portion having a shape to engage and be supported by the end of the arm and means to lock said crown to the arm.

5. An electric light fixture comprising a porcelain head for supporting a lamp socket and provided with a neck, a suspension crown from which said head is supported, said crown having a chambered portion to receive said neck and also having a hollow dome portion provided with an opening in one side wall thereof, a supporting arm on which the crown is mounted, said arm extending through said opening and into the interior of the dome portion of the crown, said dome portion having on its interior opposite said opening means providing an interlocking engagement with the end of the arm, whereby the crown is supported by said arm both at the opening and at the end of the arm and means to lock said crown to the arm to prevent movement of the crown relative to the arm.

6. An electric light fixture comprising a hollow suspension crown for supporting a lamp socket, said crown having an opening in one side, a supporting arm on which the crown is removably mounted, said arm extending through said opening and across the hollow crown, the interior of said crown opposite said opening having a shape to engage and be supported by the end of the arm, and means to lock the crown to the arm.

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