PATENT SPECIFICATION

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COMPLETE SPECIFICATION.

Holder for Electric Lamps for use in Projection Apparatus.

I, LYNWOOD FERDINAND GARDNER, of 173, 174 and 175, Fleet Street, London, E.C. 4, British Subject, do hereby declare the nature of this invention (which has been communicated to me from abroad by Bing Werke vorm Gebruder Bing Aktiengesellschaft, of 215, Regensburgerstrasse, Nuremberg, Germany, a Joint Stock Company registered under the Laws of Germany), and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to that class of holder or fitting for electric incandescent lamps in which the lamp holder can be adjustably positioned and held with the lamp exactly in the optical axis. In such cases the lamp holder has been positioned in a tube connected with a reflector, such tube being provided with an internal rib against which thickened ends of a split sleeve forming part of a screw ring carried by the tube can be caused to engage to grip the split sleeve on to the lamp holder at any desired position, or a rod carrying the lamp holder has been passed into a tube carried by the lamp body and held in any adjusted position by a hand actuated screw.

The present invention consists of a fitting or holder for an incandescent electric lamp for use in projection or like apparatus constructed from a tubular metal body having a flared mouth and provided with springy means for engaging and gripping the lamp holder or a tube carrying same, such fitting being adjustable and fixable on the lamp holder or its tube, the flared mouth being adapted to rest upon the wall of an opening in a support and at the same time form a light tight cover for such opening.

The invention will be clearly understood from the following description aided by the annexed drawings in which two typical embodiments of the fitting or holder are illustrated and in which Figure 1 represents a fitting which is slipped directly over the sleeve of the lamp holder, and is shown partly in elevation and longitudinal section, the tubular portion being passed into the hole of the support, whilst Figure 2 shows a fitting which is adapted to slide on and be secured to a guide tube enclosing the cable and carrying the lamp holder, such Figure being partly in elevation and longitudinal section. Figure 3 is a similar view to Figure 1 but showing the fitting in the reverse position and resting on the support.

In the example shown in Figure 1, a tubular fitting 3 is positioned over the cylindrical portion 1 of the ordinary lamp holder 2 carrying the cable 10, the tubular portion of said fitting 3 merging into a widely flared portion 4 at one end. The tubular portion has longitudinal slots 5, so as to form a ring of springy tongues 6, which can be pressed firmly against the cylindrical portion 1 of the holder by means of a sliding wire ring 7. If the wire ring 7 be pushed upwards, the lamp holder portion 1 can be displaced in relation to the fitting 3. When the desired position of the two members has been attained, in which the source of illumination is in alignment with the optical axis, the wire ring 7 is moved downwards, thus holding the two firmly together. If the fitting be suspended in a curled edge wall 8 surrounding an opening 8^a of the casing 9 of the projection apparatus, the flared portion 4 rests on the wall 8 as at Figure 1, thus forming a light-tight cover for the opening 8^a. The flared portion enables the fitting to be set, in a light-tight manner on the wall or an opening of varying dimensions. The flared design and adjustability of the fitting enable it to be applied to apparatus of different sizes.

In the example shown in Figure 2, the lamp holder 2 is provided at the upper end with a tube 11 through which the electric cable 10 is passed, and the fitting 3 is displaceably and fixably mounted on said tube. This fitting 3 consists of a cup shaped metal cylinder with a widely flared mouth 4. The bottom 15 of the fitting is connected with a tubular sleeve 16 which has a longitudinal slot 17 so that the holder can be displaced under a certain degree of friction, but is held firmly in any position. In this example, the casing 9 of the projection apparatus is also provided with a circular opening having the

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wall 8, in which the fitting 12 is suspended, a higher or lower part of the flared portion 4 coming to rest on the curled edge according to the diameter of the opening. The fitting 3, Figure 1, can also be positioned in the inverted position on to the holder as indicated, for example in Figure 3. In such case, the flared portion 4 of the fitting 3 rests on the wall 8 over the insertion opening. In this way, also, the distances between the fitting and the source of illumination can be varied, so that it is possible, in all cases, to bring the source of illumination exactly into the optical axis and secure it in a reliable manner.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed as communicated to me by my foreign correspondent I declare that what I claim is:—

1. A fitting or holder for an electric incandescent lamp in projection and like apparatus, characterised in that such fitting or holder consists of a tubular metal body having a flared mouth, the tubular portion being provided with spring means for gripping the lamp holder or tube carrying same, such fitting being adjustable and fixable on the lamp holder or its tube, the flared mouth being adapted to rest upon a wall of an opening in a support for the fitting or holder and forming a light tight cover thereto.

2. A fitting or holder according to Claim 1, characterised in that its tubular portion is divided, by means of longitudinal slots, into springy tongues which are adapted to be pressed against the lamp holder by means of a wire ring.

3. A fitting or holder according to Claim 1 characterised in that the fitting or holder carries a central, longitudinally slotted tubular sleeve by means of which it can be displaceably guided and held in a friction-tight manner on a tube of the lamp holder.

4. The fitting or holder for electric lamps for use in projection apparatus, constructed substantially as described with reference to Figure 1 of the annexed drawings.

5. The fitting or holder for electric lamps for use in projection apparatus, constructed substantially as described with reference to Figure 2 of the annexed drawings.

Dated this 14th day of November, 1928.

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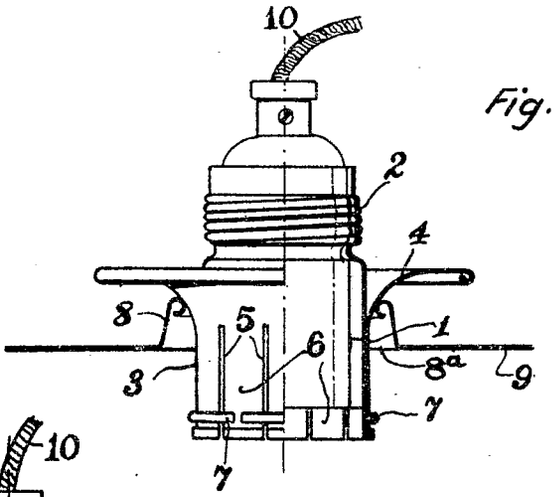

Fig. 1.

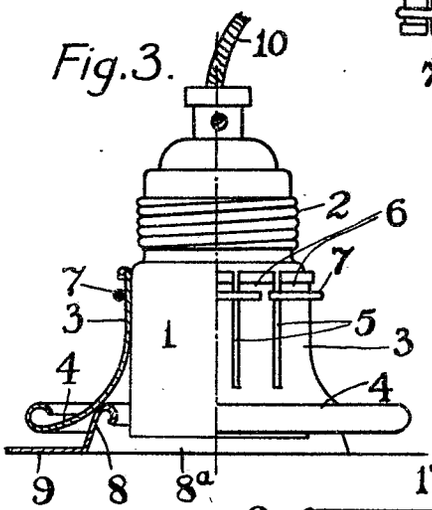

Fig. 3.

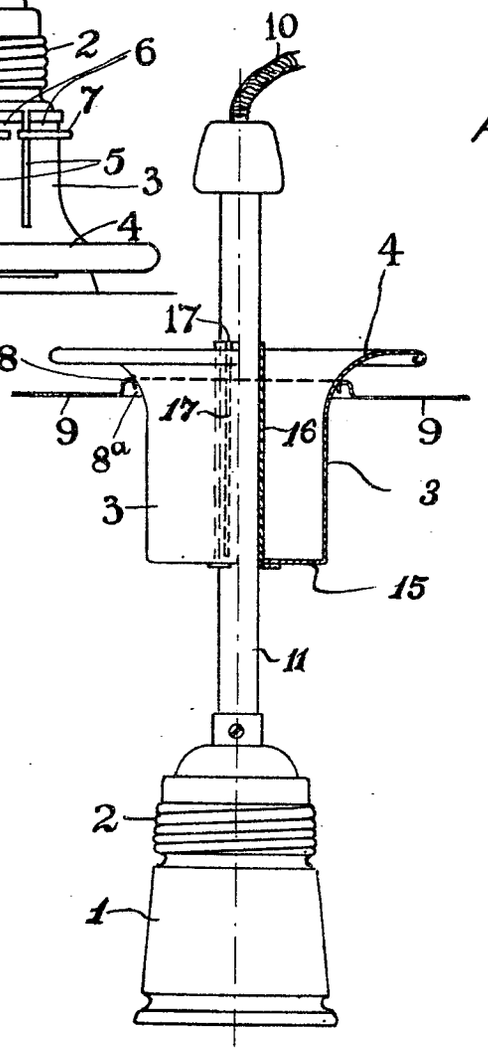

Fig. 2.

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