

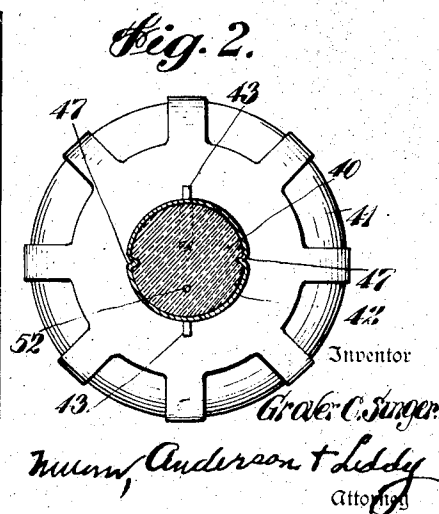
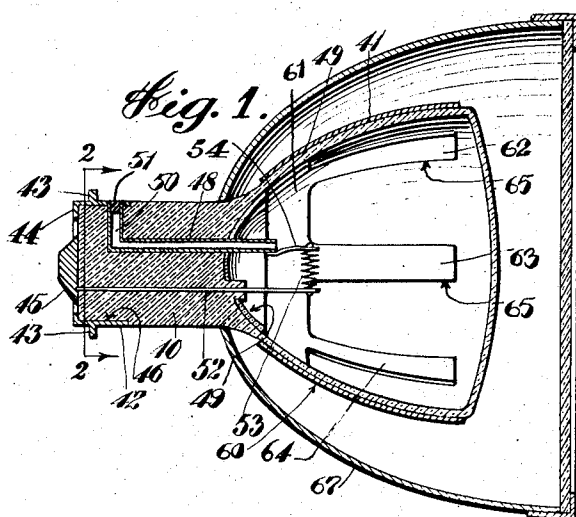
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INCANDESCENT ELECTRIC LAMP

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INCANDESCENT ELECTRIC LAMP

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1 Claim. (Cl. 176-34)

This invention relates to incandescent electric lamps.

An object of the invention is the provision of an electric lamp having a bulb portion and a base member formed integrally and made of a transparent and non-conducting material.

Another object of the invention is the provision of an electric lamp provided with a bulb within which the usual filament is mounted and a base member formed integrally with the material forming the bulb, a reflector being located upon the inner surface of the base member within the bulb and a cooperating reflector upon the exterior face of the bulb.

Another object of the invention is the provision of an electric lamp having a bulb forming a housing for a filament and a base member formed of transparent insulating material with a bulb being formed integrally with the base member, the said base member being solid and having electric wires embedded in the material and connected with the filament.

A further object of the invention is the provision of a hollow bulb forming a housing for the usual filament which is integrally formed with a solid base member that is adapted to be used with lamp sockets of the bayonet slot type, the bulb and base member being formed of transparent material, said base member being provided with a passage for exhausting air from the interior of the bulb, the wires leading from the filament being either embedded in the material or one of the wires may be inserted through the exhaust passage in the base member.

A still further object of the invention is the provision of an electric lamp composed of a hollow bulb and a solid base member formed of the same material, the solid base providing a much stronger lamp since the usual cement or wax housed by a metal sleeve and employed in the manufacture of the base member is eliminated, the inner face of the plug or base member which forms the bottom of the bulb being provided with a reflector which cooperates with a reflector located upon the side walls of the bulb for projecting direct beams of light.

This invention will be best understood from a consideration of the following detailed description, in view of the accompanying drawing forming a part of the specification; nevertheless, it is to be understood that the invention is not confined to the disclosure, being susceptible of such changes and modifications as define no material departure from the salient features of the invention as expressed in the appended claim.

In the drawing:

Figure 1 is a longitudinal vertical section of the invention,

Figure 2 is a transverse vertical section taken along the line 2-2 of Figure 1.

Referring more particularly to Figs. 1 and 2, it will be seen that a solid base member 40 is provided which is formed integrally with a bulb 41 so that both the base member and the bulb are formed of the same material which is transparent. The base member is provided with a flange 42 having radial lugs 43 adapted to be received within the usual bayonet slots for connecting certain types of bulbs within sockets. A ring 44 formed integrally with the flange 42 is spaced from a contact member 45 projecting centrally from the outer end of the base member 40. The flange of the ring is mounted within a reduced portion 46 of the base member 40 and is provided with diametrically disposed indent portions 47 which are received within complementarily formed sockets in the base member 40 to prevent rotation of the sleeve relative to the base member when the lamp is rotated within the usual socket.

The base member is provided with a longitudinally disposed passage leading into a lateral passage and a metal tube 48 is mounted in the passages. Through this tube the reflecting material 49 is forced for coating certain portions of the inner surface of the bulb 41. This passage also provides means for exhausting air from the interior of the bulb 41. The outer end of the offset portion 50 of the tube 48 is hermetically sealed as shown at 51.

A wire 52 is embedded within the material of the base member 40 and has its outer end connected to the contact member 45 while the inner end is connected to one end of a filament 53. A wire 54 is connected also with the filament with the inner projecting end of the tube 48. The outer end of the tube is connected to the flange or sleeve 42.

An outer reflector, generally designated by the numeral 60, extends from a point above the outer edge of the reflector 49 located at the bottom of the bulb and likewise at the inner end of the base member 40. The reflector 60 has an annular portion 61 at the inner end from which extends spaced fingers 62, 63 and 64. It will be noted that the portion 64 is curved around the rear portion of the bulb while the members 62 and 63 extend upwardly along the side of the bulb because this type of lamp is adapted to be used in connection with automobile headlights. As is

usual the lamps for automobiles give varying intensities of light for different purposes. In the operation, however, light rays are reflected from the surface 49 and also from the surfaces 61 to 64, inclusive. A certain amount of light passes through the slots 65 and 66 between the fingers 62 to 64, inclusive, and these light rays are then reflected by the usual reflector 67 of the automobile head lamp. This lamp is intended to not only give a spot light directly ahead, but also to provide a diffused light directly in front of the machine which will not create a glare for approaching automobiles.

The reflectors 49 and 60 may be formed by depositing silver, aluminum or mercury in a well known manner on the walls of the globe. 15

I claim:

An incandescent electric lamp comprising a base, a bulb formed integrally with the base, said base and bulb being formed of transparent and non-conducting material, the inner end of the base being curved along an arc throughout the entire surface area thereof to form the bottom of the bulb, a reflecting material covering the entire curved surface area of the inner end of the base, and reflecting material covering the side walls of the bulb, the last mentioned material being provided with spaced slots around the exterior surface of the bulb.

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