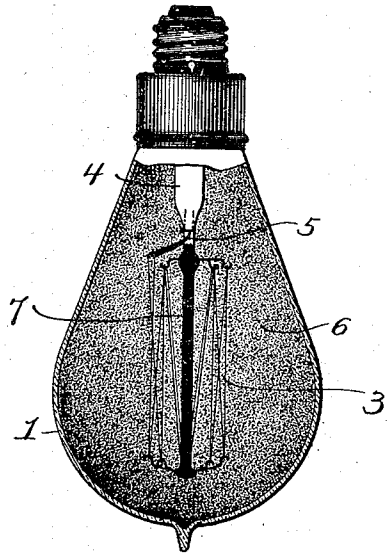
J. J. FLANNERY & E. I. DODDS.

ILLUMINATING MEANS.

APPLICATION FILED JULY 25, 1917.

1,275,890. Patented Aug. 13, 1918.



WITNESSES

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JAMES J. FLANNERY AND ETHAN I. DODDS, OF PITTSBURGH, PENNSYLVANIA, ASSIGNORS TO FLANNERY BOLT COMPANY, OF PITTSBURGH, PENNSYLVANIA.

ILLUMINATING MEANS.

1,275,890. Specification of Letters Patent. Patented Aug. 13, 1918.

Application filed July 25, 1917. Serial No. 182,731.

To all whom it may concern:

Be it known that we, JAMES J. FLANNERY and ETHAN I. DODDS, citizens of the United States, and residents of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Illuminating Means; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in illuminating means and more particularly to lamps of the incandescent electric lamp type,—the object of the invention being to so construct a lamp of the type specified that the same may be made luminous with sufficient brilliancy for ordinary purposes where a mild light is desired, by light stored or absorbed by material within the globe, which material shall be such as to be activated or energized by light from the lamp filament, and whereby a separate portion of the material shall be so contained within the lamp as to be physically separated from the other portion of said material and of such material as will be permanently luminous and serve to mildly activate the other portions of the material within the bulb of the lamp.

With this and other objects in view, the invention consists in certain novel features of construction as hereinafter set forth and pointed out in the claims.

The accompanying drawing is a view showing an incandescent electric lamp of the "Mazda" type, showing the application of our improvements.

1 represents a glass bulb such as commonly employed in the construction of incandescent lamps, and containing a lighting element or filaments 3 supported by a glass bracket 4. A portion of this bracket comprises a glass rod 5 around which the members of the filaments are supported.

In constructing our improved lamp, we provide the interior surface of the bulb with a coating 6 of phosphorescent material which will absorb light,—viz., which will be rendered luminous by light rays,—so that said coating will be energized by light emanating from the lamp filament and remain luminous for a considerable time after the light of the filament shall have been extinguished. The material of the coating 6 may comprise such luminous or light absorbing material as zinc or calcium sulfid and preferably having an infinitesimal amount of radioactive material intermixed therewith.

The rod 5 of the filament supporting bracket 4 constitutes a carrier for a coating 7 similar in composition to the coating 6 but containing a sufficiently greater proportion of radioactive material (such as a salt of radium) as to render said coating (7) permanently luminous.

By lighting the filament of the lamp for a very brief period, the coating 6 will be activated or energized and cause it to absorb and emit sufficient luminosity to illuminate the surrounding area, where a mild illumination is desired. The luminous activity of the coating 7 on the bracket rod 5 will also be enhanced by the periodical lighting of the lamp filament, but the said coating 7 will, by reason of its radium content, be permanently luminous and it will therefore serve to mildly actuate or illuminate the light absorbing coating 6.

Our improved lamp is useful in any place where a mild light is desirable and where economy in the use of electricity for lighting purposes is important,—such for example in ships' cabins, especially in submarines. It may also be used to advantage on automobiles and other vehicles, such as in railway cars.

Having fully described our invention what we claim as new and desire to secure by Letters-Patent, is:—

1. An illuminating device, comprising a bulb, a coating therein of phosphorescent material, a carrier depending within said bulb, and a coating of permanently luminous material supported by said carrier.

2. An illuminating device, comprising a bulb, a filament bracket and filament therein, a phosphorescent coating within said globe, and permanently luminous material carried by said filament bracket.

3. An illuminating device comprising a bulb provided therein with a bracket and filament members supported by said bracket

and surrounding the same, a coating of phosphorescent material on the inner face of said bulb, and permanently luminous material supported by the filament bracket so as to be surrounded by the filament members.

In testimony whereof, we have signed this specification in the presence of two subscribing witnesses.

JAMES J. FLANNERY.
ETHAN I. DODDS.

Witnesses:
G. H. GERDING,
C. F. FRITZ.