May 9, 1950 J. C. MacLENNAN 2,506,800

LUMINOUS PENDANT

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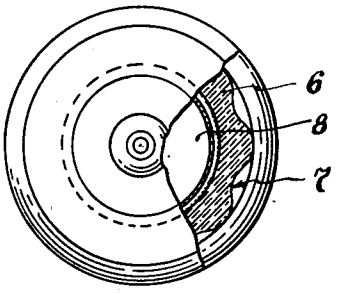


Fig. 1

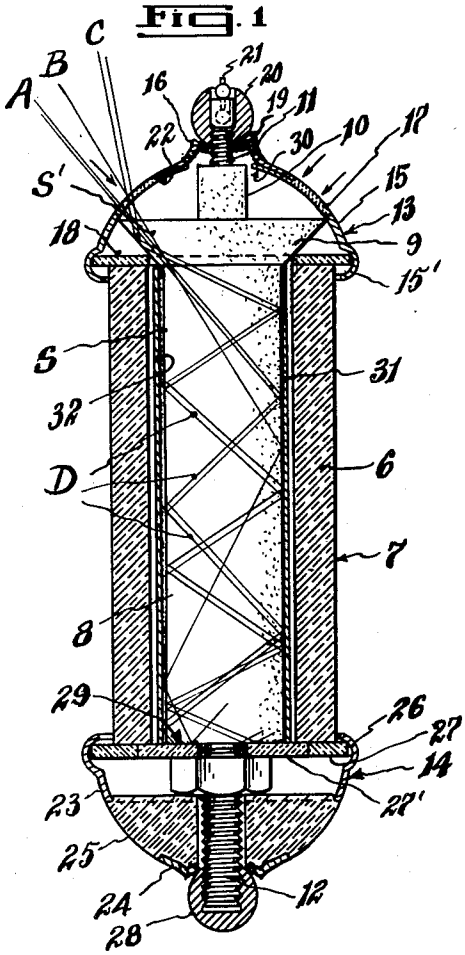


Fig. 2.

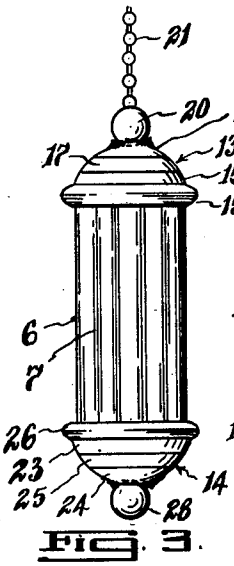


Fig. 3.

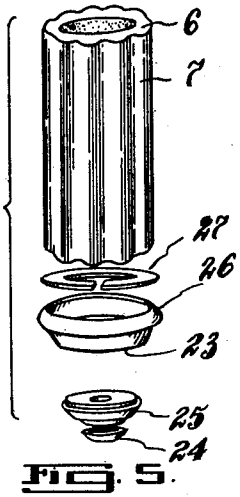


Fig. 5.

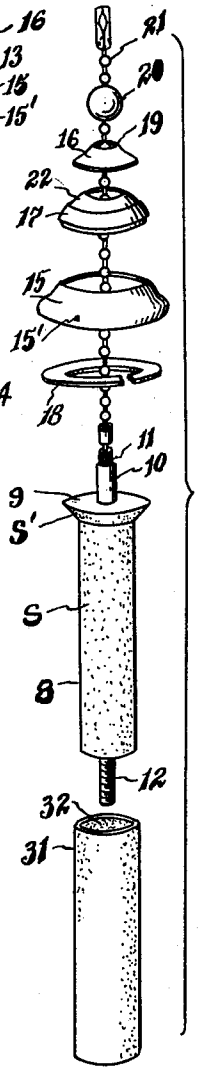


Fig. 4.

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LUMINOUS PENDANT

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5 Claims. (Cl. 250—73)

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My invention relates to improvements in luminous pendants of the kind which are used on a pull chain of an electric light fixture.

The primary object of the invention is to provide a pendant of this type which includes a transparency, such as a glass tube, that forms a part of a body member and is caused to glow uniformly as by an internal luminous coating onto which light rays are directed from within said transparency in an endwise direction.

A further object is to provide a luminous pendant which is both attractive and useful, and one which is adapted to be suspended beneath a light fixture so that light rays therefrom may be used to activate the radiant agent.

These and other objects are attained by a structure which is disclosed in the accompanying drawing as an illustration of a practical form of the invention, which invention comprises the novel arrangement of parts as fully described in the ensuing specification and more particularly ascertained in the appended claims.

In the drawing, Fig. 1 is a top plan view, partly in section, of my improved luminous pendant.

Fig. 2 is a vertical sectional view of the pendant.

Fig. 3 is an elevational view thereof.

Fig. 4 is an exploded view depicting in perspective certain components of the assembly, and

Fig. 5 is a similar view depicting other components of the assembly.

The illustrated embodiment of the pendant structure comprises a transparence 6 in the nature of a glass tube desirably having a longitudinally fluted external surface 7. Said tube is a body member in which a core member 8 is housed. Said core 8 is a transparent plastic member of a solid cylindrical form having an enlargement 9 at its upper end which is desirably of a truncated conical shape. At its upper end said core is provided with an axial shank 10 having a screw-threaded portion 11. The lower end of said core is provided with a screw-threaded shank 12.

Both the upper and lower ends of said core are enclosed by caps, 13 and 14 respectively, which are of a dome-like configuration. The upper cap 13 is made up of an inner metal ring 15, and outer metal ring 16 and a medial transparency 17. The inner ring 15 has an annular bead 15' which fits over the adjoining end of the glass tube 6. A split washer 18 is sprung into the recess of the bead 15' in order to provide an abutment face for the adjoining end of the glass tube 6. The outer metal member 16 is supplied

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with a central opening 19 to permit the threaded section 11 of the shank 10 to pass therethrough so that it may be engaged by a nut 20 which secures the components of the upper end of the pendant assembly in place. A flexible element, such as the chain 21 suspends the pendant from the electric light fixture, which chain is attached in approved manner to the shank 10.

Said medial transparency 17 may be a ring-like section of glass or other suitable transparent material interfitted in approved fashion with the complementary members 15 and 16 of the cap and preferably having an upper part 22 extended inwardly of said outer member 16.

The lower cap 14 is made up of an inner metal ring 23, an outer metal ring 24 and a medial transparency 25. The metal ring 23 is formed with a bead section 26 which is annular and supplies a recess in which a split washer 27 is sprung. This washer provides an abutment face which is engaged by the adjoining end of the glass tube 6. The washer 27 is secured to the core 8 by means of a nut on the shank 12, which washer has a separable inner part 27'. The outer metal ring 24 is pierced to permit the shank 12 to extend therethrough. The protruding portion of this shank is engaged by a nut 28 which retains the components of the lower cap in assembled relation. Said medial transparency 25 is a piece of glass or plastic which is suitably interfitted with the opaque elements 23 and 24.

In the use of the pendant it is attached to a pull chain of an electric fixture to hang below a lamp bulb thereof so that light rays therefrom will pass through the transparent section 17 of the upper cap 13, as indicated by the lines A, B and C, Fig. 2. An important feature of the construction is that the surfaces S and S' of the core 8 are reflecting surfaces which are formed by a coating devised to reflect the majority of the light rays which pass endwise into the core from said transparent section 17 obliquely to the core-axis. The reflecting surfaces S and S' may be composed of aluminum dust applied by means of lacquer or any other suitable vehicle or binder. The reflecting surfaces thus formed function to reflect the majority of light rays passing endwise into the core, but not all of them. These reflecting surfaces deflect the rays again and again, as indicated at D, Fig. 2, throughout the length of the core, and at the same time permit rays to pass from the core to the outside thereof in a radial manner. Accordingly the light rays are not only uniformly distributed throughout the length of the core but also the light rays enter-

ing the transparent section of the top cap are utilized to best advantage in activating the luminous paint. The inner face 29 of the lower washer 27 may also be a reflecting surface in order that any light rays passed thereto by reflection may be re-reflected. Also, if so desired the inner face 30 of the upward extension 22 of the transparent element 17 may be formed as a reflecting surface for re-directing light rays falling thereon.

Interposed between the glass tube 6 and the cylindrical body of the core 8 there is preferably provided a light filter indicated at 31. This filter is shown as a tubular member, which may be made of any suitable material that will act as a light filtering medium for substantially precluding light from the outside of the glass tube entering the bore thereof. This filtering film may for instance be made of gelatin, plastic or like material. The inner surface 32 is coated with a luminous paint which is activated by light rays reaching it from the transparent section 17 of the top cap, thereby producing a soft glow uniformly throughout the length of the glass tube 6.

The invention as herein disclosed may be modified as to details of construction. For instance in variant structures within the scope of the invention the luminous coating might be applied to the outer surface of the film member 31, or on the other hand this film member might be omitted and the luminous coating applied to the bore of the glass tube. A colored glass tube may be used and the transparencies 17 and 25 may also be colored.

What I claim is:

1. A luminous pendant comprising a cylindrical core of transparent material having a conical enlargement at one end in the form of a truncated element and having central shanks extending from its ends, a coating of luminous material applied to the periphery of said core, a tubular body member of transparent material encompassing said core with the wall surface of its bore spaced from the periphery thereof, a tubular light filter in said bore and encircling the periphery of said core, opaque caps enclosing the ends of said core and said tubular body member, at least one of said caps having a transparent ring-like section for admitting light to the end of said core which is provided with said conical enlargement, and means attaching said caps to said shanks.

2. A structure as set forth in claim 1, in which the caps are provided with beads at their inner ends that provide annular recesses in which split washers are sprung, said washers forming abutment for said tubular body.

3. A structure as set forth in claim 1, in which the caps are pierced to permit the ends of the shanks to extend therethrough, and in which the caps are secured to the shanks by nuts on the ends of the shanks.

4. A luminous pendant comprising an inner body member of transparent material having longitudinal extent and provided with a reflecting surface about its longitudinal extent for reflecting and re-reflecting light rays from within that are admitted endwise of said member, said reflecting surface being of a character such as to permit a proportionate amount of the light rays to pass outwardly thereof, an outer body member of transparent material encompassing said inner body member throughout its longitudinal extent but leaving exposed an end of the inner body member for admittance of light rays therein, means providing a luminous surface between said inner and outer body members, said luminous surface being of a character to be activated by light rays passing outwardly of said reflecting surface, a light filtering element disposed between said inner and outer body members, and an opaque enclosing member covering said end of said inner body member and including a transparent section.

5. A luminous pendant comprising an inner body member of transparent material having longitudinal extent and provided with a reflecting surface about its longitudinal extent for reflecting light rays from within that are admitted endwise of said member, said reflecting surface being composed of minute particles of a light reflecting material and a binder pervious to light rays; an outer body member of transparent material encompassing said inner body member throughout its longitudinal extent but exposing an end of said inner body member for admittance of light rays therein, means providing a luminous surface within said outer body member and surrounding said inner body member, said luminous surface being suited to be activated by light rays passing outwardly of said reflecting surface, and an opaque enclosing member covering said end of said inner body member and having a transparent section disposed laterally thereof.

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