F. W. MATHIEU.

GLOBE FOR LIGHTING FIXTURES.

APPLICATION FILED JUNE 23, 1919.

1,354,262. Patented Sept. 28, 1920.

Fig. 1

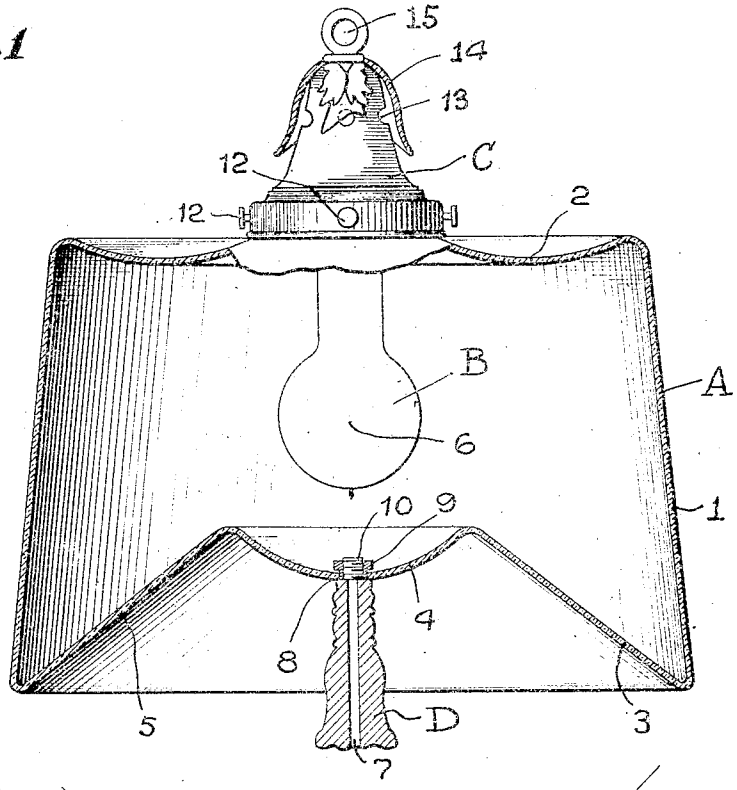
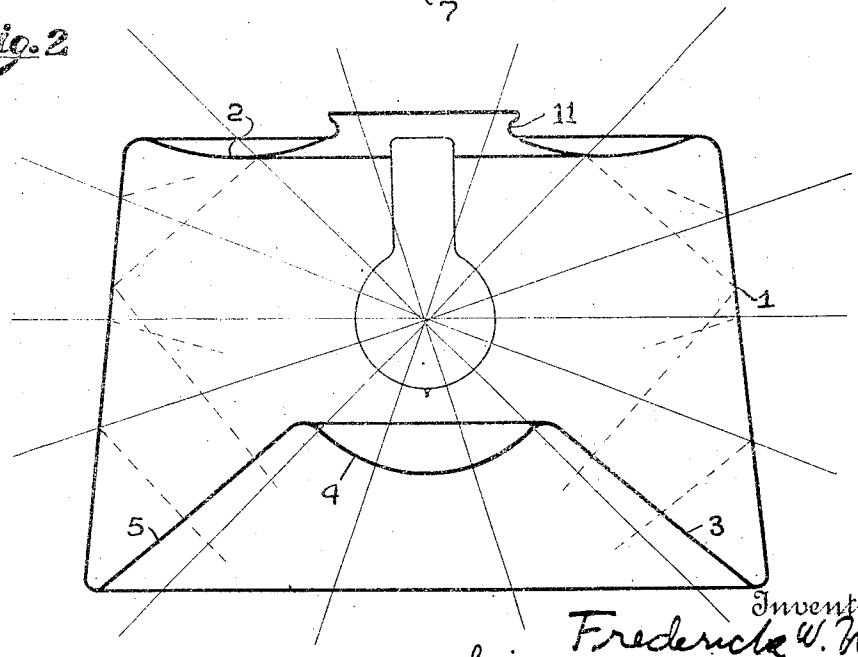


Fig. 2



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GLOBE FOR LIGHTING-FIXTURES.

1,354,262. Specification of Letters Patent. Patented Sept. 28, 1920.

Application filed June 23, 1919. Serial No. 306,051.

To all whom it may concern:

Be it known that I, FREDERICK W. MATHIEU, a citizen of the United States, and a resident of the city of New York, county and State of New York, have invented an Improvement in Globes for Lighting-Fixtures, of which the following is a specification.

My invention relates to lighting fixtures, an object thereof being to provide a novel and highly desirable form of globe for such fixtures and a superior type of fixture in which said globe may be incorporated.

I have shown an illustrative embodiment of my invention in the accompanying drawings, wherein:

Figure 1 is a cross section of said embodiment;

Fig. 2 is a diagrammatic view illustrating the distribution of light in the foregoing embodiment.

The foregoing illustrative embodiment of my invention comprises a globe A containing a source of light such as the incandescent bulb B, the whole being supported by a supporting member generally designated by reference character C.

The fixture may also be provided with an ornamental member such as a tassel D which also serves to assist in ventilating the globe as will be subsequently more fully set forth.

The globe, which is preferably made integral and of translucent material, as by blowing the same of a single piece of opal glass, comprises an outer frusto-conical reflecting and diffusing member 1. At one end, preferably the upper or smaller end of the outer member, is an annular reflecting and diffusing member 2, preferably concave, so as to assist in distributing the light in the manner desired.

At the other end of the outer member is an inwardly extending diffusing and reflecting member 3. Said inwardly extending member comprises a central convex diffusing and reflecting portion 4 and a peripheral frusto-conical diffusing portion 5. The center of the filament of the lamp B here indicated by reference character 6 is preferably adjacent the apex of the frustum of a cone comprising the member 5.

The member D is channeled as at 7 and passes through an aperture 8 in the member 4, where it is held by means of the nut 9 coöperating with the threaded inner end 10 of the member D.

The fixture is supported by means of the member C which fits over the channeled open upper end 11 of the globe A, the usual binding screws being provided to enter the channel 12 to fixedly position the fixture with respect to its support. The support C is perforated as indicated at 13, the perforations being covered by a guard member 14 which serves to prevent any undesirable light from issuing through the perforations 13. A ring or other member may be provided for supporting the fixture as a whole.

In Fig. 2, I have diagrammatically illustrated the approximate disposition of the light rays in the embodiment above described. A certain component of the light will pass directly through the members 1, 2 and 4. Due to the disposition of the light with respect to the member 5, no light will directly pass through this member, which is one of the desirable features of the foregoing embodiment of my invention. Light will, however, pass through said member 5 by reflection directly from members 1 and 2 and also by double reflection from member 4 and either of members 1 or 2. This will result in the member 5 being softly illuminated, whereas the member 4 will be very brightly illuminated, while the members 1 and 2 will be illuminated with a brightness intermediate that of members 4 and 5.

Since member 3, comprising portions 4 and 5, extends inwardly, member 4 which is most brightly illuminated will not ordinarily be directly visible, especially where the fixture is used for a dining room lamp for illuminating a table by being suspended only a short distance above the table. On the other hand, member 1 which is moderately illuminated and member 5 which is softly illuminated, will be directly visible, but being moderately illuminated will be free from glare and the fixture as a whole will present a very softly lighted, attractive appearance while utilizing very efficiently and economically distributing the light values of the source of light.

It is of course, to be understood that my invention is not to be limited to the specific embodiment thereof here described for purposes of illustration only.

What I claim is:

1. A globe for lighting fixtures having an outer, frusto-conical reflecting and diffusing member, a substantially horizontal reflecting and diffusing member at one end of said

outer member, and an inwardly extending diffusing and reflecting member at the other end of said outer member, said inwardly extending member comprising a central convex portion and a peripheral frusto-conical portion.

2. A globe for lighting fixtures having an outer, slightly inclined frusto-conical reflecting and diffusing member, an annular, substantially horizontal convex reflecting and diffusing member at one end of said outer member, and an inwardly extending diffusing and reflecting member at the other end of said outer member, said inwardly extending member comprising a central convex portion and a peripheral frusto-conical portion.

3. A unitary, translucent globe for lighting fixtures having an outer, frusto-conical reflecting and diffusing member, a reflecting and diffusing member at one end of said outer member, and an inwardly extending diffusing and reflecting member at the other end of said outer member, said inwardly extending member comprising a central convex portion and a peripheral frusto-conical portion.

4. A unitary, translucent globe for lighting fixtures having an outer, frusto-conical reflecting and diffusing member, an annular, convex reflecting and diffusing member at one end of said outer member and an inwardly extending diffusing and reflecting member at the other end of said outer member, said inwardly extending member comprising a central convex portion and a peripheral frusto-conical portion.

5. A globe for lighting fixtures having an outer, frusto-conical reflecting and diffusing member, a substantially horizontal reflecting and diffusing member at one end of said outer member, and an inwardly extending diffusing and reflecting member at the other end of said outer member, said inwardly extending member comprising a central convex portion and a peripheral frusto-conical portion, in combination with a source of light adjacent the apex of said peripheral frusto-conical portion.

6. A globe for lighting fixtures having an outer, frusto-conical reflecting and diffusing member, an annular, substantially horizontal convex reflecting and diffusing member at one end of said outer member, and an inwardly extending diffusing and reflecting member at the other end of said outer member, said inwardly extending member comprising a central convex portion and a peripheral frusto-conical portion, in combination with a source of light adjacent the apex of said peripheral frusto-conical portion.

7. A unitary, translucent globe for lighting fixtures having an outer, frusto-conical reflecting and diffusing member, a reflecting and diffusing member at one end of said outer member, and an inwardly extending diffusing and reflecting member at the other end of said outer member, said inwardly extending member comprising a central convex portion and a peripheral frusto-conical portion, in combination with a source of light adjacent the apex of said peripheral frusto-conical portion.

8. A unitary, translucent globe for lighting fixtures having an outer, frusto-conical reflecting and diffusing member, an annular convex reflecting and diffusing member at one end of said outer member and an inwardly extending diffusing and reflecting member at the other end of said outer member, said inwardly extending member comprising a central convex portion and a peripheral frusto-conical portion, in combination with a source of light adjacent the apex of said peripheral frusto-conical portion.

In testimony whereof, I have signed my name to this specification this 20th day of June, 1919.

FREDERICK W. MATHIEU.