

Sept. 4, 1928.

1,683,580

C. D. RYDER

AEROPLANE LAMP

Filed March 18, 1925

Fig. 1

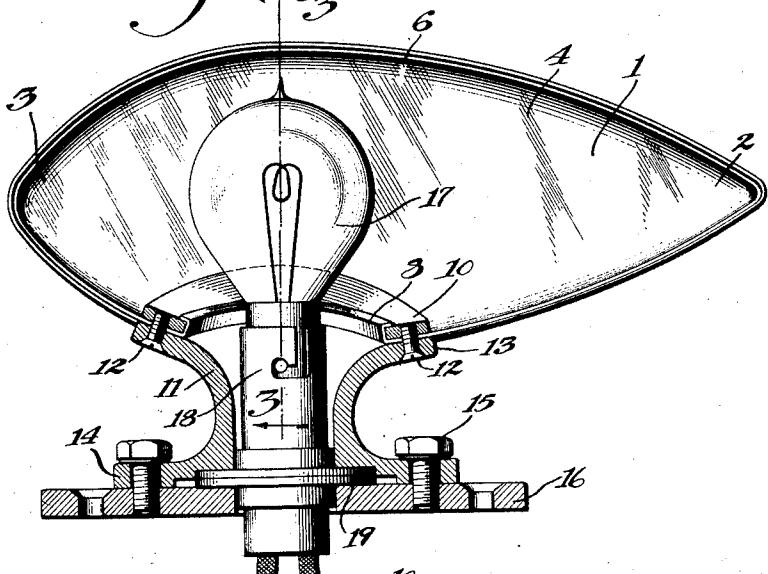


Fig. 2

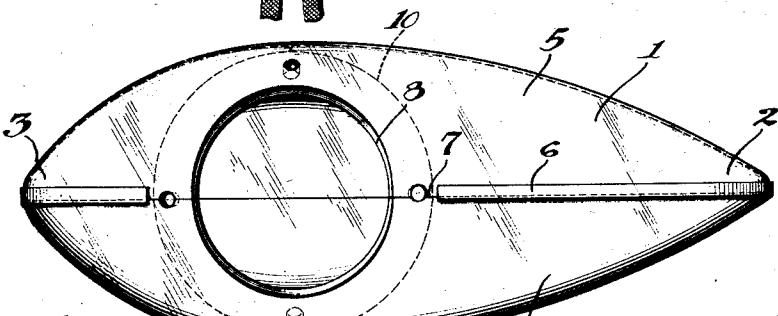
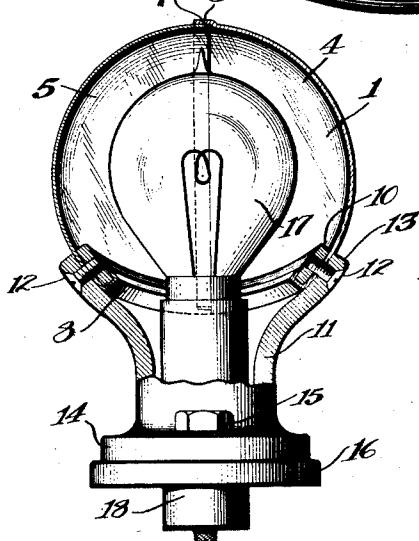


Fig. 5



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UNITED STATES PATENT OFFICE.

CHARLES D. RYDER, OF COVINGTON, KENTUCKY, ASSIGNOR TO THE CINCINNATI VICTOR COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

AEROPLANE LAMP.

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My invention relates to lamps and is particularly directed to a type of lamp adapted to be used on aeroplanes and other moving bodies where it is desirable to have a structure which offers small resistance to the air and provides great lighting area.

One object is to provide a lamp having a transparent, translucent or light permeable material globe so shaped as to offer a minimum of air resistance.

Another object is to provide a lamp which can be easily made and quickly assembled.

Other objects and certain advantages will appear from the description of the drawing, in which:

Figure 1 is a longitudinal section of the lamp.

Figure 2 is a bottom plan view of the body with the base removed.

Figure 3 is a section on line 3—3, of Figure 1.

I provide an elongated egg shaped or irregularly elliptical globe 1, the forward end 2 thereof tapering more gradually than the opposite end 3. This shape is termed "streamline" in the art. The exact curves therefor are worked out mathematically for the intended speed of the vehicle in which the light is mounted.

The globe 1 comprises two sections 4, 5, the ends of which meet in a vertical longitudinal plane. Section 4 has an offset portion 6 formed around its edge, said portion being offset the thickness of the material. When the opposite section 5 is placed thereagainst, the offset portion 6 overhangs the plain edge 7 of the section 5 thereby providing mating edges and preventing the entrance of moisture or dust.

In the center of the bottom of the globe and at its widest part is a circular aperture 8. The aperture is formed by bending the material of which the globe is formed around a circular metal ring 10. The ring 10 is placed on the inside of the globe and the material bent or molded upwardly on the inner side of the ring and then on the top of said ring a distance sufficient to insure rigidity.

The offset portion 6 is cut away near the aperture 8 far enough so as not to provide an irregular bearing for the globe 1 on the base 11 of the lamp. The globe 1 is suit-

ably fastened to the base by screws or bolts 12 entering into the ring 10.

The base 11 is of hollow structure having upper and lower flanges 13, 14, respectively, the upper flange 13 shaped to fit the contour of the globe 1 and the lower 14 having apertures for bolts 15 holding the base 11 to a base plate 16.

An incandescent lamp 17 and socket 18 of standard make are used for illumination and extend into the globe through aperture 8. The socket is rigidly clamped in position by means of a flange 19 thereon which is clamped between the base 11 and base plate 16.

The globe 1 is composed of any color or composition such as will give the desired translucency or transparency, non-inflammable material being preferable. Making the globe substantially in halves permits more economical methods of manufacture and provides a structure which can be shipped unassembled with little danger of breakage.

The "streamline" shape offers as small as possible an amount of air resistance and the transparent or translucent material provides a maximum of lighting area.

Having described my invention, I claim:

1. A lamp, comprising, an elongated two-piece globe of translucent material, a base therefor, a flange on said base shaped to correspond to the curvature of the globe and to fit about an aperture in the globe side, a ring mounted on the inside of the globe and lying around the margin of the aperture, said ring formed to correspond to the shape of the base flange and nesting therein with the material of the globe clamped between the base flange and the ring, and a light source mounted within the base and extending upwardly through the aperture into the globe at right angles to the longitudinal axis of the globe.

2. A lamp, comprising, an egg-shaped two-piece globe of light permeable material, a cup-shaped base, a flange on said base corresponding in shape to the curvature of the globe side and fitting thereagainst, a ring mounted on the inside of the globe and lying around the margin of an aperture between the base and globe with the material of the aperture edge drawn around the inner edge of the ring, said ring shaped to correspond to the curvature of the globe, a light source ex-

tending from the base into the globe, and means for securing the globe aperture margin portion and ring to the base flange.

3. A lamp, comprising, a streamline shaped globe of light permeable material, said globe formed by the mating of two sections, an aperture in said globe to admit a source of light, a ring about said aperture, a base

adapted to support the globe and a light source within the globe; and means associating said globe sections, said ring and said base securely together. ¹⁰

In witness whereof, I hereunto subscribe my name.

CHARLES D. RYDER.