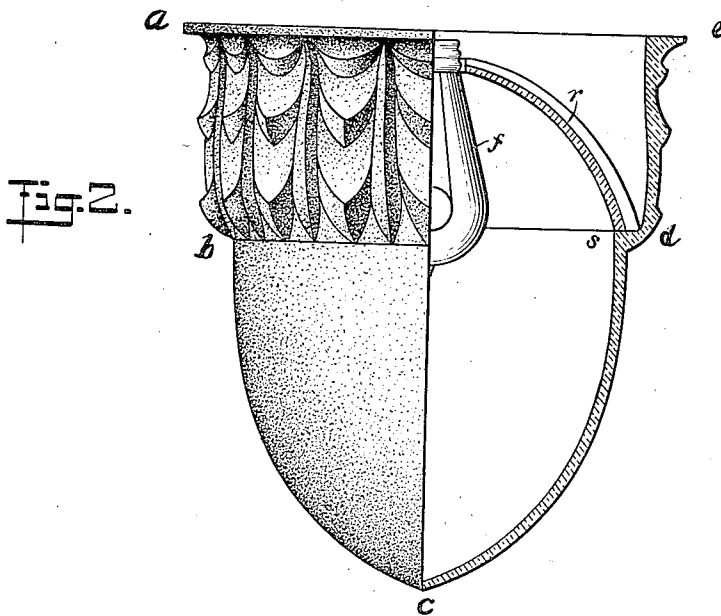
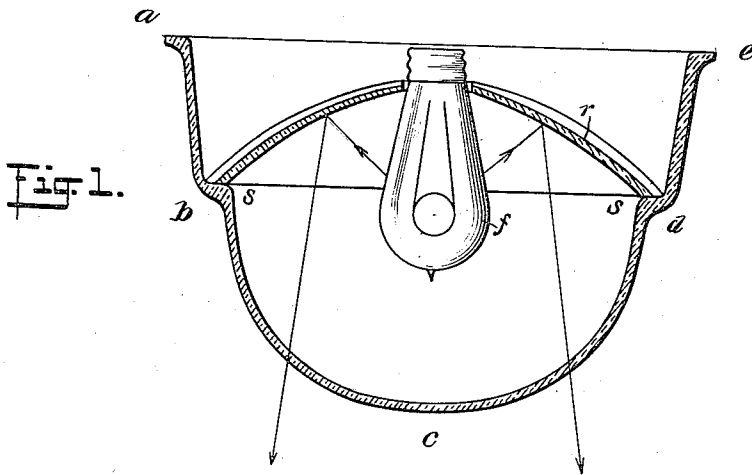


O. A. MYGATT.
ILLUMINATING APPLIANCE.
APPLICATION FILED SEPT. 22, 1910.

1,061,000.

Patented May 6, 1913.

2 SHEETS—SHEET 1.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 3.

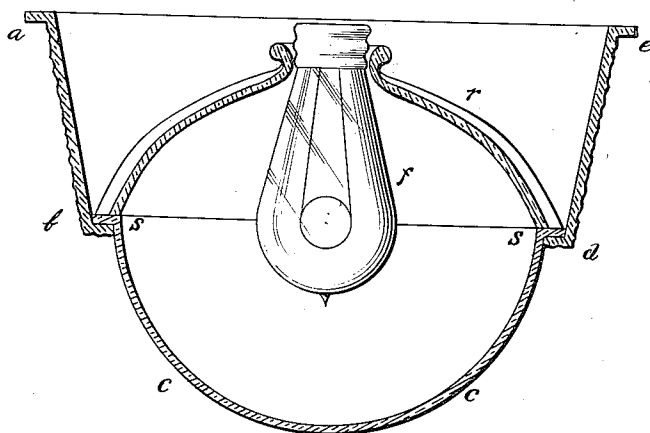
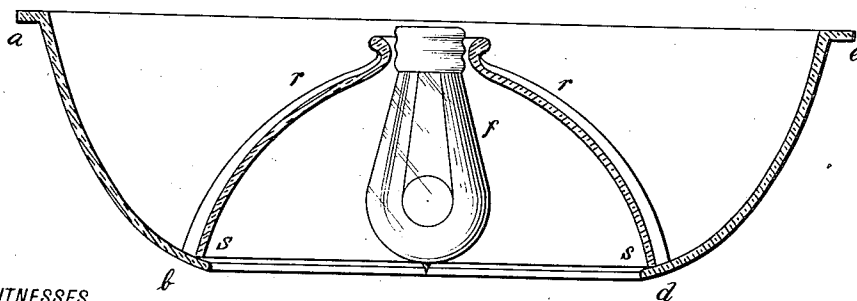
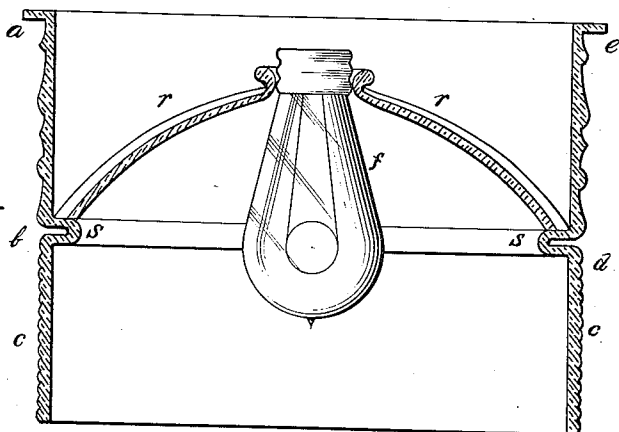


Fig. 4.



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Fig. 5.

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UNITED STATES PATENT OFFICE.

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ILLUMINATING APPLIANCE.

1,061,000.

Specification of Letters Patent.

Patented May 6, 1913.

Application filed September 22, 1910. Serial No. 583,213.

To all whom it may concern:

Be it known that I, OTIS A. MYGATT, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Improvement in Illuminating Appliances, of which the following is a specification.

The object of my invention is to produce a glass shade or other artificial light inclosure of such construction that it will both conceal and support a reflector in any desired position.

The combination of a reflector and a shade to form an illuminating unit is well known, the advantages to be gained by having the reflector rest upon the shade being also fully recognized, and a number of appliances are now in use which embody this principle. In such appliances, however, the reflector is either visible, or if concealed it is found necessary to employ an expensive metal fixture.

If it is desired to make the outline or contour of an exposed reflector to conform artistically to the outline or contour of a shade portion, the efficiency of the illuminating appliance must often be sacrificed. The present invention avoids this disadvantage conveniently and inexpensively by providing the shade with an inner projection or shoulder placed some distance below its upper edge. The reflector rests upon this projection or shoulder and is thus held securely in position. The position of the shoulder will depend upon the shape and height of the reflector after the reflector outline has been calculated for desired distributions. The lower part of the shade will act in the usual way to transmit both direct and reflected light rays, while the upper part above the shoulder will conceal the reflector from view and can be treated as a fixture portion to produce a great variety of pleasing decorative effects.

The nature of the present invention can be readily seen in the drawings in which:

Figure 1 is a vertical cross section of an appliance embodying the principles of my present invention. Fig. 2 is an elevation of another modification of my invention, cut away to show a vertical section. Figs. 3, 4 and 5 are vertical sections of further modifications of my invention.

In Fig. 1, *a b c d e* is an integral hollow glass body formed of pressed or blown glass. The portion *b c d* is light transmit-

ting, and may be provided with transmitting prisms or other means known in the art. The portion *a b c d e* may be formed as a glass fixture made to imitate ornamental holder portion of metal or other material. At the portions *b* and *d* the shade is formed in the mold to produce a shoulder at *s*. This may have the form of a continuous circular bead, or it may consist of a series of lugs to support the reflector. The reflector may be made of any reflecting material, as for example, of silvered or mirror glass or of prismatic glass having reflecting prisms on its surface. The outline is formed as desired in order to obtain definite light distributions for transmission and direction about the part *b c d*. The upper zone *a b d e* of the shade completely conceals the reflector *r*, which therefore can be made of any material or outline without interfering with the artistic appearance of the whole combination.

The part *a b d e* can be shaped to represent a fixture design as shown in Fig. 2 and the part *b c d* left smooth. The part *a b d e* can be depolished or rendered opaque and actually tinted to resemble fixture tints. It may be covered with a bronze or green coating. The fact that the reflector *r* cuts off most, if not all of the light from the part *a b d e* is of slight importance from a light distributing standpoint, and of still less importance from a decorative standpoint. The greater the contrast between the fixture portion and the light transmitting portion, the greater will be the artistic effect. The course of representative light rays is indicated.

Fig. 2 is a partial elevation and partial cross section of an illuminating appliance made according to my invention. *r* is a reflector; *b c d* the transmitting or shade portion; *a b d e* the continuation of that part generally carried out in a fixture design of desired pattern. *f* is the light source. In this modification the reflector is shown as having double reflecting prisms on its upper surface, and the transmitting portion is sand-blasted or acid-etched. The reflector *r* is completely hidden by the portion *a b c d e*. As before stated, the reflector can be made of any contour and likewise the transmitting portion. They may vary from the shallowest form to the deepest and most bowl-like types. In the latter event the part *a b d e* must simply be cut larger.

In actual practice I prefer to provide the

upper circular band-like portion *a b d e* above the shoulder *s* with molded designs of the type and character of the designs commonly carried out in brass or other metal fixtures while the lower portion of the shade below the shoulder *s* will be in every respect similar to the glass shades hitherto in use. The combination will then present the appearance of a glass shade supported by an upper fixture portion. This upper fixture-like portion having the contour of and being provided with decorative designs of the type and character used in metal fixtures can, to advantage be depolished, painted or metallized by electro-plating, in which case it will give the appearance of a fixture of brass or other metal while the cost of production will be much less.

Fig. 3 is a vertical section of a combination embodying my invention with the outer glass inclosure portion carried out in two pieces of glass in the following manner: The upper portion *a b d e* is a cylindrical band of blown or pressed glass, the upper edge of which is flared out at *a* and *e* and the lower edge of which is flared in at *b* and *d* to form a support for the flared out upper edge *s* of the lower part *s c s* of said outer glass inclosure. The reflector *r* rests upon this flared out upper edge *s*. In fact this two-piece article may be considered as the result of splitting the one-piece glass inclosure in Figs. 1 and 2 into two parts at the inner shoulder *s*, one part of this shoulder forming the flared out upper edge of the lower inclosure while the other forms the flared in lower edge of the upper inclosure.

The two-piece construction exemplified in the present figure has the great advantage that the upper band-like portion can be more conveniently made in imitation of a fixture of brass or other metal while the lower part remains in all respects identical with the ordinary glass shade now in use. An additional advantage is that it permits the upper portion to be made of blown glass while the lower shade portion is made of pressed glass, or the reverse.

To the best of my knowledge, circular glass rings or bands made to imitate and to take the place of brass or other metal fixtures are now in the art of glass manufacture. I therefore claim not merely as a part of the illuminating appliance herein described but also separately as a new article of manufacture blown, pressed or molded cylinders or circular bands of glass having the upper edge flared out so as to rest upon a brass or metal ring shaped holder

and the lower edge flared in so as to support by its flared out upper edge an inner and entirely separate glass inclosure, reflector or shade.

Fig. 4 is a vertical section of a modification of my invention which introduces a shoulder formed by a projecting bead. Although preferably and generally the lower glass shade portion of my combination is closed, it may be found desirable to make combinations forming a straight sided or cylindrical glass inclosure, as shown in this figure. Such cylindrical article could be used for ceiling lights, the lower portion beneath the inner shoulder *s* acting as a hanging to shade the light in the manner of a fringe.

Fig. 5 is a vertical section of another modification of my device, in which the supporting shoulder is adjacent to the lower edge of the outer glass inclosure.

If the hidden reflector is formed of double reflecting prisms and the fixture part of translucent glass, the small amount of light allowed to pass forms a pleasing contrast to the lower, more brilliant portion.

A light metal ring with hooks engaging the flange of the appliance at *a e* may serve as a means of attachment.

In pressed glass articles, where it is desirable to do away with the metal attachment, or the metal ring parts for supporting the combination, glass lugs may be used all around the upper rim, which would fit into a ring held by a chain, or else holes can be drilled through this upper part.

The most beautiful and complicated designs carried out in brass or metal fixtures can be produced in blown or pressed glass infinitely cheaper than in the metal article and, therefore, my method of making bands of blown or pressed glass with the outlines and forms of fixture designs, and then painting these with metallic paint or covering them with electro-plating, forms a very valuable new article of glass manufacture.

Having described my invention what I claim is:

1. An illuminating appliance comprising a glass inclosure having below its upper edge an interior support and a reflector within the same held by said support.

2. An illuminating appliance comprising a glass inclosure having below its upper edge an interior support and a prismatic reflector within the same held by said support.

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Witnesses:

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H. D. JAMESON.