

No. 756,194.

PATENTED MAR. 29, 1904.

E. L. ZALINSKI.
REFLECTOR.

APPLICATION FILED JAN. 6, 1904.

NO MODEL.

Fig. 1.

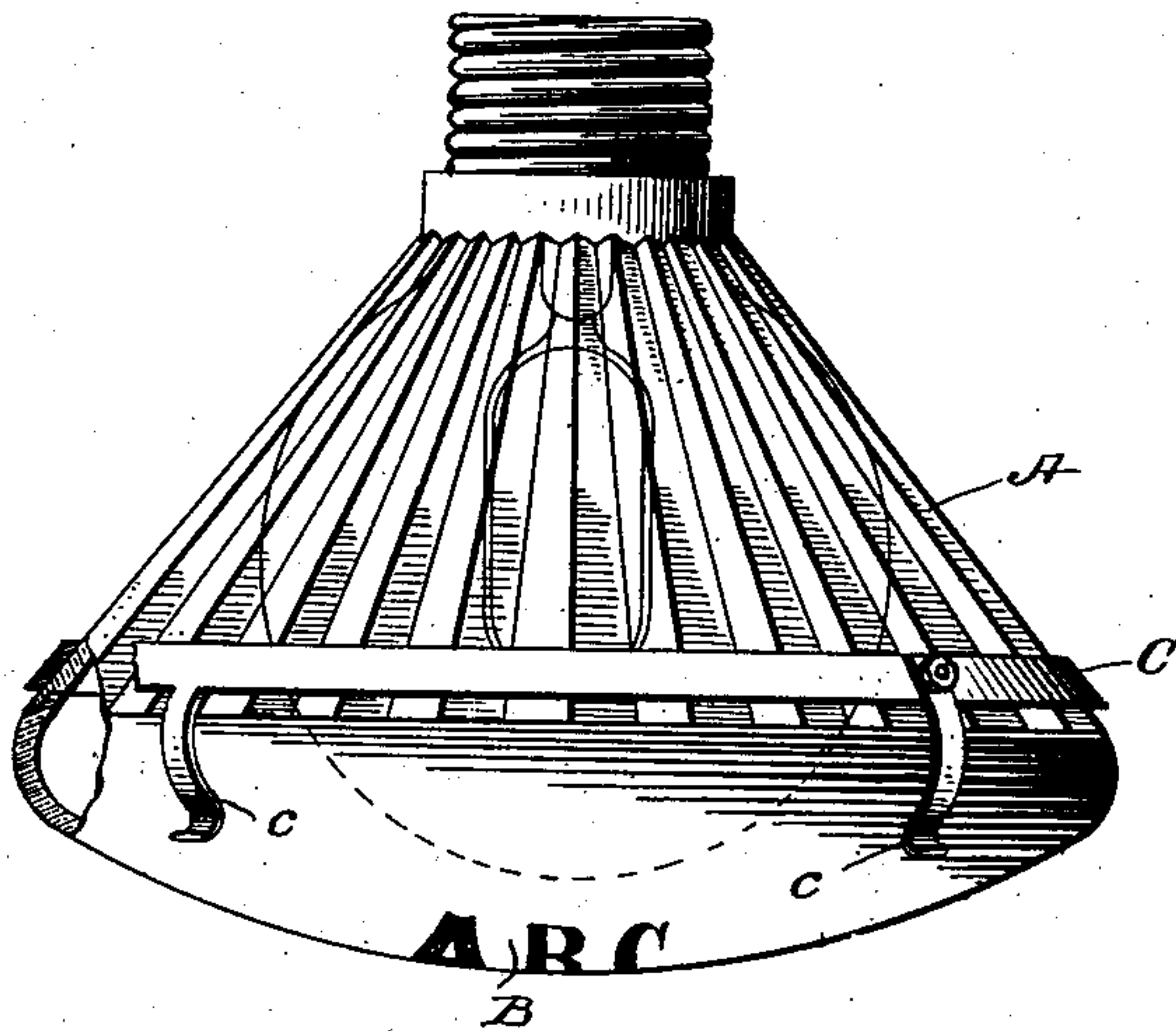


Fig. 3.

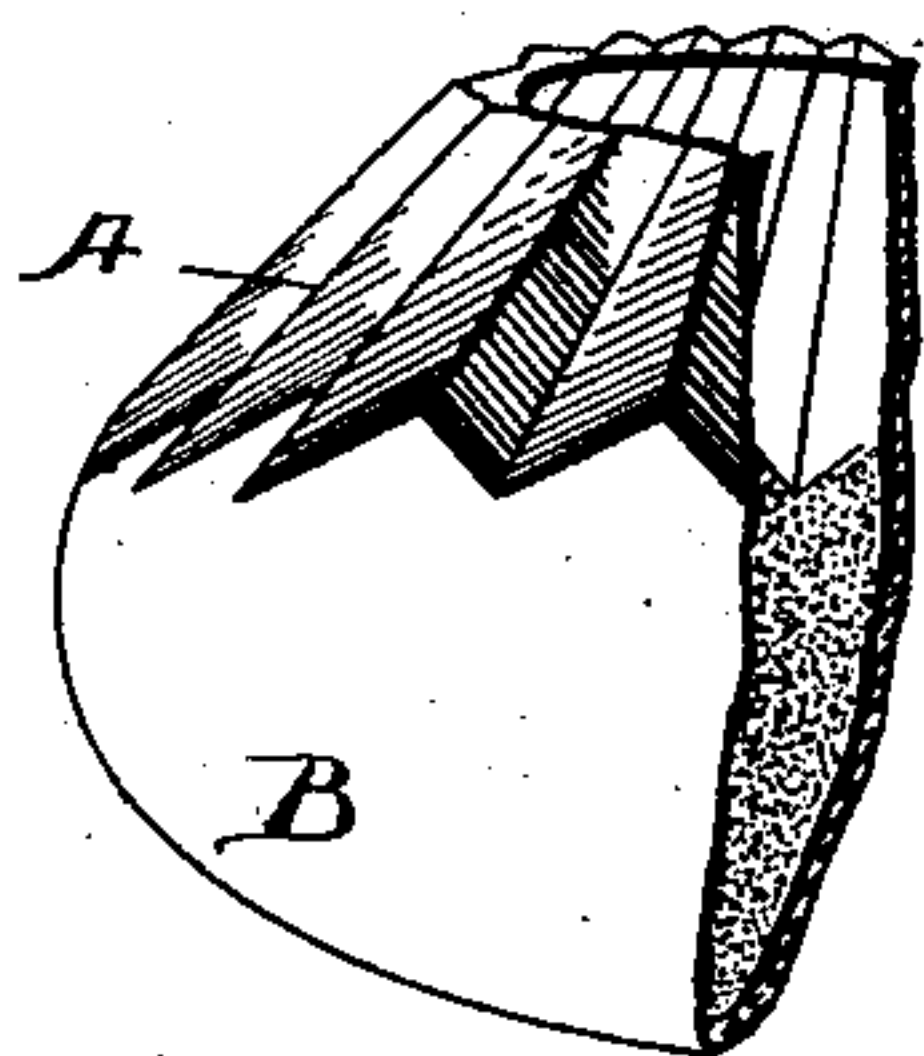


Fig. 4.

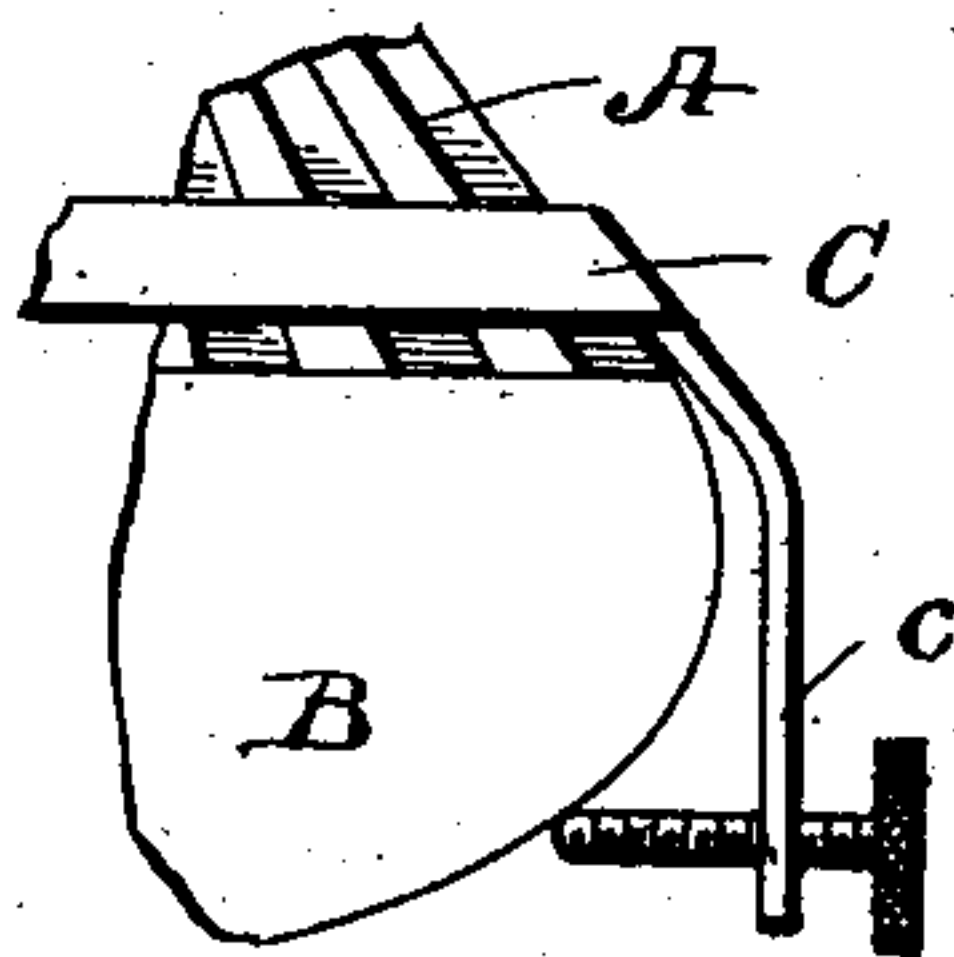
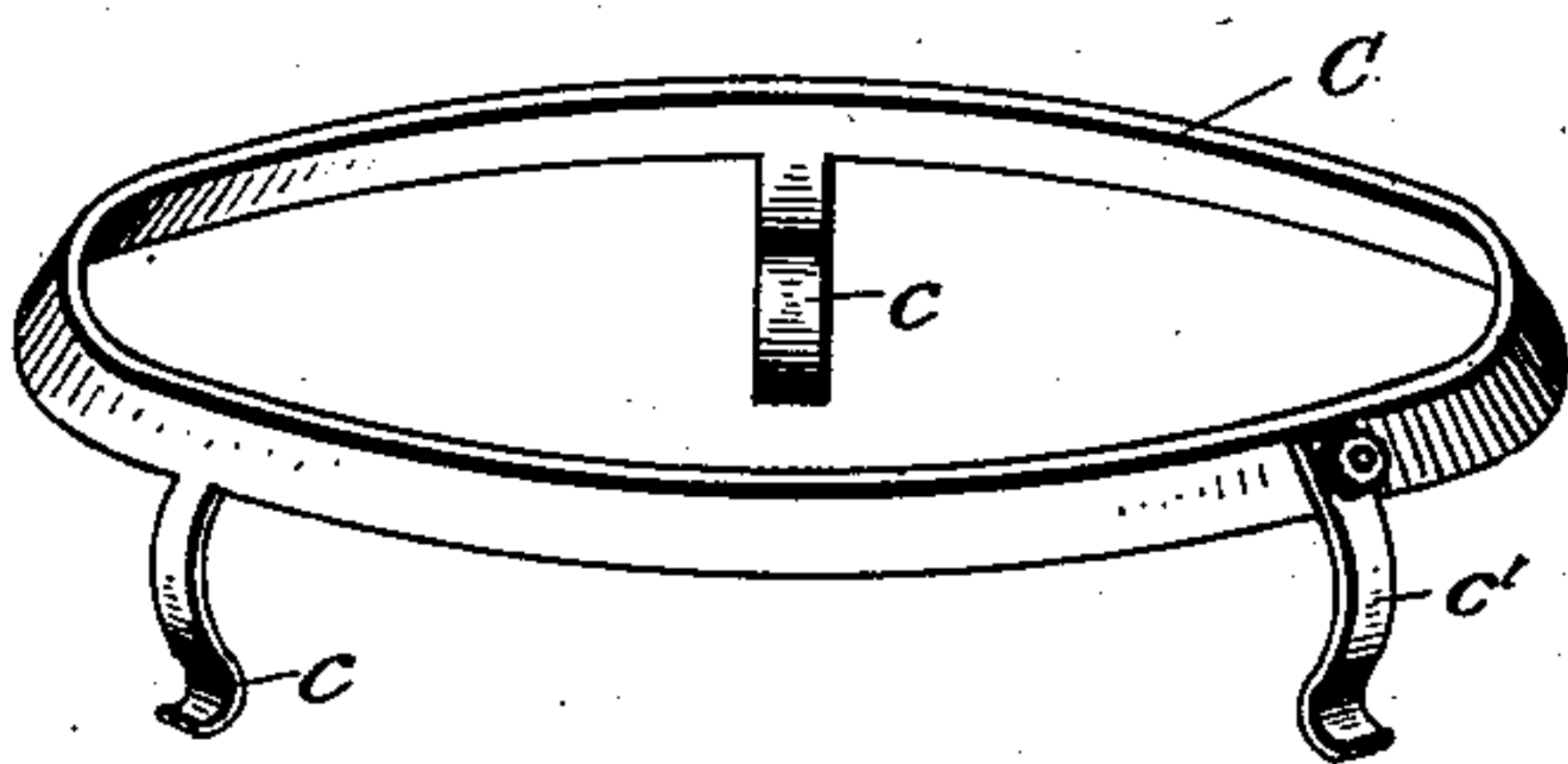


Fig. 2.



Witnesses

B. M. Offutt
Katie Hurst

Inventor

Edmund L. Zalinski,

by *E. W. Bradford*
Attorney

UNITED STATES PATENT OFFICE.

EDMUND L. ZALINSKI, OF NEW YORK, N. Y.

REFLECTOR.

SPECIFICATION forming part of Letters Patent No. 756,194, dated March 29, 1904.

Application filed January 6, 1904. Serial No. 187,932. (No model.)

To all whom it may concern:

Be it known that I, EDMUND L. ZALINSKI, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Reflectors, of which the following is a specification.

In the use of incandescent lamps the bulbs are frequently etched or painted on the outside, giving the effect of frosting, in order to protect the eyes from the injurious effect of the bright filaments. The first cost of such lamps is about twenty per cent. greater than that of the ordinary lamps, and such cost is reincurred on renewal of the lamps. In the use of such bulbs a considerable proportion of the illuminating power is cut off by such treatment from the time of the first installation and a still greater proportion later by dust, soot, &c., which accumulates on such surfaces and is not readily removed.

In the use of reflectors for electric and other incandescent lights it has been found that the glare is sometimes too intense for the eyes, and therefore injurious. It is also considered by many oculists to be injurious to the eyes to use reflectors which are dark in one part and bright in another. The eye is injured in passing from brightness to perfect darkness, and vice versa.

The object of my said invention is therefore to provide a reflector the use of which will counterbalance the loss of light due to the use of frosted glass or its equivalent, reduce the cost of maintenance, avoid the chances of further obscuration which may occur from the accumulations of dust and dirt on the outside of the frosted bulb, obviate the injurious effect to the eyes of the light being reflected into them with undiminished intrinsic brightness, and avoid subjecting the eyes to the injury incidental to passing from great brightness to darkness, and vice versa. Such a reflector is preferably of partly-translucent material and has walls of prismatic glass or other partly-translucent material arranged so that a small percentage of light may pass out through the sides of the walls and covered at its lower end with a translucent but not transparent bowl.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference - letters indicate similar parts, Figure 1 is a side elevation of a partly-translucent reflector covered by a suitable bowl embodying my said invention; Fig. 2, a detailed perspective view of the clamping-ring for securing the bowl to the reflector; Fig. 3, a view of a modified form, showing the reflector and bowl integral; and Fig. 4 a detail view showing a modification in the detachable bowl-holding device.

In said drawings the portions marked A represent the main portion of the reflector, and B the attached frosted-glass or thin porcelain or opaline bowl.

The reflector A is mounted so as to contain within it an electric or other incandescent lamp in any approved manner. It is preferably formed of glass, as shown, with prisms on the outside surface; but the reflector part may be of porcelain, opaline, or other suitable partially-translucent material. It will be understood, of course, that it may be used with a cluster of lamps instead of with the single lamp, if desired, and may be of any approved shape. It may also be used with other lights than those mentioned, as incandescent gas, &c. The bowl B is formed to fit the lower end of said reflector, their respective edges being preferably formed with engaging recesses, as shown to the left in Fig. 1, or may be connected in any suitable manner, as desired. It may be held in place by any suitable means, and I have shown the metal ring C, adapted to surround the lower end of the reflector A, provided with the depending fingers *c c* and *c'*, curved to be suitably engaged under said bowl and support it. Two of these fingers, *c c*, may be fixed and the other, *c'*, may be fastened by a thumb-nut *c''* to a bolt on the ring or otherwise be detachably secured to readily secure the bowl or permit its removal when the bulbs are to be changed. An ordinary thumb-screw may pass through the end of one of the fingers, which may be permanently fastened, as shown in Fig. 4.

The electric bulb of plain glass is placed within the walls of the reflector. The larger end of the reflector (which is usually conical

or parabolical in shape) is covered by a detachable ground, etched, or otherwise frosted bowl, the etching or frosting being on the inside of the glass-bowl surface. This bowl may
 5 also be made of thin porcelain or opaline or like substances, in which case no frosting will be required; but it is desirable that the outer surface shall be smooth.

The reflector portion and the frosted-bowl
 10 portion may be made integral, as shown in Fig. 3, if preferred, with the reflector part having outside reflecting-prisms or other reflecting-surfaces, the same being semitranslucent and the bowl part being frosted on the
 15 inside. The etching or frosting being on the inside in either form and the outside surface being smooth and polished, the chance of increasing obscuration due to the accumulation of dust, soot, &c., on the outside surface is
 20 greatly reduced. The inside surface is measurably protected from this by being practically closed. The sides of the reflector being of a somewhat translucent material or arrangement permits a small percentage of the
 25 light to pass through, which prevents the injury to the eyes from the great contrasts of light and darkness incidental to some reflectors in common use having their upper portions practically opaque and non-translucent.

30 Letters may be formed on said bowl, as indicated in Fig. 1, in any manner preferred, and the letters thus formed will appear brightly illuminated upon the surface, making an effective and efficient advertising-sign, which

can be maintained at a less cost than ordinary
 electric signs. Such letters, of course, will
 not be formed upon the bowls to be used with
 lights for reading and ordinary purposes.

Having thus fully described my said invention, what I claim as new, and desire to secure
 by Letters Patent, is—

1. A reflector comprising a partly-translucent reflector and a separate glass bowl frosted on the inside and smooth on the outside, detachably secured over the lower end of said
 45 reflector, substantially as set forth.

2. A partly-translucent prismatic reflector having a glass bowl frosted on the inside and smooth on the outside, attached on its lower end, substantially as set forth. 50

3. A partly-translucent reflector for incandescent lights having a partly-translucent bowl, removably attached to its lower end, said bowl being provided with sign-letters, substantially as set forth. 55

4. A partly-translucent reflector for incandescent lamps the lower end of which is closed by a bowl-shaped surface which is frosted on the inside and smooth on the outside, substantially as set forth. 60

In witness whereof I have hereunto set my hand and seal, at New York, N. Y., this 16th day of December, A. D. 1903.

EDMUND L. ZALINSKI. [L. s.]

Witnesses:

SIMON L. ADLER,
 RICH'D. ROBINS.