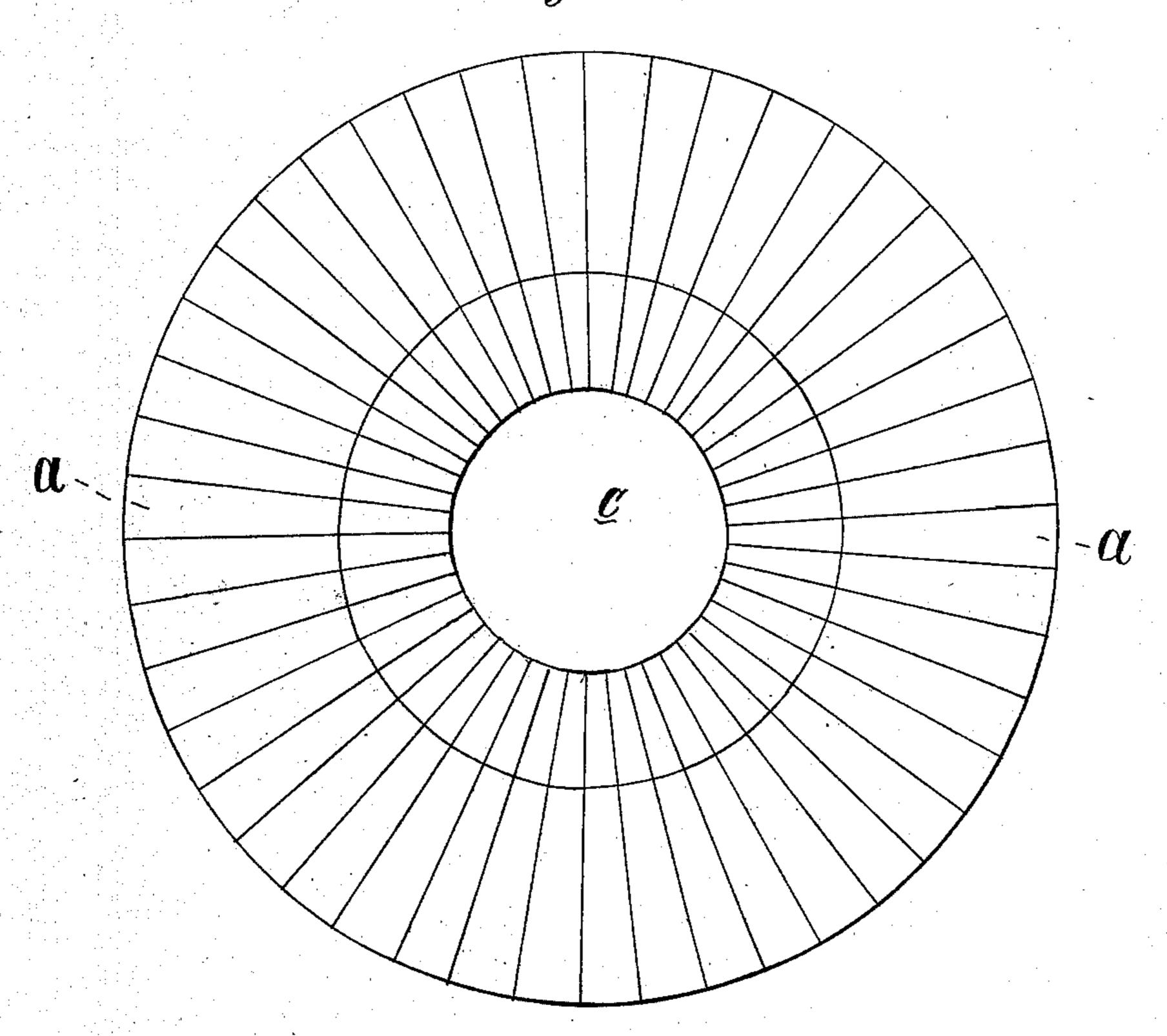
## J. T. WILLIAMS.

Reflector.

No., 35,644.



Patented June 17, 1862.



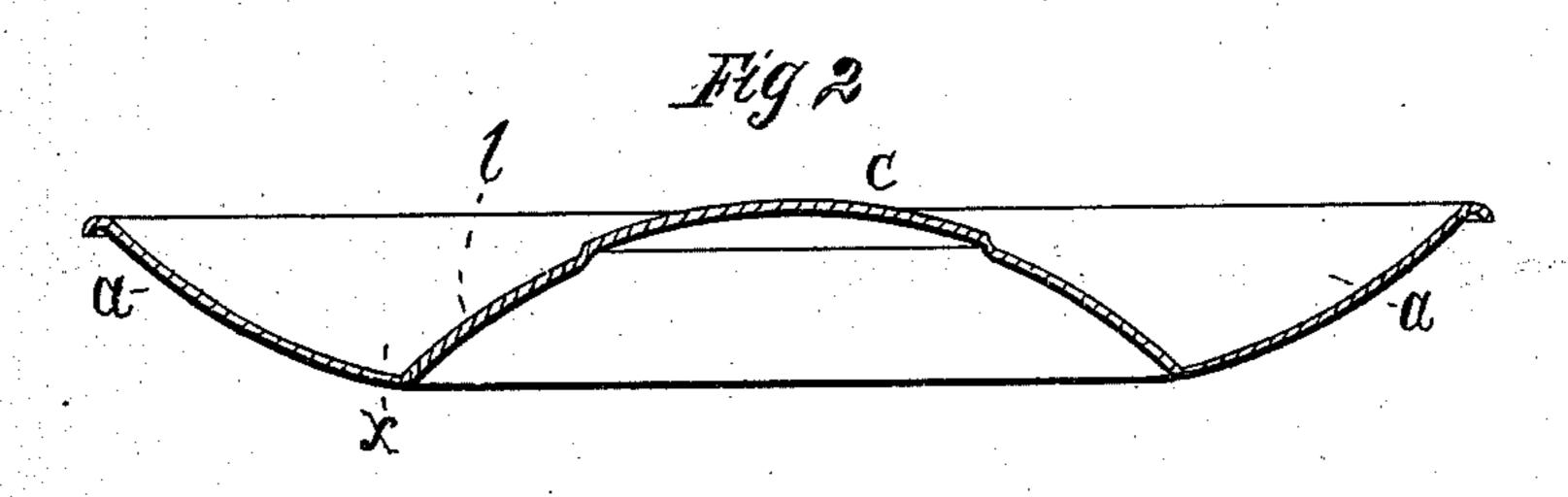


Fig.3.

C. Howson.

Inventor J. J. Williams.

## United States Patent Office.

JOB T. WILLIAMS, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN LAMP-REFLECTORS.

Specification forming part of Letters Patent No. 35,644, dated June 17, 1862.

To all whom it may concern:

Be it known that I, Job T. Williams, of Philadelphia, Pennsylvania, have invented an Improvement in Reflectors for Lamps, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of a circular reflector composed of an outer concave rim and central convex projection and having radial ribs or corrugations, the whole being constructed and arranged in the manner described hereinafter, for the purpose of increasing the reflecting-surface, reflecting the rays of light at a variety of angles, and increasing the illuminating effect.

In order to enable others to make my invention, I will now proceed to describe the manner in which it is formed and constructed.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a front view of my improved reflector; Fig. 2, a sectional view on a line drawn through the center of the reflector; and Fig. 3, an edge view, partly in section.

Similar letters refer to similar parts throughout the several views.

As far as regards the general form of the reflector, it is similar to the circular reflectors used in connection with lamps, lanterns, gaslights, &c., the outer rim, a, representing on the face a portion of a concave disk meeting the central convex projection, b.

Instead of making these reflectors as heretofore with plain surfaces, I form on them a series of corrugations radiating from the cen-

ter, all the corrugations being of the same size, and their convex sides appearing on the face, as seen in Fig. 3. A circular portion, however, in the center of the convex projection bof the reflector is plain, and from the edge of this plain portion the radial corrugations are continued over the remaining portion of the convex projection b and over the concave portion a, the corrugations of course diminishing in width as they approach the center of the reflector. Not only is an extended reflectingsurface afforded by these corrugations, but the rays of light are reflected at a variety of angles, and are dispersed to such an extent that much greater brilliancy and illuminating effect is obtained than from an ordinary plain reflector.

In some cases the reflector has to be applied to the chimney of a lamp, in which case a hole of suitable dimensions is made in the center of the reflector.

I do not desire to claim, broadly, a reflector with ribs or corrugations; but

I claim as my invention and desire to secure by Letters Patent—

The reflector composed of the outer concave rim, a, and central convex projection, b, and having radial ribs or corrugations, the whole being constructed and arranged as and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOB T. WILLIAMS.

Witnesses:
HENRY HOWSON,
JOHN WHITE.