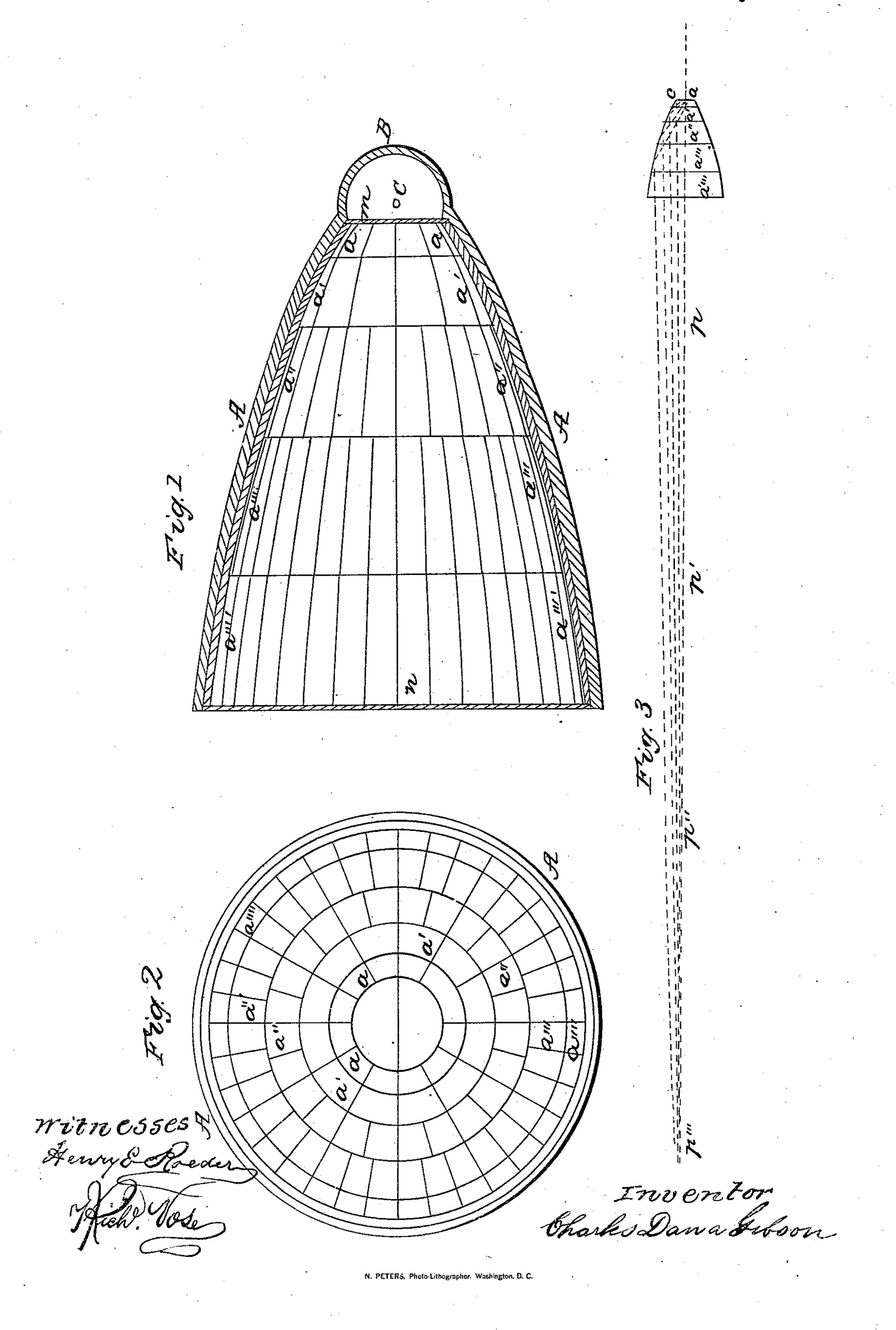
C. D. GIBSON.

Head Light Reflector.

No. 38,668.

Patented May 26, 1863.



## United States Patent Office.

CHARLES D. GIBSON, OF NEW YORK, N. Y.

## IMPROVEMENT IN HEAD-LIGHT REFLECTORS.

Specification forming part of Letters Patent No. 38,668, dated May 26, 1863.

To all whom it may concern:

Be it known that I, CHARLES D. GIBSON, of New York, in the county and State of New York, have invented a new and Improved Head-Light Reflector; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the combination of a series of polished surfaces, looking-glasses, or their equivalents, in the interior of a cylindrical curved frame or box, and arranged in such a manner that the rays of light from the focal point will be reflected from every series of surfaces to a different and distinct point.

In the accompanying drawings, Figure I represents a longitudinal section of my improved head-light reflector, and Fig. II is a front view of the same.

A is a cylindrical curved frame or box, forming the reflector-case, open at both ends, and having at its after end the lamp-frame B attached, in which a suitable light, C, is arranged at a point corresponding with the focal point, due to the form or shape of the curve of the reflector. In the interior of this frame

A small pieces of looking-glass, a a' a'', &c., or their equivalents, are firmly secured and arranged in regular series, in such a manner that in accordance with the rules of optics the rays from the light C, falling on one series of surfaces, a, will be reflected to a point, p, while the rays of the light C, falling upon another series of plates or surfaces, a', will be reflected and thrown to another point, p'. (See Fig. III.) The front and back ends of the reflector are closed by clear panes of glass n and m, so as to prevent the admission of dust, &c., and thereby preserve the polish of the reflecting-surfaces.

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

The construction of a cylindrical curved head-light reflector lined with several pieces of looking-glasses or their equivalents, and arranged in regular series around the interior of the case or box, so as to reflect the rays of the light to different and distinct points, substantially as set forth and described.

CHARLES DANA GIBSON.

Witnesses:

HENRY E. ROEDER, RICHD. VOSE.