

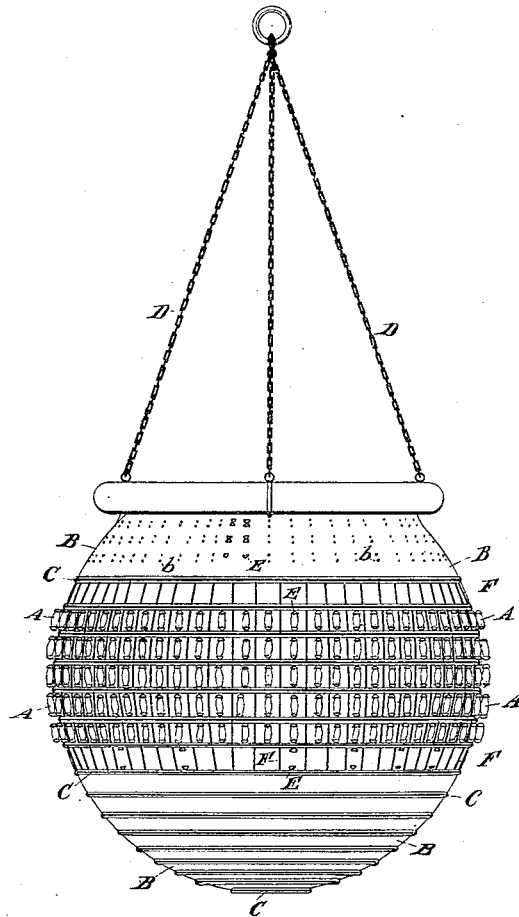
(No Model.)

J. H. IRWIN.

INCANDESCENT ELECTRIC ILLUMINATOR.

No. 262,418.

Patented Aug. 8, 1882.



Witnesses—  
*Charles F. Searle,*  
*William Ebeling*

Inventor—  
*John H. Irwin,*  
*By A. M. Pierce*  
*Atty.*

# UNITED STATES PATENT OFFICE.

JOHN H. IRWIN, OF MORTON, PENNSYLVANIA.

## INCANDESCENT ELECTRIC ILLUMINATOR.

SPECIFICATION forming part of Letters Patent No. 262,418, dated August 8, 1882.

Application filed December 29, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. IRWIN, of Morton, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Incandescent Electric Illuminators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing and the letters of reference marked thereon.

My invention relates especially to the application of small incandescent electric lamps to illuminating purposes; and it consists essentially in arranging a number of minute lamps upon an object or figure having a reflecting-surface; and my invention involves certain novel and useful combinations or arrangements of parts and peculiarities of construction and operation, all of which will be hereinafter first fully described, and then pointed out in the claims.

The drawing presented herewith shows a globe or sphere constructed and arranged in accordance with my invention.

Similar letters indicate corresponding parts. I have heretofore made application for Letters Patent for "forming symbols and figures from electrically-luminous vacuous cells," and for "forming signs and objects from incandescent electric luminous cells," wherein are shown certain peculiar methods of construction and operation. In the latter application are shown small incandescent electric lamps arranged upon a background of any color. In the present device the lamps are arranged upon a reflecting-surface.

A are the minute incandescent lamps or vacuous cells. B is a hollow globe or sphere, constructed of glass or other suitable material, the interior thereof being prepared in such a manner as to give the globe a mirror-surface.

For convenience I show only a sphere or globe; but it is obvious that my invention is not limited to the use of a device of any particular shape or form, as any object having a reflecting-surface whereon were arranged a number of incandescent electric lamps will come within the scope of my invention.

The globe B may be perforated with holes *b*, through which the conductors from the lamps may be passed to the line concealed within the

globe; or the conductor C may be arranged upon the exterior of the globe, suitable grasping devices, E, being attached to the conductors in either case for holding the lamps in place and establishing electric connection therewith. F are pieces of non-conducting material, holding conductors C in place upon the globe.

If desired, the lamps may be connected up in such a manner as to permit the use of one, two, or more rows or all of the lamps, as occasion may require, each lamp being removable from its connections, as described in my above-mentioned applications.

D are the supports of the globe, which may be utilized for the purpose of establishing electrical communication with the suspended device.

When constructed and arranged in accordance with the foregoing description, my improved illuminator will be found to be superior to any device heretofore employed for the specified purpose. By the use of the reflecting-background the entire light from the lamps is thrown outward and down, and at the same time the device appears to be one mass of incandescence, diffusing light in a soft and pleasing manner.

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

1. An incandescent electric illuminator composed of a hollow reflecting-support, numerous incandescent electric lamps arranged upon the exterior of the same, and electrical conductors for such lamps concealed in the interior of said support, substantially as described.

2. A hollow reflecting support or background adapted and arranged to support upon its surface a number of incandescent electric lamps or vacuous cells, the conductors to said lamps being concealed within the structure, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

JOHN H. IRWIN.

Witnesses:

F. W. HANAFORD,  
A. M. PIERCE.