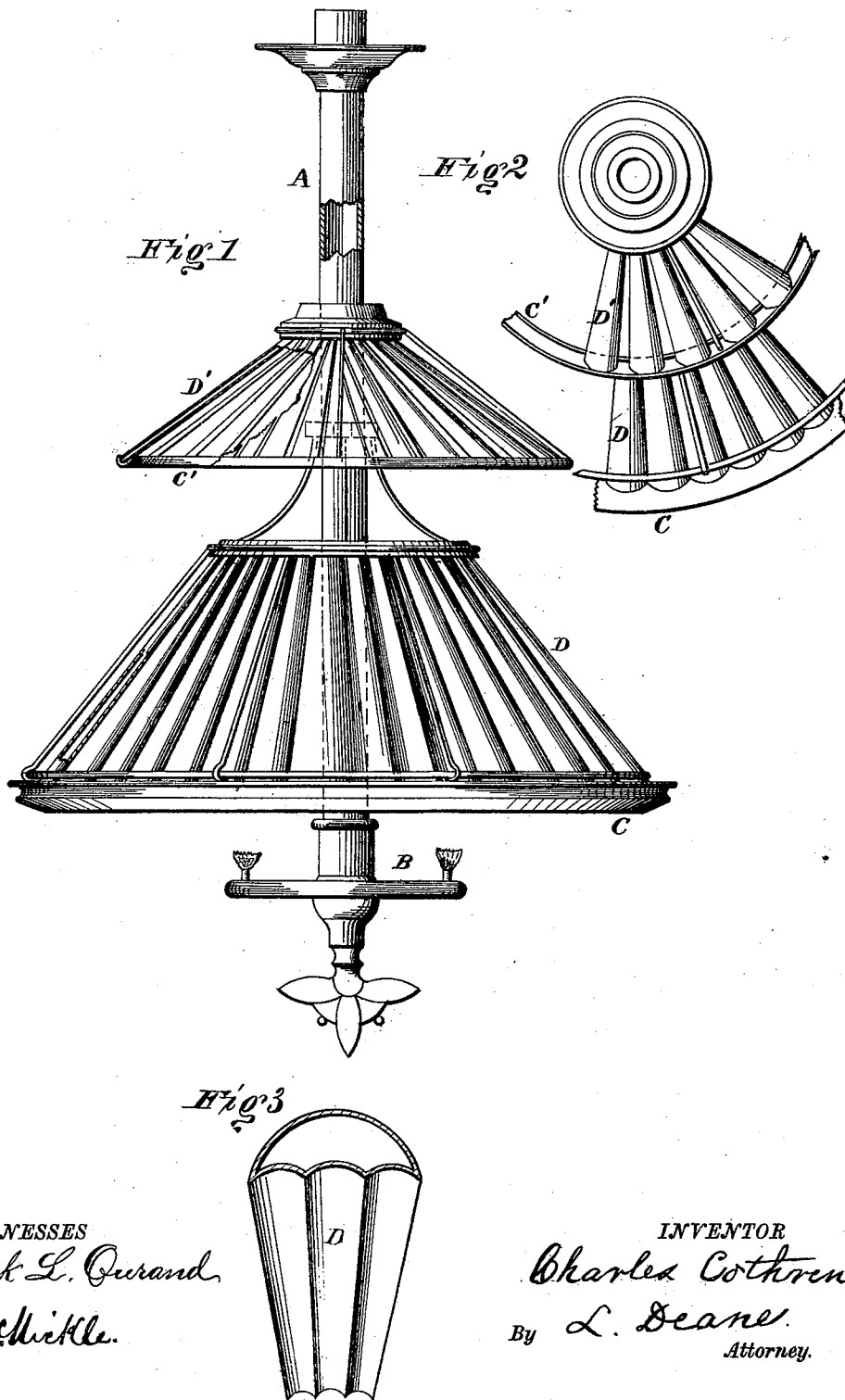


C. COTHREN.
REFLECTOR.

No. 179,001.

Patented June 20, 1876.



WITNESSES
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UNITED STATES PATENT OFFICE.

CHARLES COTHREN, OF NEW YORK, N. Y.

IMPROVEMENT IN REFLECTORS.

Specification forming part of Letters Patent No. 179,001, dated June 20, 1876; application filed May 26, 1876.

To all whom it may concern:

Be it known that I, CHARLES COTHREN, of 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:

My invention relates to that class of reflectors generally known as Overhead Reflectors; and it consists in a double-reflecting double-cone reflector made of silvered glass, or other suitable material, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of an overhead reflector embodying my invention. Fig. 2 is a plan view of a portion thereof. Fig. 3 shows one of the tubes of which the reflector is composed.

A represents the vertical pipe, with burners B. C and C' are two metallic skeleton frames attached to the pipe A, for containing the tubes forming the reflector. D D are the tubes of the lower or larger reflector; and D' D' are those of the upper or smaller reflector. These tubes may be made of silvered glass, or any other suitable material, tapering forward and corrugated on one or both sides, as desired, and making both the inner and outer sides reflecting surfaces. The tubes D' form-

ing the upper reflector may be so arranged in the frame C as to leave small spaces or narrow fissures between them, as shown fully in Fig. 2, thereby admitting a certain amount of light to pass through that there may be no shadow on the ceiling, as in the case of other reflectors. In addition hereto some of the rays of light that are reflected from the inner surface of the upper reflector are reflected by the outer surface of the lower reflector, and hence the entire ceiling is fully lighted up.

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

1. A double-reflecting double-cone reflector made of silvered glass, or other suitable material, substantially as herein set forth.

2. A cone-reflector made of a series of glass tubes corrugated on one or both sides, and forming both an outer and inner reflecting-surface, substantially as herein set forth.

3. In a double-cone reflector the upper reflector formed with a series of narrow open spaces or fissures, substantially as for the purposes herein set forth.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

CHARLES COTHREN.

Witnesses:

THOMAS S. RIVETT,
NATHL. COTHREN.