J. RETTERER.

Reflector-Lamp.

No. 162,689. Patented April 27, 1875.

Fig: 1.

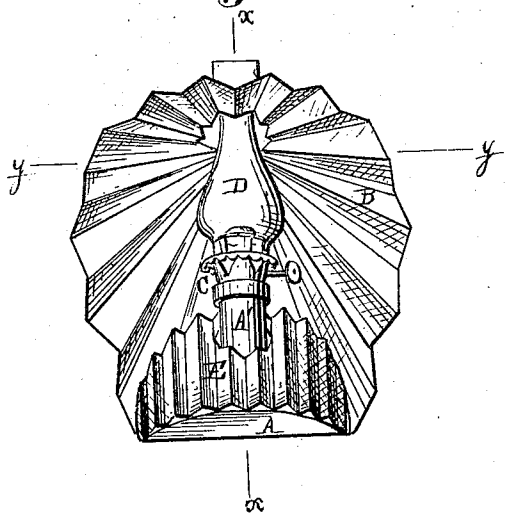


Fig: 2.

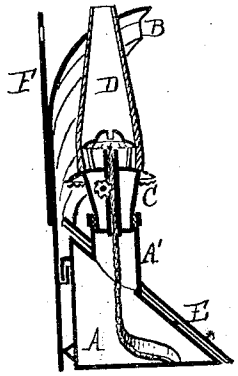
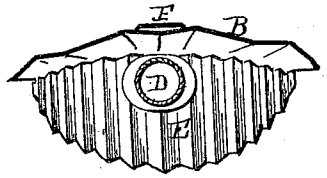


Fig: 3.



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JACOB RETTERER, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN REFLECTOR-LAMPS.

Specification forming part of Letters Patent, No. **162,689**, dated April 27, 1875; application filed March 29, 1875.

To all whom it may concern:

Be it known that I, JACOB RETTERER, of Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Reflector-Lamps, of which the following is a specification:

In the drawings, Figure 1 is a front perspective view of the lamp and reflector. Fig. 2 is a vertical section at *x x*. Fig. 3 is a horizontal section at *y y*.

In the drawing, A represents the front of the lamp, which in form is a vertical section of a cone, and is provided with a hook, *a*, to engage with a socket on the face of a sheet-metal reflector, B. Near the top a collar, A′, rises from the fount to receive the burner C, which supports a chimney, D. A corrugated sheet-metal refractor, E, covers the entire inclined surface or front of the fount, a hole being cut in it to slip over the collar. F is a strap soldered to the back of the reflector with a hole near the top, by which the lamp may be hung on a wall. The upper part of the reflector is bent forward over the fount and a hole is cut through it for the top of the lamp-chimney to pass through. The reflector is radially corrugated from the center of the chimney-opening. The vertical part of the reflector projects forward, the rays of light impinging upon it, while the upper part throws them down upon the corrugated refractor, which projects them at a right angle with the plane of incidence, the surface of said refractor being inclined at an angle of forty-five degrees or thereabout.

The surfaces of the reflectors should be plated with silver, in order to give the best results, although any bright or planished sheet metal may be employed.

The refractor will project the light in a horizontal plane, laterally as well as in front, being superior in this respect to ordinary reflectors, which collect and reflect the rays in one direction only; it also protects the fount from heat, and thus prevents generation of gas from hydrocarbon oils, and danger of explosion.

What I claim as my invention is—

The combination of the corrugated reflector B, as described, with the fount A, and corrugated refractor E placed over said fount, substantially as described and shown.

JACOB RETTERER.

Witnesses:

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