C. ROBINSON.

Reflector for Lamps, &c.

No. 199,575. Patented Jan. 22. 1878.

Fig. 1.

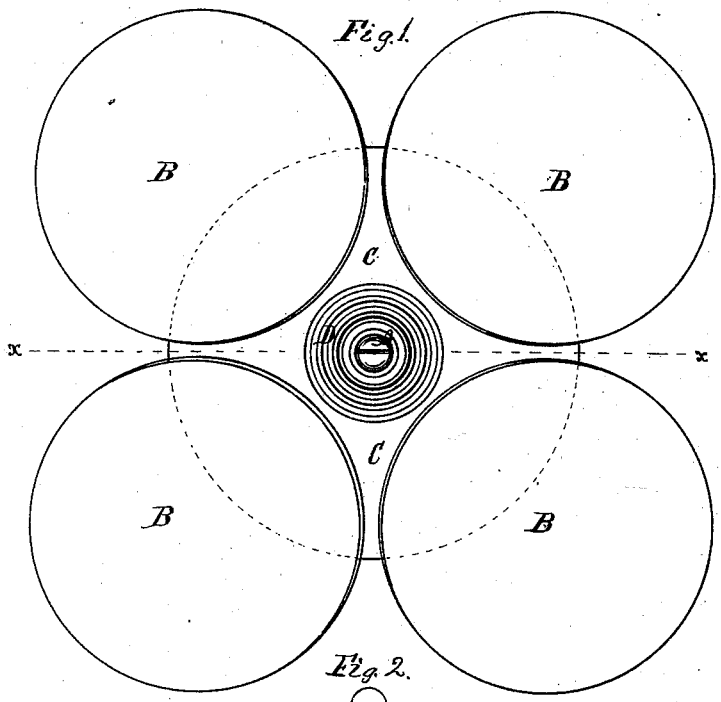


Fig. 2.

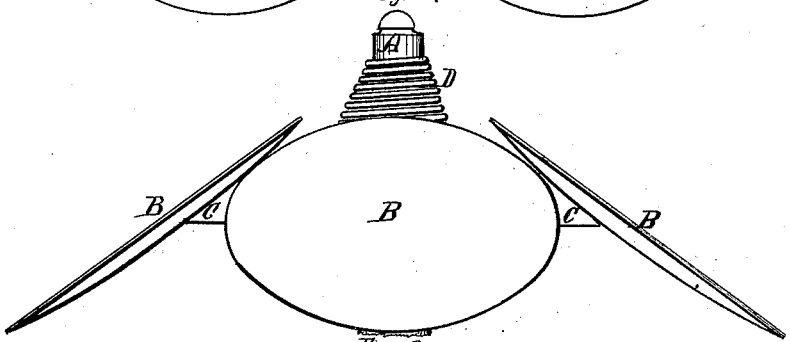


Fig. 3.

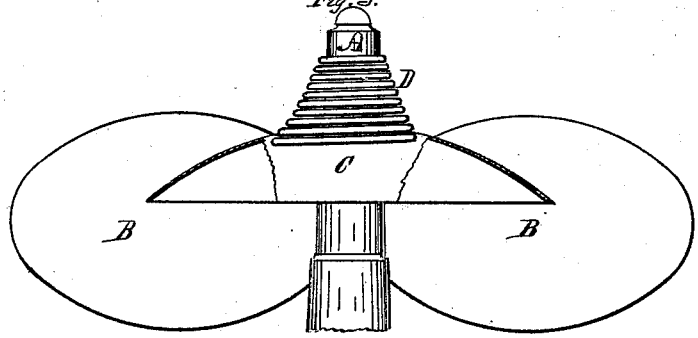
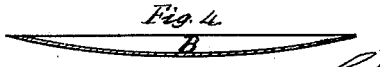


Fig. 4.



WITNESSES

D. T. Cowl

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UNITED STATES PATENT OFFICE.

CHARLES ROBINSON, OF CAMBRIDGEPORT, MASSACHUSETTS.

IMPROVEMENT IN REFLECTORS FOR LAMPS, &c.

Specification forming part of Letters Patent No. **199,575**, dated January 22, 1878; application filed August 29, 1877.

To all whom it may concern:

Be it known that I, CHARLES ROBINSON, of Cambridgeport, in the county of Middlesex and State of Massachusetts, have invented an Improved Lamp-Reflector; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a top view of the improved lamp-reflector; Fig. 2, a side view of the same; Fig. 3, a partial vertical section thereof in a plane indicated by the line *x x*, Fig. 1; Fig. 4, a central section through one of the individual mirrors which compose the complete reflector.

Like letters designate corresponding parts in all of the figures.

My invention consists, first, in a series of slightly-concave mirrors or individual reflectors, arranged in a circuit below and a little outside of the top of a lamp or gas-burner, also being arranged in downwardly and outwardly inclined positions, so that the light will be reflected therefrom outwardly in nearly horizontal directions, or as may be required; second, in mounting the said reflectors by a spring or yielding support, so that they may be pushed aside for reaching the burner in lighting, and will again automatically assume a central or normal position when the torch or other means of lighting the burner is withdrawn.

In the drawings, A represents a gas-burner as used in an ordinary street-lamp or in other places. Around this burner is arranged a series of individual mirrors or reflectors, B B B B, each being slightly, and only slightly, concave, about as shown in Fig. 4, and these mirrors are inclined so as to reflect the light coming from the flame of the burner outward in directions nearly horizontal, or as required in each particular case. The concavity is designed to cause the light from many rays to be reflected to each point within the scope of each individual reflector, without too greatly diminishing that scope or concentrating the reflected light to a focus. A degree of concavity about as represented is very suitable for street-lamps, to which this invention is especially applicable.

Each reflector may be molded in glass, and silvered on the back; or it may be stamped in metal suitable for the purpose, and brightly polished.

The reflectors may be attached permanently to the burner itself by any of the well-known means; but to adapt them to burners already in use it is convenient to make them separate from the burner, but generally all of a set secured to a common base, as shown in the drawings, with a central hole to fit around a burner, and thus in a simple and easy manner to mount them thereon; and for another special reason the reflectors are made separate from the burner, to enable me to apply the second feature of my invention—namely, to mount the reflectors so as to be easily moved aside, for getting access to the burner in lighting, &c. For this purpose the individual mirrors or reflectors B B B B are secured in proper position to a central holder, C, which has a coiled spring-wire support, D, substantially as shown, to hang the reflectors by around the burner A.

This coiled-wire supporting device allows the reflectors to move freely aside in any direction, for lighting the burner or for any other purpose, and to again return to a central position as soon as the torch or other lighter is withdrawn.

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

1. A lamp or gas light reflector, composed of a series of individual concave reflectors, B B B B, arranged around and below the burner A, substantially as and for the purpose herein specified.

2. In combination with the burner A and reflector B B B B, the coiled spring D, by which the said reflector is suspended from the said burner, substantially as and for the purpose herein specified.

The foregoing specification signed by me this 10th day of August, 1877.

CHARLES ROBINSON.

Witnesses:

H. L. HAZELTON,

W. H. H. YOUNG.