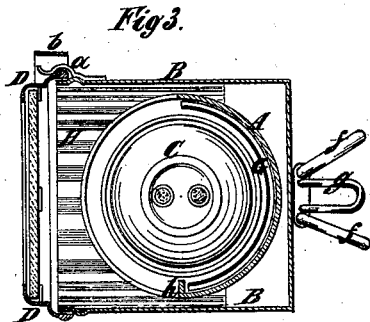
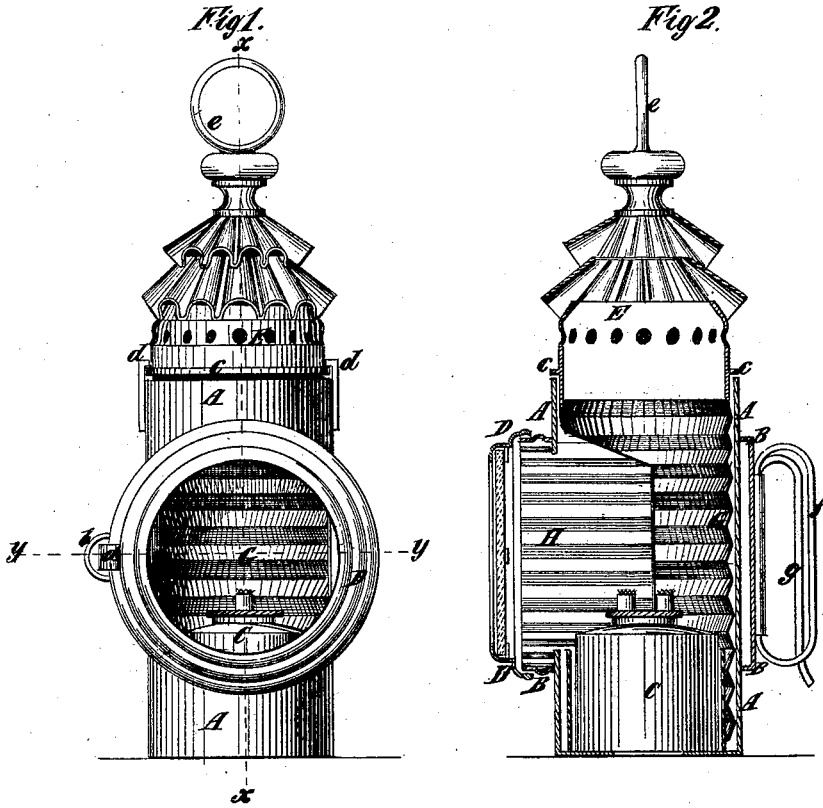


H. NAHE.  
Lantern.

No. 210,624.

Patented Dec. 10, 1878.



Witnesses:  
Chandler Hall.  
Thomas G. Birch.

Inventor:  
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By his Attorney  
Edwin D. Proctor

# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN LANTERNS.

Specification forming part of Letters Patent No. **210,624**, dated December 10, 1878; application filed  
November 15, 1878.

### *To all whom it may concern:*

Be it known that I, HENRY NAHE, of Brooklyn, Kings county, and State of New York, have invented certain new and useful Improvements in Lanterns, of which the following is a specification:

The object of this invention is to produce a simpler, more convenient, and serviceable lantern for general use than has hitherto been obtainable.

The invention consists in the combination, in a lantern with a shell or body composed of two intersecting cylinders, one vertically and the other horizontally arranged, the former containing the lamp, the latter provided with an opening through which the rays of light are emitted, of a polyzonal semi-cylindric reflector fitted within the vertical cylinder of the shell, and a series of angular reflectors arranged longitudinally in the horizontal cylinder of the shell, whereby I produce a lantern very attractive in appearance and very effective in focusing light from the lamp and shedding it with a steady luster from the exit-opening.

It also consists in the combination, in a lantern with such a shell, of a semi-cylindric polyzonal reflector, preferably made of sheet metal and of corresponding form inside and outside, arranged within the vertical cylinder of the shell, and a series of angular reflectors arranged longitudinally in the horizontal cylinder of the shell, the said polyzonal semi-cylindric reflector being capable of adjustment behind the lamp for use, or in front of the lamp, so as to preclude the emission of light from the lantern.

It also consists, in a lantern with such a shell, of a polyzonal semi-cylindric reflector fitted within the vertical cylinder of the shell, and suspended from a cowl attached to the said shell, so as to be free to turn relatively thereto, whereby it serves as a means for adjusting the said reflector therein.

It also consists in details of construction, to be hereinafter explained.

In the accompanying drawings, Figure 1 represents a front view of a lantern embodying my improvements. Fig. 2 represents a central vertical section taken on the plane of

the dotted line *x x*, Fig. 1; and Fig. 3 is a horizontal section thereof, taken on the plane of the dotted line *y y*, Fig. 1.

Similar letters of reference designate corresponding parts in all the figures.

A B designate the shell of the lantern, consisting of two cylinders or cylindric portions, intersecting each other at right angles, one, A, arranged vertically and containing a lamp, C, (which may be of any suitable form,) the other, B, arranged horizontally, provided with an opening through which light is emitted from the lantern, the same being fitted with a hinged cover, D, furnished with a glass, through which the light may shine, and fastened by a catch, *a b*. This catch *a b* consists of a spring-claw affixed to the horizontal cylinder or cylindric portion B of the lantern-shell, and adapted to project over the edge of the cover D, so as to retain it in place and yet permit of its being slipped past it when opened. To preclude it from injury the cover is preferably provided with a bridge or loop, *b*, which, when the cover is closed, will project across the claw *a* and protect it. The vertical cylinder or cylindric portion of the shell of the lantern has fitted to its upper end a cowl, E, provided with deflectors to preclude air from passing downward into the lantern, furnished with a bead, *c*, resting upon the top of the lantern-shell, and secured thereto by means of claws *d*, affixed to the lantern-shell and overlapping the said bead. This cowl is shown as provided with a handle, *e*, whereby the lantern may be carried.

There are, however, other handles, *f*, attached to the rear end of the horizontal cylinder or cylindric portion B, as also a tongue or hook, *g*, for securing the lantern to a fixed support.

In the vertical cylinder or cylindric portion A of the lantern-shell there is what I term a "polyzonal semi-cylindric reflector," G, which is designed to be arranged, when in use, behind the flame of the lamp, so as to direct it through the exit-opening of the lantern. It is composed of a number of zones of reverse angles, as may be clearly understood by reference to the drawings; and it may advantageously be attached to the cowl of the lantern,

and in such case may be adjusted by simply turning said cowl into a position behind the lamp for use, or into a position in front of the lamp to preclude the emission of light from the lantern. Preferably it is made of sheet metal, and of corresponding shape inside and outside, for then, even when turned into a position to exclude the emission of light from the lantern, it enhances the attractive appearance of the lantern. Preferably a stop, *h*, (see Fig. 3,) is arranged so as to preclude the movement of the reflector in the wrong direction.

In the horizontal cylinder or cylindrical portion of the lantern-shell I arrange a reflector, H, composed of a series of longitudinally-extending and reverse-angled reflecting-planes.

It will be seen that by my invention I provide a lantern which is susceptible of general use, either as a portable lantern or as a lantern attached to a fixed support and having a very attractive appearance, as also great effectiveness in concentrating and reflecting light so concentrated through the exit-opening of the lantern.

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

1. The combination, in a lantern with a shell or body composed of two intersecting cylinders, one vertically and the other horizontally arranged, the former containing a lamp, the latter provided with an opening for the emission of light, of a polyzonal semi-cylindric reflector fitted within the vertical cylinder of the shell, and a series of reverse angular reflectors arranged longitudinally in the horizontal cylinder, substantially as specified.

2. The combination, in a lantern with a shell composed of two intersecting cylinders, one vertically and the other horizontally arranged, the former containing the lamp, and the latter provided with an opening for the emission of

light, of a semi-cylindric polyzonal reflector, preferably made of sheet metal, and of corresponding form inside and outside, and arranged within the vertical cylinder of the shell, and a series of reverse angular reflectors arranged longitudinally in the horizontal cylinder of the shell, the said semi-cylindric polyzonal reflector being capable of adjustment behind the lamp for use, or in front of the lamp for precluding the emission of light from the lantern, substantially as specified.

3. The combination, in a lantern with a shell or body composed of two intersecting cylinders, one vertically and the other horizontally arranged, the former containing the lamp, the latter provided with an opening for the emission of light, of a semi-cylindric polyzonal reflector fitted within the vertical cylinder of the shell and suspended from a cowl attached to the shell, so as to be free to turn or oscillate relatively thereto, for the purpose of adjusting the said reflector therein, substantially as specified.

4. The combination of the shell A B, the lamp C, hinged cover D, cowl E, adapted to oscillate relatively to the shell, semi-cylindric polyzonal reflector G, reflector H, and the handle *e* or *f*, substantially as specified.

5. The combination of the shell A B, cover D, and catch *a b*, substantially as specified.

6. The combination of the shell A B, provided with a stop, *h*, and the adjustable semi-cylindrical polyzonal reflector G, substantially as specified.

In testimony that I consider the above-described improvements to be my invention I hereunto subscribe my name.

HENRY NAHE.

Witnesses:

OWEN PRENTISS,  
CHANDLER HALL.