

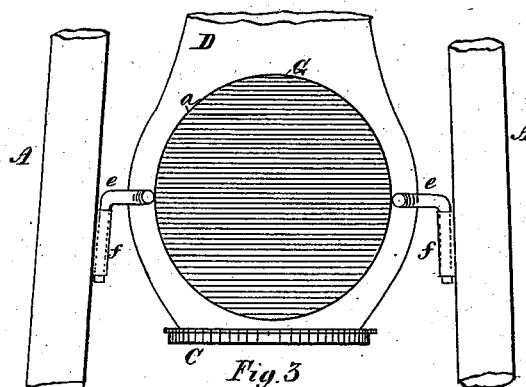
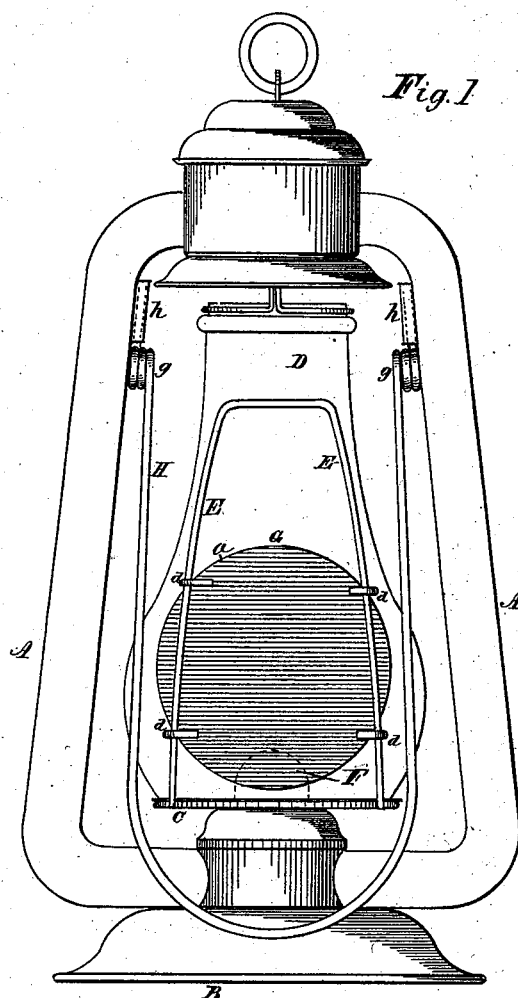
(No Model.)

2 Sheets—Sheet 1.

J. H. STONE.  
TUBULAR LANTERN.

No. 382,626.

Patented May 8, 1888.



Witnesses,

A. C. Jones,  
J. M. Eastwood.

# Эмментор

John Henry Stone,  
By W. Bruce  
Att'y

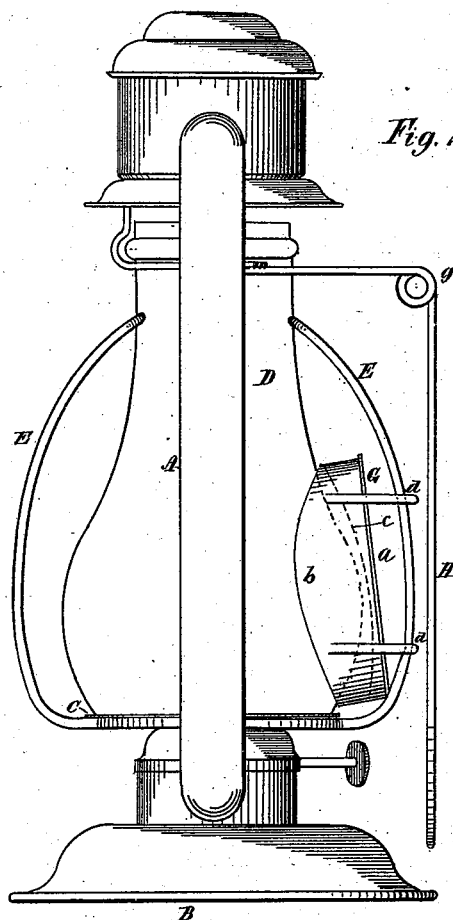
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# UNITED STATES PATENT OFFICE.

JOHN HENRY STONE, OF HAMILTON, ONTARIO, CANADA.

## TUBULAR LANTERN.

SPECIFICATION forming part of Letters Patent No. 382,626, dated May 8, 1888.

Application filed April 17, 1886. Serial No. 199,210. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN HENRY STONE, of the city of Hamilton, in the county of Wentworth, Province of Ontario, Dominion of Canada, manufacturer, have invented certain new and useful Improvements on Tubular Lanterns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

My device relates to an improved removable reflector specially designed for tubular lanterns, but which may be used for other kinds; and it consists in a circular metal plate provided around its circumference with a frame cut to conform to the swell and shape of the globe at its largest diameter. It will contain a concave burnished plate, which may be tinned, silvered, nickel-plated, or otherwise, as required, and the reflector may be attached in any convenient manner to the lantern, say, by hooks to the guard, to the tubes, or to the perforated globe-disk or top of the lantern.

By reference to the annexed drawings, forming part of this specification, it will be seen that Figure 1 represents a front elevation of my improved tubular lantern. Fig. 2 is a side elevation. Fig. 3 is a section showing one method of fastening the reflector.

A A are the tubes; B, the reservoir; C, the perforated disk upon which the globe D rests. E is the spring-guard. F is the burner. G is the reflector, consisting of the back *a*, the flange *b* surrounding the back *a* and cut closely to fit the rotundity of the globe D, to prevent mud, dust, or any deleterious material getting in between the globe and reflector to tarnish its smooth and polished surface.

*c* is the concave burnished plate secured to the back *a*. The reflector will be so placed

that its center will be about opposite the flame of the burner, so as to focus the light, and capable of throwing the light a long distance forward and at a considerable angle at each side, similar to a locomotive head-light. It may be observed that the said reflector constructed and placed as shown may be held in its place in any convenient manner—such as by hooks *d* soldered to the flange *b* and made to catch on the guard E, by which it is easily adjusted to the lantern or removed; or where the guard is not used wires *e* may be attached to the reflector, one on each side, and made to pass over to the tubes, have their ends bent down, and inserted in corresponding sockets *f*, soldered to the tubes A; or the said reflector may be attached to the perforated globe-disk C or to the top part of the lantern. In any case it must be made to be removable, so as to be easily taken off when the light is wished to be diffused equally on all sides.

Having thus described my device and its advantages, what I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a tubular lantern, of a removable reflector, G, having its flange *b* cut to conform to and fit the shape of the globe, substantially as specified.

2. The combination, with a tubular lantern, of a reflector, G, having its flange *b* cut to conform to and fit the round shape of the globe, and secured to the guard E by hooks *d*, substantially as specified.

Dated at Hamilton, Ontario, Canada, this 23d day of March, A. D. 1886.

JOHN HENRY STONE.

In presence of—

JAMES FORDE,  
WM. BRUCE.