(No Model.)

# L. F. BETTS.

## REFLECTOR ATTACHMENT FOR TUBULAR LANTERNS.

No. 377,287. Patented Jan. 31, 1888.

FIG. 1.

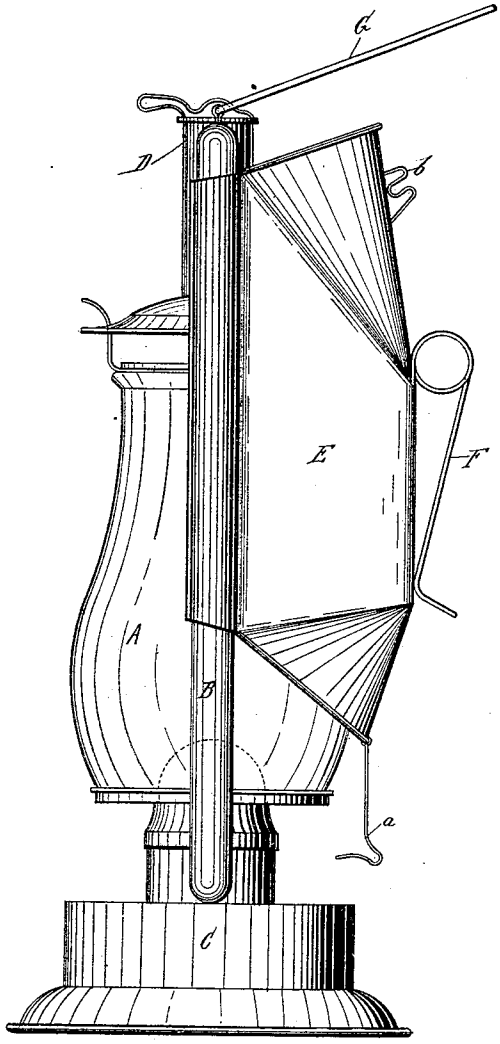
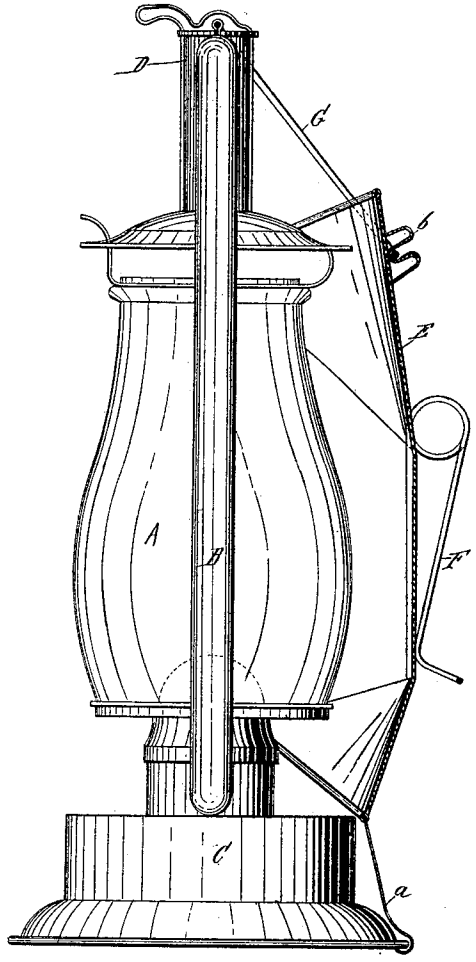



FIG. 2.




Witnesses:
John Buckler.
L. H. Osgood.

Lewis F. Betts,
Inventor.
By Wm. H. Osgood,
Attorney.

N. PETERS, Photo-Lithographer, Washington, D. C.

# UNITED STATES PATENT OFFICE.

LEWIS F. BETTS, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, OF ONE-HALF TO THE R. E. DIETZ COMPANY, OF SAME PLACE.

## REFLECTOR ATTACHMENT FOR TUBULAR LANTERNS.

SPECIFICATION forming part of Letters Patent No. 377,287, dated January 31, 1888.

Application filed June 4, 1887. Serial No. 240,205. (No model.)

*To all whom it may concern:*

Be it known that I, LEWIS F. BETTS, of New York city, county and State of New York, have invented certain new and useful Improvements in Reflector Attachments for Tubular Lanterns, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention has relation to attachments for reflectors such as are applied upon or in connection with tubular lanterns. Of this class of reflectors an example is seen in the United States Patent No. 343,792, granted for my invention June 15, 1886, though it should be understood that my present invention is applicable to other forms of reflectors for like uses and purposes.

The object of my present invention is to provide a simple, cheap, and efficient means for securing the reflector in place upon the lantern, securely holding it against accidental movement, and at the same time holding the bail or handle so that neither the reflector nor the handle can move or rattle when the lantern is used upon the dash-board of a vehicle or in other analogous situation. To accomplish this object I make the bail large enough to extend down a sufficient distance upon the back of the reflector, and at the proper point upon the back of the reflector I apply a spring-clip, which will receive and hold the bail, but from which the bail may be detached, all operating as will be herein fully described, and constructed and arranged as will be set forth in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a view in side elevation showing a tubular lantern and reflector therefor, the reflector being elevated above its proper seating and having the clip for the lantern-bail applied upon its back. Fig. 2 is a view of the same device, the lantern being shown in elevation and the reflector in section and elevation, the parts being locked together in accordance with my invention.

Like letters of reference, wherever they occur, indicate corresponding parts in both figures.

A is the lantern-globe; B B, the side tubes; C, the oil-pot, and D the central air-pipe with which the side tubes are united.

E is the reflector, which in the example shown is of the general form and arrangement of the reflector illustrated in the before-mentioned Letters Patent, and is mounted upon the side tubes, which are inclined outwardly from top to bottom and receive projecting portions of the reflector; but it should be understood that the reflector may be variously connected with the lantern structure.

Reflectors of this class are chiefly intended to adapt the lantern for use upon vehicles, and especially upon the dash-boards thereof, (but they may be used on other parts,) and the spring shown at F is intended to pass over the top of the dash-board or other projecting support, and to hold the lantern and its reflector in the proper place.

It is important to secure the lantern and reflector so that neither can move with respect to the other when thus supported, and for this purpose I have heretofore employed a hook, as shown at *a*, the same being attached to the reflector and arranged to hook beneath the lower rim of the oil-pot or base of the lantern. This may or may not be used in the present form or under the present arrangement. The locking of the reflector and lantern together prevents rattling when in use upon a vehicle and prevents the two from becoming separated. When the lantern is carried in the hand, ordinarily the parts are not required to be locked together.

G is the lantern-bail, hinged at some convenient point and in some convenient and secure manner upon the upper part of the lantern. I make the bail large enough so that when the free portion is allowed to drop it will extend well down upon the back of the reflector. At the portion where it touches the reflector I apply an open spring-clip, as *b*. Upon crowding the bail into the clip *b*, as shown in Fig. 2, it will lock the reflector down to its seat upon the lantern, as will be readily seen, from which seat it cannot be disturbed until the bail is released from the clip. The locking so accomplished also insures the locking of the bail so that it will not move or rattle, and this an important feature.

Whenever desired, the bail can be readily removed from the clip and the lantern carried in the hand. The locking with the bail is amply sufficient for all ordinary purposes, but the hook *a* may be used also, if desired, affording additional security, or the hook may be omitted, as above explained.

The improved lock is readily applicable in connection with any of the forms of reflectors for tubular lanterns, and is found to admirably answer the purpose or object of the invention, as previously stated. The mere form of the clip may be variously modified, it being only intended that it shall retain the bail until it is purposely released, and that it shall, in connection with the bail, the lantern, and the reflector, hold the latter to its seat, and all against rattling or moving one part with respect to the other.

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

1. In combination with a tubular lantern having a handle or bail, an attachment consisting of a reflector adapted to engage with the tubes of the lantern when slipped vertically thereon, and a projection from the rear of said reflector wherewith said handle or bail is adapted to engage, substantially as and for the purposes set forth.

2. In combination, a tubular lantern, a hinged bail thereon, a reflector, and a clip applied upon the reflector and arranged to receive and hold the lantern-bail, substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

LEWIS F. BETTS.

Witnesses:
JOHN BUCKLER,
WORTH OSGOOD.