(No Model.)

C. J. HIGGINS.

LANTERN ATTACHMENT.

No. 265,673. Patented Oct. 10, 1882.

Fig. 1.

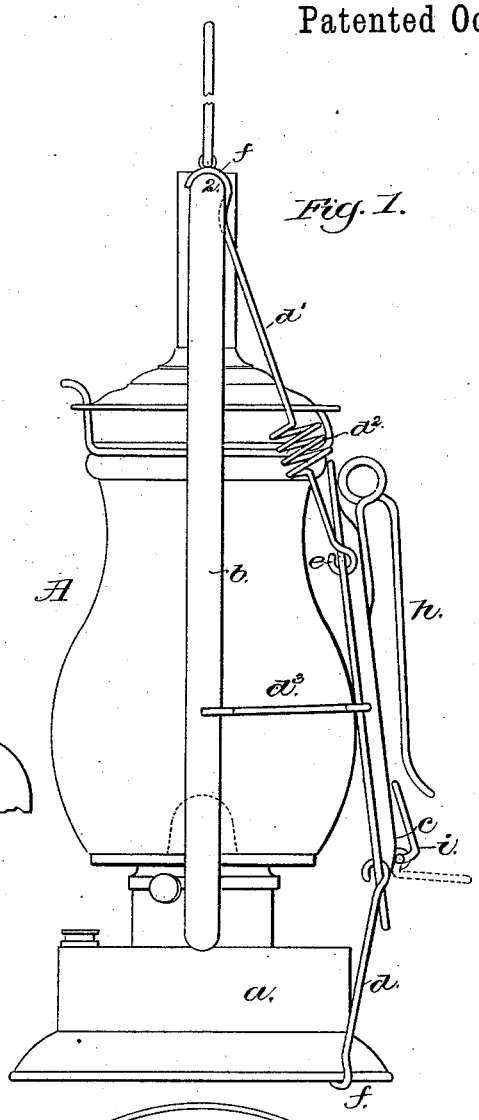
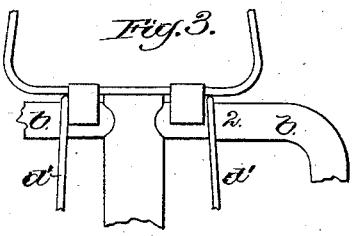


Fig. 3.



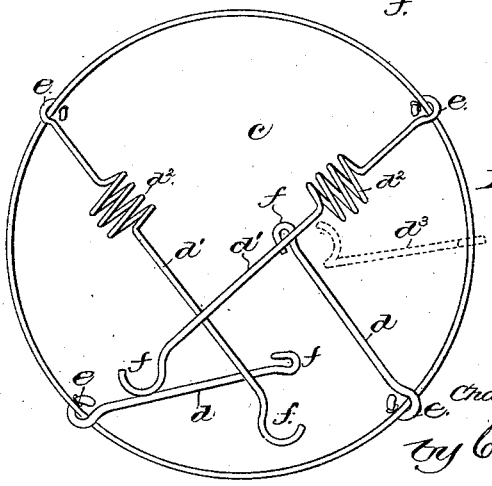


Fig. 2.

Witnesses.
John F. C. Brinkerhoff
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UNITED STATES PATENT OFFICE.

CHARLES J. HIGGINS, OF HALLOWELL, MAINE.

LANTERN ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 265,673, dated October 10, 1882.

Application filed August 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. HIGGINS, of Hallowell, county of Kennebec, State of Maine, have invented an Improvement in Lantern Attachments, of which the following description, in connection with the accompanying drawings, is a specification.

My invention relates to a reflector attachment for lanterns, and has for its object to produce a reflector that can be readily applied to or removed from the lantern, and which, with its attaching device, may be packed in a small space for shipment.

The invention consists in the combination, with the reflector, of a series of holding-arms having a pivotal connection therewith at one end, and being provided with holding-hooks at their other ends to engage the frame-work of the lantern, one or more of the said holding-arms being elastic in a longitudinal direction. The said arms are shown as made of stout wire, bent to form the pivotal eyes and engaging points or hooks, and the longitudinally-elastic ones have a portion of their length bent or coiled to form a spring. When the reflectors are detached from the lantern their holding-arms may be easily detached from them, or may be folded over into the concavity of the reflector, either method enabling them to be packed closely for shipment.

I am aware that reflectors have been mounted upon lanterns by means of arms or frame-work rigidly connected with the said reflectors, which, together with the said arms, are very bulky and inconvenient when detached.

Figure 1 is a side elevation of a lantern provided with a detachable reflector embodying this invention; Fig. 2, a view of the inside of the said reflector detached, and with its holding-arms folded within it; and Fig. 3, a detail showing the upper portion of the lantern-frame and reflector-holding arms in front elevation.

The lantern A may be of any usual construction, it being shown as a tubular lantern, or one in which the oil-pot *a*, forming the base, is connected with the top and handle portion by tubes *b*, which pass up at either side of the lantern-glass and then turn in horizontally at 2 to the point where they join the lantern-top.

The reflector *c* is provided with a series of holding-arms, *d d'*, having a loose pivotal connection therewith, they being shown as of stout wire, bent at one end to form eyes *e*, which are received in holes near the periphery of the reflector. The other ends of the said arms are provided with holding-hooks *f*, to engage the frame-work of the lantern. The arms *d* are shown as two in number, extending from the lower portion of the reflector to the base *a* of the lantern, where the hooks *f* engage the edge of the flange which forms the foot of the lantern. The arms *d'* extend to the top of the lantern, where the hooks *f* engage the horizontal portion of the tubes *b*.

In order to enable the hooks of the arms *d* and *d'*, which extend in opposite directions, to be engaged with the lantern-frame, one of the said sets of arms, as *d'*, is made longitudinally extensible, it having in this instance a portion of its length coiled to form a spiral spring, d^2, by the tension of which the reflector is firmly held in place. The said springs yield to permit the hooks *f* to engage or be disengaged from the lantern.

When the reflector is detached from the lantern the holding-arms *d d'* may be easily removed therefrom by disengaging the eyes *e* from their holes, or the said arms may be turned on the said eyes as pivots into the concavity of the reflector, as shown in Fig. 3, either method rendering the entire reflector attachments very compact, so that they can easily be boxed in large numbers for shipment.

It will be seen that two holding-arms extending from opposite sides of the reflector, one at least being longitudinally elastic, would be sufficient to hold the reflector, and that any larger number may be employed.

In practice the four arms marked *d d'* are very convenient, and, if desired, additional bracing-arms d^3 may be employed, extending from the side of the reflector to the tubes *b*, they preventing the reflector from being pressed against the glass of the lantern by the tension of the springs d^2.

The reflector is provided with a hook, *h*, at its rear side, by which it, together with the lantern, may be hung upon the dash-board of a vehicle or other similar support.

In some cases the upper edge of a vehicle dash-board inclines forward, and in order to enable the lantern to be held vertical the lower por-

tion of the reflector is provided with a folding prop, *i*, which may be turned out at right angles to the reflector, as shown in dotted lines, when the dash-board is so inclined. With the more common vertical dash-boards the said prop *i* may be folded down upon the back of the reflector, as shown in full lines, or may be wholly dispensed with.

The holding-arms may be properly modified to enable the reflector to be attached to any lantern.

I claim—

1. In a lantern attachment, the combination, with a reflector, of a series of holding-arms loosely connected therewith, substantially as and for the purpose described.

2. The combination, with a reflector, of a series of holding-arms connected therewith, a portion of the said arms being longitudinally extensible, substantially as described.

3. The reflector combined with hooked holding-arms having a loose pivotal connection therewith, one or more of the said arms having a portion of its length bent to give it longitudinal elasticity, substantially as described.

4. The reflector provided with the supporting-hook *h*, combined with the loosely-pivoted hooked holding-arms *d d'*, some of which have a portion of their length bent into a spiral spring, substantially as and for the purpose described.

5. The combination, with the reflector, of its supporting-hook *h* and folding prop *i*, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES J. HIGGINS.

Witnesses:
JOS. P. LIVERMORE,
FRED A. POWELL.