

(No Model.)

A. L. BARON & W. T. RUFER.

LANTERN.

No. 302,465.

Patented July 22, 1884.

Fig. 1.

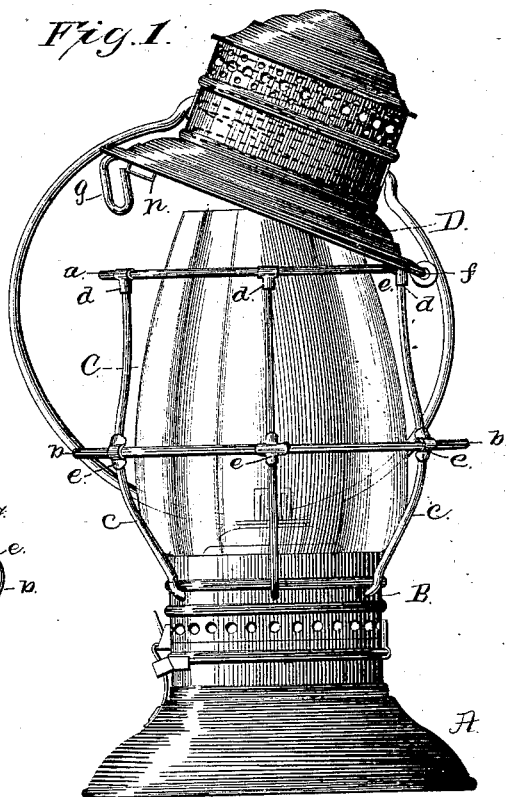


Fig. 2.

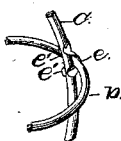


Fig. 3.

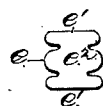


Fig. 4.

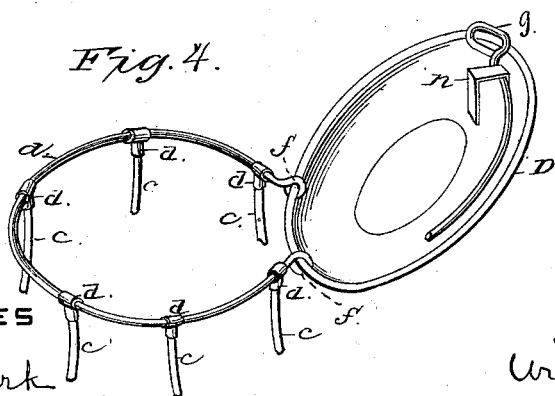
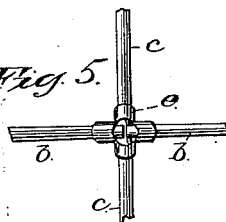


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALFRED L. BARON AND WILLIAM T. RUFER, OF BELLAIRE, OHIO, ASSIGNORS
TO THEMSELVES AND BENJAMIN F. COCKAYNE, OF SAME PLACE.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 302,465, dated July 22, 1884.

Application filed December 28, 1883. (No model.)

To all whom it may concern:

Be it known that we, ALFRED L. BARON and WILLIAM T. RUFER, of Bellaire, in the county of Belmont and State of Ohio, have
5 invented a new and useful Improvement in Lanters; and we do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference
10 marked thereon.

Our improvements relate to what are commonly known as "hinged-top lanterns," and are specially adapted for the use of railroad employes, and are mainly connected with the
15 construction of the globe-guard and the hinged top, and the pivoting of both together, with a view to cheapness and accuracy in manufacture and increased durability and efficiency in use.

The invention therein consists, mainly, in
20 the construction and arrangement of the various parts of the guard, in the construction of the lantern-top, and in the means by which the guard is hinged to the top of the lantern, and in the various other combinations of parts,
25 all as more fully hereinafter described and claimed.

For the better comprehension of our invention, attention is invited to the accompanying drawings, in which—

30 Figure 1 is an elevation of our lantern with the hinged top thereof partly opened; Fig. 2, a detail showing the manner of securing the breast and vertical wires of the guard together, and Fig. 3 a view of the blank for the clasp
35 employed in making said connection. Fig. 4 is a top view of the upper part of the guard with the hinged top thrown back, and Fig. 5 a view in detail showing the ends of a horizontal breast-wire meeting over one of the vertical
40 wires of the guard.

Like letters denote corresponding parts in the several views.

A represents the base of the lantern, which contains the oil-reservoir, and B the globe-band, hinged to said base and supporting the
45 globe C, all of which may be of any of the well-known forms. The globe-guard is composed of horizontal wires *a* and *b* and vertical wires *c*, the lower ends of the latter being secured
50 to the globe-band B. These wires *c*, which are in separate pieces, are secured to and sup-

port at their upper ends the annular top wire, *a*, by means of clasps *d*, which secure such ends directly under the annular wire *a*. This annular wire is not an entire ring, but its ends
55 are separated and pass through proper perforations in the reflector D, and are bent around the edge of the same and form loops or hinges *f f* for the lantern-top, being supported near such hinges by two of the vertical wires *c c*.
60 This top wire, *a*, further serves as a support for the reflector D when the lantern-top is closed, and as a catch for the latch *g*, which is a long wire spring curved in form and extending around a considerable portion of the under
65 side of said reflector, and has its outer or free end held in position by a guard, *h*. A breast-wire, *b*, passes centrally around the outside of the vertical wires *c c*, and is so arranged that its ends meet directly over one of the vertical
70 wires, where it is secured by a clasp, *e*, as well as at the points where it crosses the other vertical wires. This clasp is of metal, made from a blank preferably of the form and construction shown in Fig. 3, having two wings, *e' e'*,
75 at each end, and with its body *e''* widened somewhat. In securing the wires together with this clasp *e* the body of it is applied to the outside of the breast-wire, or to the top of the annular
80 wire, and the wings are bent around the vertical wires, and all are firmly secured, preferably, by solder.

In order to effect a firm and yet elastic support by the lantern-top to the globe, we employ a well-known spiral spring and diaphragm, the
85 former arranged between the upper inner surface of the top and this diaphragm, which is placed in the flue-opening of said top. When the top is closed down upon the top of the globe, the diaphragm yields a little, but the
90 spring keeps it with proper pressure constantly against the top of said globe, so that any sudden movement of the lantern will not displace the globe, and an accidental fall of the lantern renders the globe less liable to fracture.
95

The principal advantages asserted in these improvements may be found in the increased strength of the several parts, and in the increased durability and efficiency of the lantern.

What we claim as new in our lantern, and
100 desire to protect by Letters Patent, is—

1. In a lantern-guard, the combination of

separate vertical wires and a horizontal top wire with ends adapted to form hinges for the lantern-top, substantially as described.

2. In a lantern-guard, the combination of
5 separate vertical wires, horizontal breast-wires meeting directly over one of said vertical wires, and a clasp, *e*, provided with wings *e'* and body *e''*, all constructed and arranged substantially as and for the purposes
10 set forth.

3. In a lantern-guard, a horizontal wire with ends adapted to form hinges for the lantern-top, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

ALFRED L. BARON.
WILLIAM T. RUFER.

Witnesses:

C. C. CRATTY,
W. P. BLOOM.