C. S. S. & A. L. BARON.

Lantern.

No. 108,430. Patented Oct. 18, 1870.

Fig. 1.

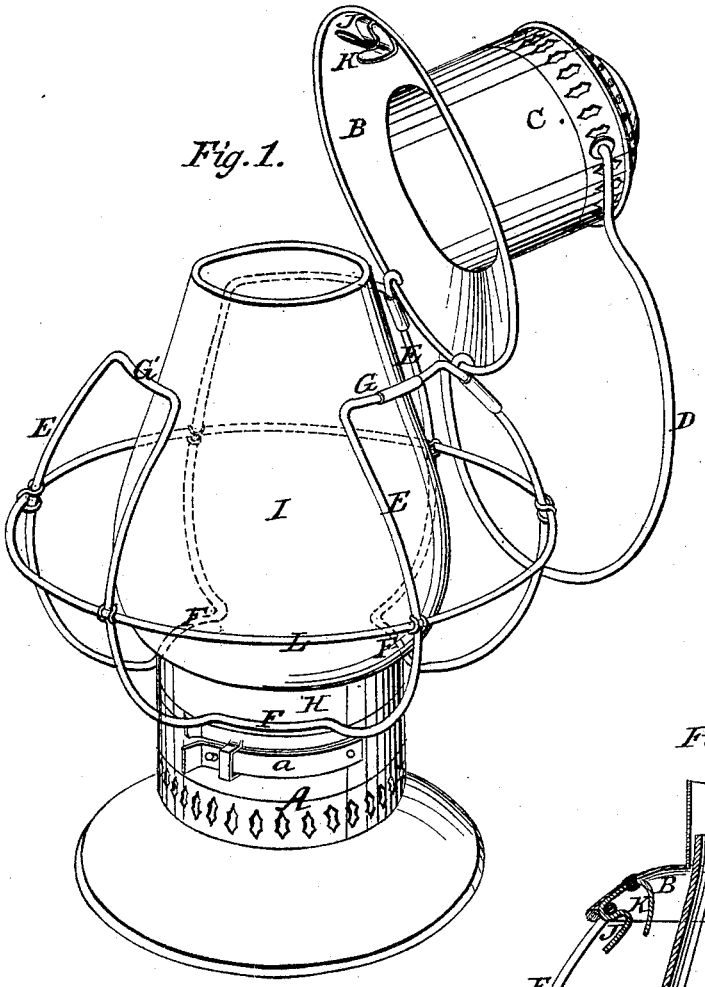
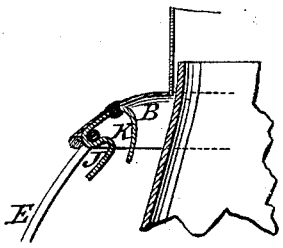


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES S. S. BARON AND ALFRED L. BARON, OF BELLAIRE, OHIO.

IMPROVEMENT IN LANTERNS.

Specification forming part of Letters Patent No. **108,430,** dated October 18, 1870.

To all whom it may concern:

Be it known that we, CHARLES S. S. BARON and ALFRED L. BARON, of Bellaire, in the county of Belmont and State of Ohio, have invented certain new and useful Improvements in Hand-Lanterns; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, which makes part of this specification, and in which—

Figure 1 represents a view, in perspective, of a lantern embracing our improvements, the dome being turned back upon its hinges. Fig. 2 represents a partial section of the cap or canopy and lantern-guard, showing the device for locking these two parts together.

Our invention relates to hand-lanterns; and it consists in constructing the guard of a continuous piece of wire, so as to form three or more distinct vertical sections, in such manner as to unite each section to the band of the lamp-shade by a segmental bearing equal in length to the distance between said sections, and alternately with said bearings, forming horizontal segmental supports for the canopy and dome, whereby we obtain a strong connection of said continuous guard with the shade-band, and a firm support for the canopy and dome, so that when the latter is locked with the guard it serves to brace firmly every part of the upper portion of the continuous guard to which it is hinged, while the continuity of the several sections of said guard, being unbroken, makes each section serve as a brace to the others.

Our improvement further consists of a catch of peculiar construction, for the purpose of locking the canopy with the continuous guard, so that when locked the greater the strain upon the dome tends only to lock it more firmly, while a check or stop used in connection with said latch forms a limit to the movement of the spring-section of the continuous guard in being pressed inward to release it from the catch, and thus prevent it from being pressed out of spring by constant use.

In the accompanying drawing, the base and receptacle A for the lamp, the canopy or reflector B, the dome-ventilator C, and its bail-handle D are constructed and arranged as represented in the drawing, or in any approved manner. The guard, however, for protecting the lamp-shade differs in construction from those heretofore in use, and consists of a single piece of wire bent so as to form three (more or less) vertical sections, E, each section having a horizontal segmental branch alternating with each other, those, F, at the bottom of the guard being secured to the shade-band H by solder or otherwise, and those, G, at the top forming a support for the hinges, the dome and reflector, and an arm, G′, with which the catch interlocks.

The fastening of the segmental branches F occupies about one-half of the circumference of the band H, within which the shade or globe I is secured, and therefore forms a much firmer support for the guard, and, of course, a stronger attachment to the shade-band than could possibly be obtained by the connection of the ends of each vertical branch to the shade-band independently of each other, as heretofore. The advantages of strength and firmness by this method of attaching the guard are of great importance, because the motion of the lantern, in swinging it to and fro when used for signaling, produces great strain upon the guard, and frequently breaks the connections of a single point of wire. Moreover, these segmental branches F form braces to each pair of vertical guards at the bottom, while those, G, form braces at the top of the lantern, and thus each acts as a brace to the other.

The dome and reflector are hinged to the opposite angles of two sections of the guard, which affords a very firm support thereto, and enables us to use a hinged dome with an open spring top-guard. The upper portion of each section of the guard forms alternate segmental supports and spaces, which allows each section to have a certain amount of spring independent of the other, so as to adapt themselves to shades of varying sizes, and to obtain a spring sectional guard with a fixed catch.

The locking-catch J is secured to the under side of the reflector, and, in the instance represented, is composed of a single plate having a curved branch, J, which locks with the horizontal part G′ of one of the sections, and another branch, K, which forms a stop to limit the inward spring of the section in unlocking the catch, and thus prevent the said section

from being pressed by the hand too far inward, so that this stop always maintains the proper set of the spring-section.

It will be observed that the outer branch, J, of the catch locks with the outer side of the spring-section, and that the greater the strain upon the guard tends only to lock it more securely. The continuous guard or frame is strengthened, in the usual manner, by one or more horizontal belt-guards, L.

The seam formed by the union of the ends of the shade-band is materially strengthened by attaching one of the segmental branches so as to cross it, and as this band frequently breaks asunder, it is very important and advantageous to strengthen it by the guard.

The ends of the continuous guard may be secured together to the shade-band, or at any convenient part of the guard.

The continuous guard thus described, with its vertical sections, can be made at a single operation, and it is obvious that, being thus made, it can be more easily and quickly secured to the shade-band than if it were in independent sections, as heretofore made.

The shade-band is locked to the lamp-base by a spring-catch, *a*, as represented, or in any other manner.

Having described our invention, we claim—

1. A wire guard for a lantern, made of a continuous piece, as described.

2. A continuous wire guard secured to the shade-band by segmental bearing-branches F, so as to serve as braces to said band, and to the several sections of the guard, as described.

3. A continuous wire guard made so as to form vertical sections, open and closed at the top and bottom of said sections in alternate order, so that each section must act as a brace to the other, as described.

4. The catch J and its check or stop K, constructed in one piece, in combination with the spring-guard E, with which it locks, for the purpose described.

5. The reflector and dome, hinged directly to the opposite angles of the open sections of a continuous guard, in the manner described.

6. The combination of a reflector, B, and dome C, hinged to the opposite angles of the open sections, with a continuous guard, E, and catch J, as described.

7. The combination of a continuous guard, E, made as described, with the shade-band H, the hinged reflector B, dome C, and locking-catch J K, the several parts constructed and arranged as described.

In testimony whereof we have hereunto set our hands.

CHARLES S. S. BARON.
ALFRED L. BARON.

Witnesses:
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