(90.)

C. S. S. BARON.

Lantern.

No. 122,931. Patented Jan. 23, 1872.

Fig: 1.

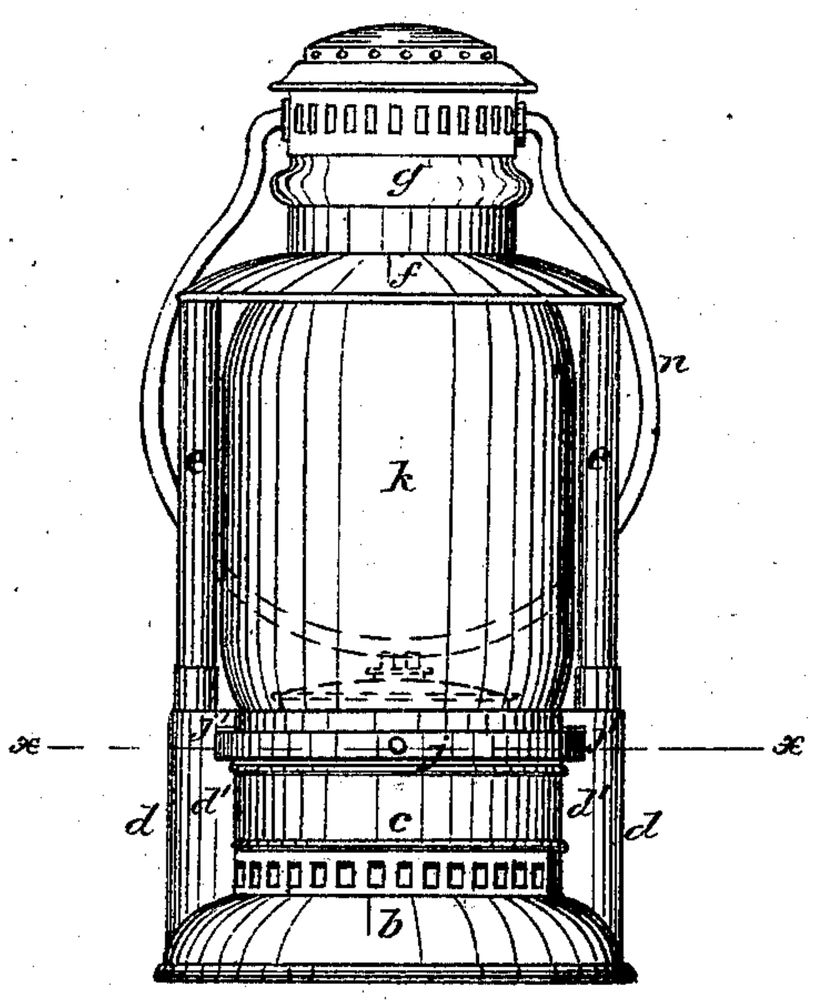


Fig: 2.

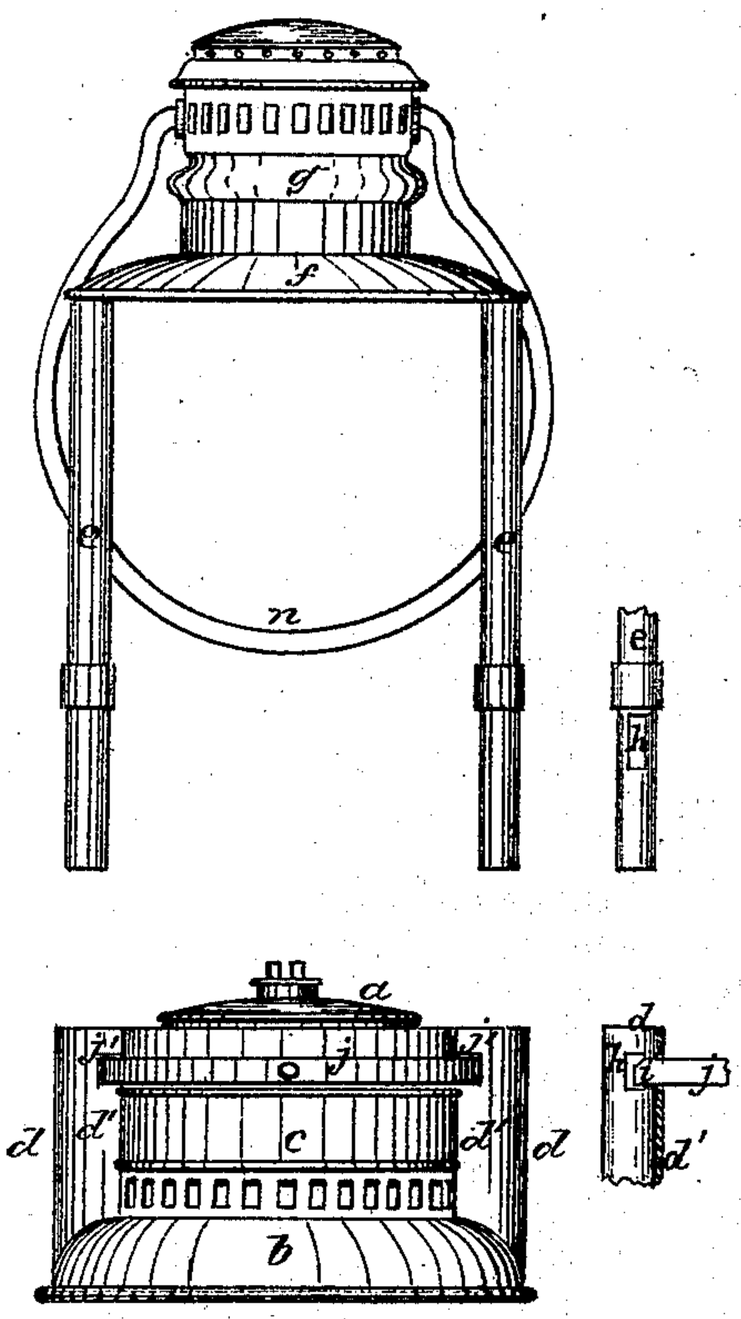


Fig: 3.

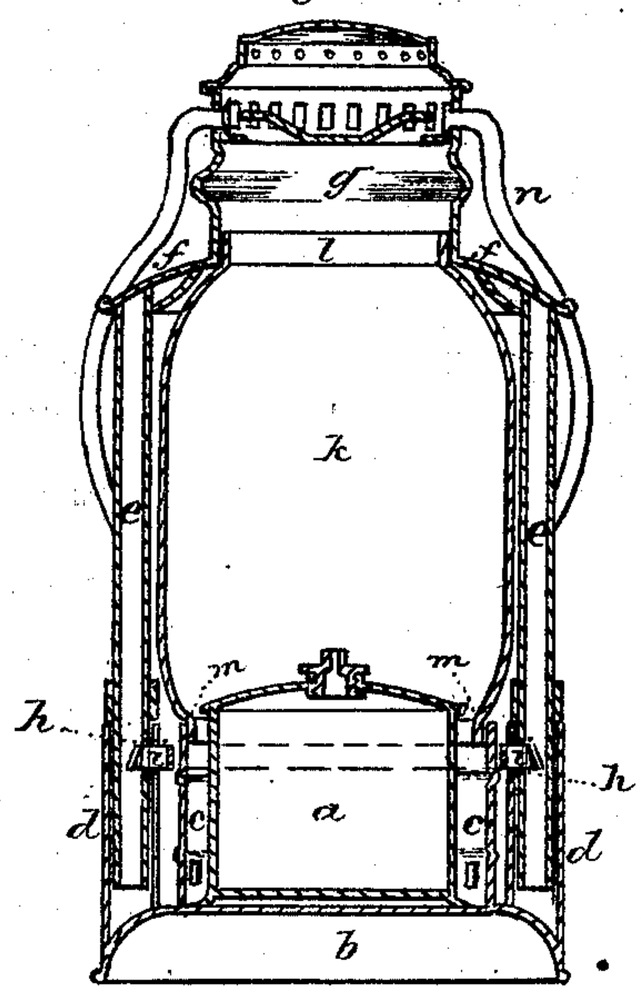
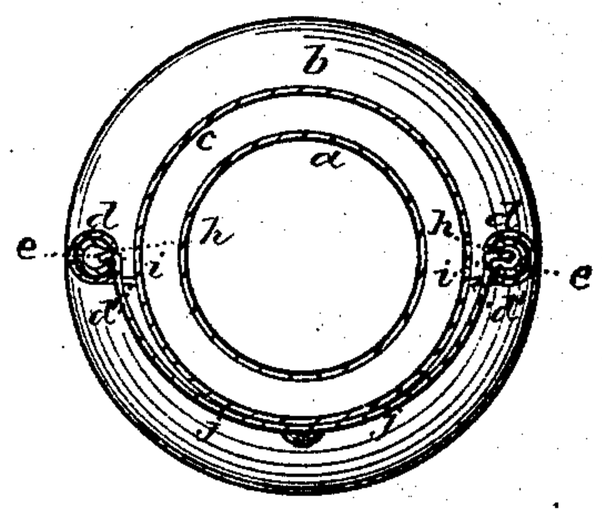


Fig: 4.



Witnesses:

J. Wesl. Wagner.

Parker H. Sweet Jr.

Inventor:

Charles S. S. Baron

by

Johnson Maucke & Co.

his Attorneys

122,931

UNITED STATES PATENT OFFICE.

CHARLES S. S. BARON, OF BELLAIRE, OHIO.

IMPROVEMENT IN LANTERNS.

Specification forming part of Letters Patent No. 122,931, dated January 23, 1872.

To all whom it may concern:

Be it known that I, CHARLES S. S. BARON, of Bellaire, in the county of Belmont and State of Ohio, have invented a new and useful Improvement in Lanterns, of which the following is a specification:

My invention relates more especially to that class of lanterns known as railroad lanterns; and my said invention consists in constructing the guard-tubes connecting the cap with the base of a lantern of distinct, separable sections, the upper sections fitting within and sliding into the lower sections, the two thus interlocking being held to each other so as to firmly hold the globe between the cap and base, and admit of its instant removal for cleansing and lighting the lamp; and further, in the arrangement of a bow-spring, secured to the band of the base centrally between its bent and beveled ends, which are free to enter or be withdrawn from slots or mortises formed in both sections of tubes, in such manner that when the ends of the upper sections of tubes enter the lower sections they will automatically compress the spring through its beveled bent ends until the slots in both sections of tubes match each other, when the ends of the spring, being released from contact with the ends of the upper sections of tubes, enter both slots, and thus firmly hold the interlocking sections; the spring being so arranged as to be readily operated by two fingers of one hand to release the ends from the slots, and thus allow the sections to be separated, while their interlocking is accomplished automatically.

In the accompanying drawing, Figure 1 represents a side elevation of a lantern embracing my invention. Fig. 2 represents a similar view, the globe being removed and the connecting guard-tubes separated from each other. Fig. 3 represents a vertical central section of Fig. 1; and Fig. 4 represents a horizontal section in line *x x* of Fig. 1.

The ordinary cup *a*, foot *b*, and perforated band *c* are formed in the usual manner of sheet metal, and at opposite sides of the band short tubes *d* are soldered to the foot *a*, in vertical positions, and braced to the band *c* by braces *d'*. To the reflector *f* of the dome *g* are soldered, at corresponding points, tubes *e*, extending downwardly, and of a little less diameter than the tubes *d*, so as to enable them to be slid into the tubes *d* when the parts are put together. The tubes *d* and *e* are slotted or mortised, as shown at *h*, the slots or mortises of both sets of tubes matching with each other when the parts are put together to allow the bent ends *i* of a flat spring, *j*, to enter said slots or mortises *h*, whereby the tubes *e* are prevented from slipping out of the tubes *d* unless the spring be so compressed toward the periphery of the band *c*, as to withdraw the bent ends *i* from the slots or mortises *h*, which is easily accomplished by reason of the central connection of said spring. The globe *k* rests on the band *c*, its lower end *m* extending into the same, and its upper narrow straight end *l* extends into the dome *g* in such a manner that, when the parts are put together as shown in Figs. 1 and 3, the globe is held firmly between the dome *g* and band *c*, and can be removed only by compressing spring *j* to remove its ends *i* from the slots or mortises *h*, and elevating the dome *g* with its reflector *f* and tubes *e* from the tubes *d* of the foot. The ends of springs *j*, which are, as above described, bent at *i*, pass through slots *j'* in braces *d'*, so as to prevent any downward movement of the ends of the spring under the pressure of the tubes *e* upon them while interlocking the parts. Thus the slots *j'* act as braces to the spring, insuring the entrance of its ends *i* into the slots or mortises *h* of tubes *e* without fail every time the tubes *e* are depressed into the tubes *d*. The usual bail or handle *n* is suitably pivoted to the dome *g*. The tubes *d e*, when the parts are put together, not only unite the several parts in connection with spring *j*, which holds them together firmly, but also serve as guards for the protection of the globe. The beveled upper edges of the ends *i* of spring *j* allow of the automatic interlocking of tubes *e* and *d* by merely depressing the former into the latter until the ends *i* can pass through the slots *h* in both, while the straight lower edge of the ends *i* prevents any accidental removal of the ends from the slots unless the spring *j* is compressed from outside.

To enable manufacturers to make a low-priced lantern with a removable globe guarded with wire in the usual manner, they must construct the parts of flimsy material, thereby considerably weakening them; but by my improved

construction I am enabled to produce a very cheap lantern, yet a very strong one—a lantern which has all the advantages of a high-priced railroad lantern, such as strength, large light-radiating surface of the removable globe, easy manipulation for lighting and cleansing, and yet can be furnished at an exceedingly low price, comparatively.

It is obvious that the base of the lantern may be provided with sockets to receive the distinct and separable tubular guards in any suitable and convenient manner, so long as the feature of interlocking and separation of parts is effected.

Having described my invention, I claim—

1. In a lantern having outer tubular guards for connecting the dome with the foot to secure the globe, I claim such tubular guards made in distinct and separable sections, so as to be united to each other and to admit of their separation, essentially as described.

2. In a lantern in which the tubular guards are made in distinct and separable sections, as described, I claim, in combination therewith, the automatic locking-spring, arranged to operate essentially as described.

3. The automatic locking-spring, having its free ends provided with their upper edges beveled downwardly and their lower edges straight to act in conjunction with the ends of the tubular guards to effect their automatic locking and to prevent unlocking of said connection, as described.

4. In combination with an automatic locking-spring, arranged as described, I claim the braces *d'* to support its free ends against the vertical resistance of the tubular guards in the operation of interlocking the same with the tubes of the base, essentially as described.

5. The combination, in a lantern, of the separable and distinct tubular guards *d e* with the dome, the base, and the automatic locking-spring *j*, the several parts being constructed and arranged for use essentially as described.

CHARLES S. S. BARON.

Witnesses:

GEORGE CRISWELL,

ANDREW RODER.