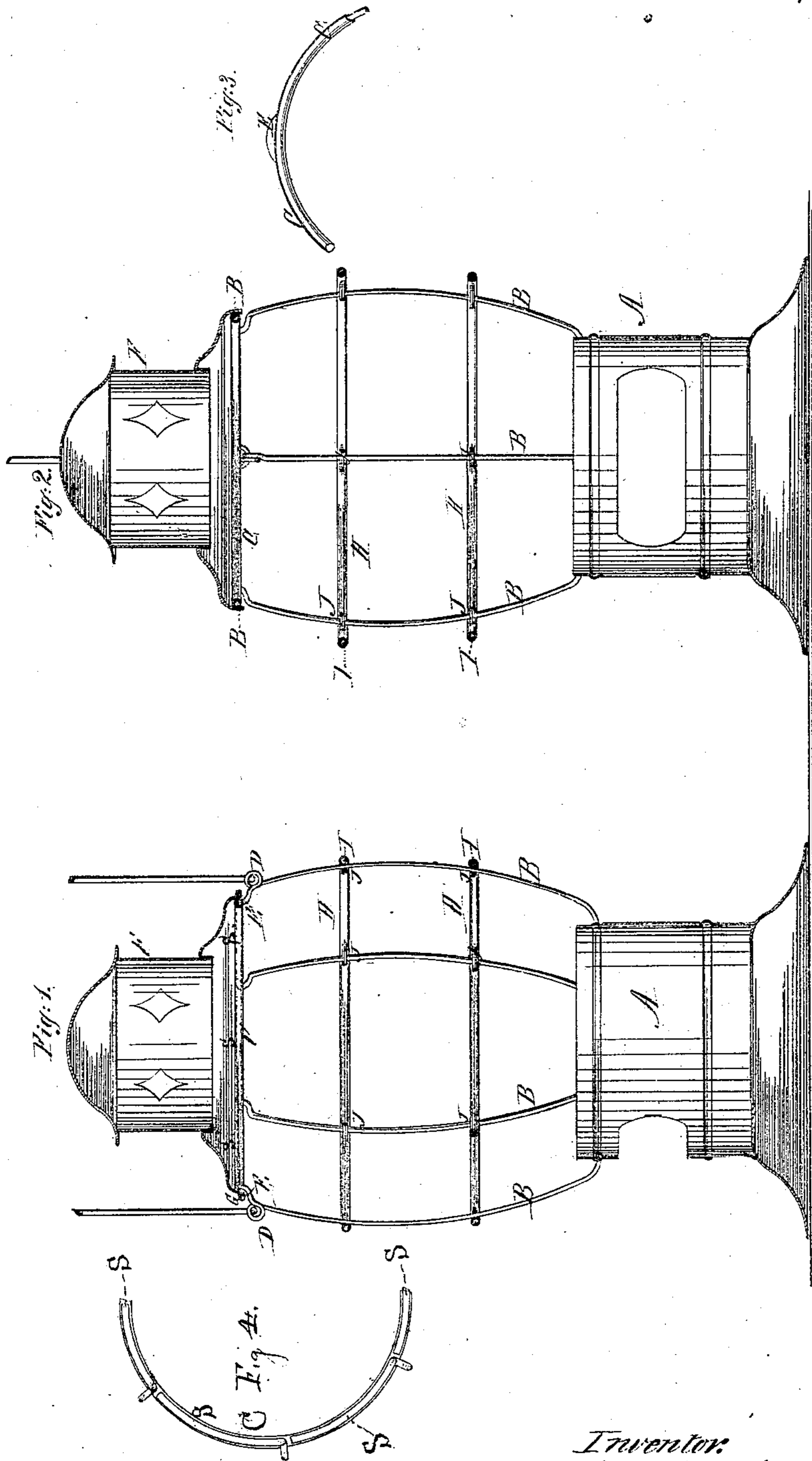


J. KINTZ.  
Lantern Guard.

No. 104,857

Patented June 28, 1870.



Witnesses:  
C. F. Kastenhuber  
C. Mahler

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Joseph Kintz  
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# United States Patent Office.

JOSEPH KINTZ, WEST MERIDEN, CONNECTICUT.

Letters Patent No. 104,857, dated June 28, 1870.

## IMPROVEMENT IN LANTERN-GUARDS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH KINTZ, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Lanterns; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 is a vertical section of my improved lantern.

Figure 2 is another vertical section of my improved lantern, taken at right angles to the section, fig. 1.

Figures 3 and 4 show parts of the ring C in top view, detached.

Similar letters indicate corresponding parts.

My invention consists in continuing the vertical bars of a lantern-frame beyond the upper tube to which they are secured, so as to form arms which lie in the tube.

It also consists in said tube formed with lugs which are engaged by sockets on the cap, whereby the cap and frame are readily engaged and disengaged.

It further consists in the inclosing-guards for the horizontal wires, which entirely envelope said wires, and have ears formed with them, which serve to hold together the ends of the tube, and also support the vertical wires or bars.

It finally consists in the construction of the entire frame, as will be hereinafter described.

The letter A designates the bottom of the lantern, or the part which receives the lamp.

From its upper edge extend vertical bars B, whose upper ends are combined with the upper tube C, which is perforated on its under side to receive them within it, the ends of the several bars, after entering said tube, being bent to a horizontal direction, and forming arms S, which rest in, and are inclosed within the tube, whereby the latter is stiffened and strengthened, and also connected with the lower part of the lantern, and the ends of the bars are confined in place in an effectual and simple manner.

Two of the vertical bars B, on opposite sides of the lantern, are bent so as to form eyes, D, just before they reach the tube C, to which eyes the ends of the bail are connected.

The tube C consists of sheet metal bent to the proper shape, so as to inclose the ends of the bars B, which are of such a length that the horizontal part

of each bar extends along in the tube C up to the next bar in the series, or nearly so, whereby the tube C is stiffened throughout its whole course.

The outside edge of the tube C is provided with lugs E, two or more, by means of which the cap F is attached to the lantern, the bottom of the cap being provided with horizontal sockets G, whose openings receive the lugs E when the cap is brought down upon the tube C, and turned in the proper direction.

The tube C constitutes the top of the guard or protecting-frame of the lantern, the other parts of such frame consisting of the vertical bars B, and the horizontal guards H, which will be next described.

The guards H, of which there may be one or more, consist of sheet-metal tubes, inclosing-wires I, and having on their inner circumference ears, J, which are perforated, to allow the vertical bars B to pass through them.

The wires I strengthen the tubes H, and give them the required stiffness, so that they constitute efficient guards around the lamp and its window or chimney inclosed by it.

The guards H inclose the wires I with unbroken surfaces, and each pair of ears, J, come together, assisting to retain the guard on the wires, and supporting the vertical bars B, which pass through them.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with the tube C, of the vertical bars B, entering said tube, and continued horizontally to form arms S, which lie in the tube, substantially as and for the purpose described.

2. The tube C, constituting the top of the guard-frame, and inclosing the arms of bars B, and formed with lugs E, in combination with the cap F, and its socket G, as and for the purpose described.

3. The guards H, inclosing the horizontal wires I, and having projecting ears J, which are formed in pairs, for retaining the guards, and supporting the vertical bars B, as set forth.

4. The frame-work of a lantern, consisting of the inclosing-tube C, vertical bars B, inclosed arms S, inclosed wires I, inclosing-guard H, and ears J, substantially as described.

This specification signed by me this 22d day of March, 1870.

JOSEPH KINTZ.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.