

(No Model.)

C. E. MEIER.
LANTERN.

No. 343,048.

Patented June 1, 1886.

Fig. 1.

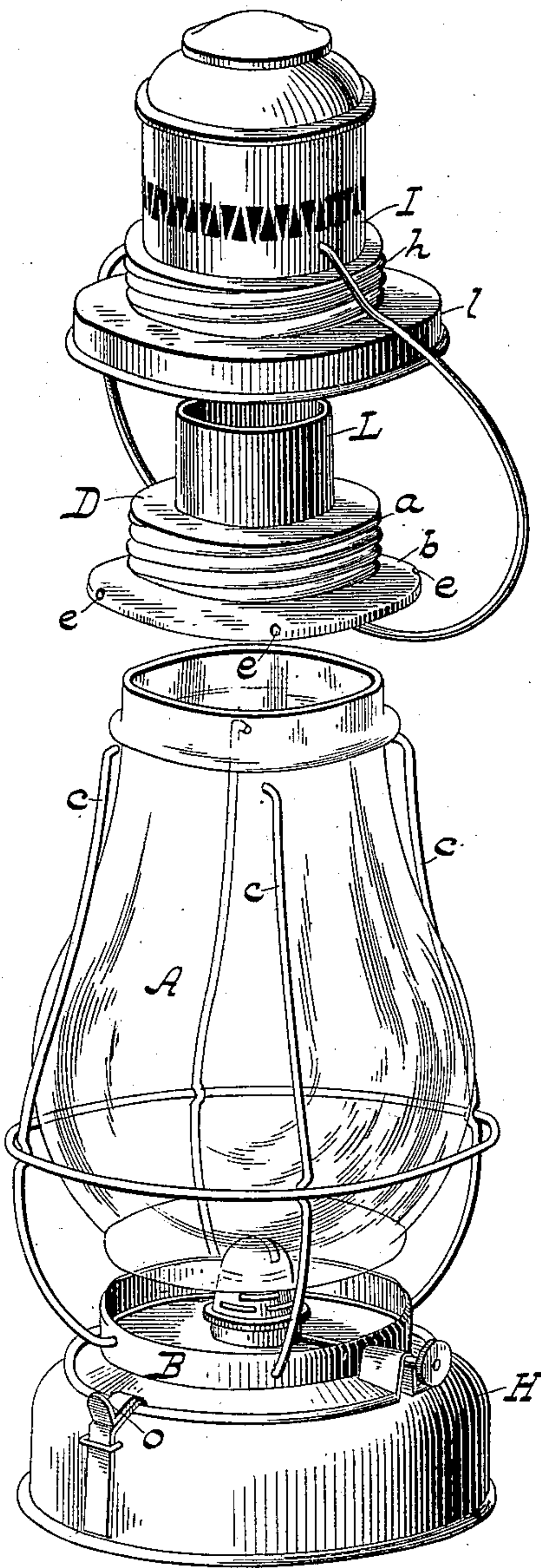


Fig. 2.

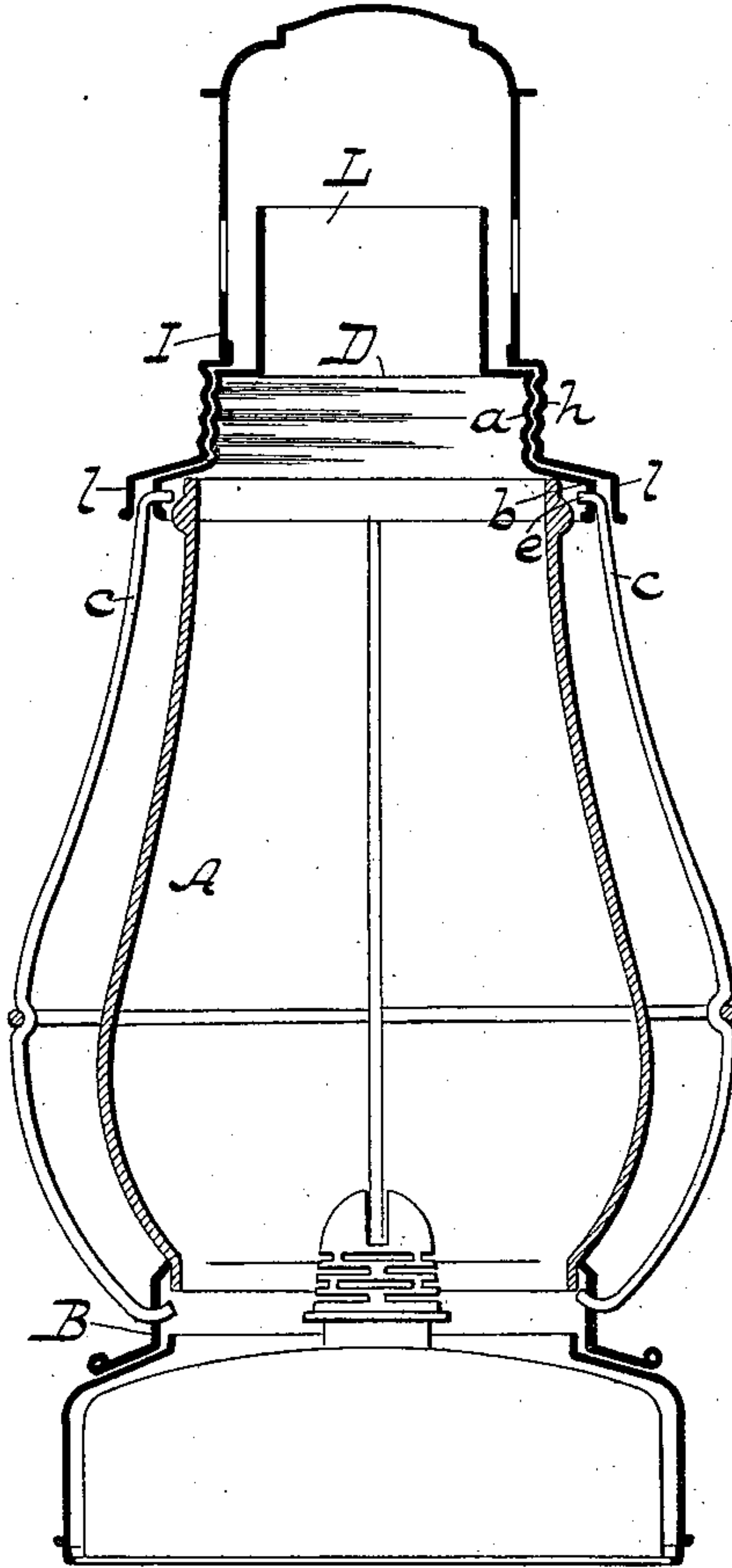
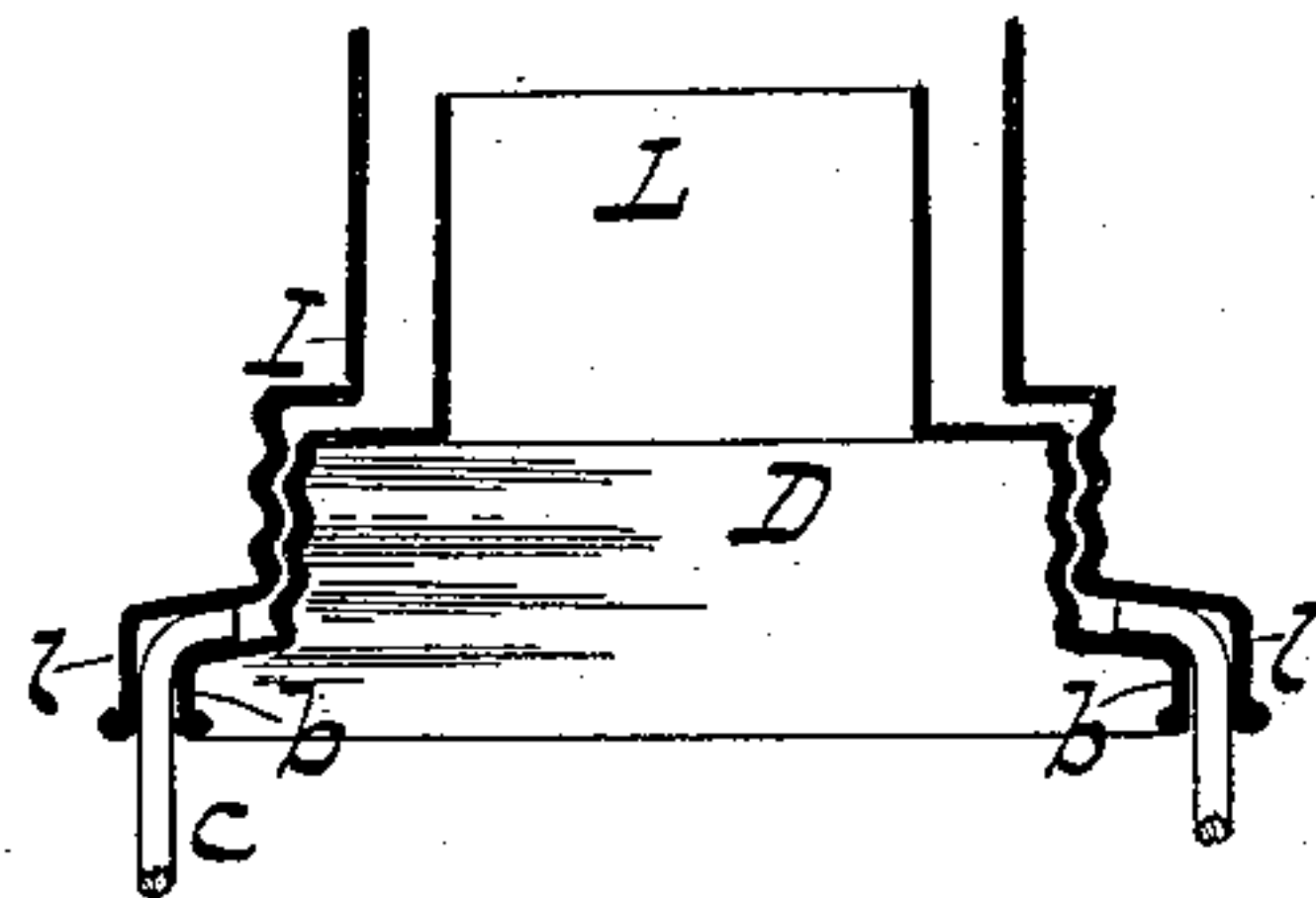


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES E. MEIER, OF NEW YORK, N. Y.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 343,048, dated June 1, 1886.

Application filed August 25, 1885. Serial No. 175,276. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. MEIER, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Lanterns, of which the following is a specification.

My invention relates to improvements in lanterns; and the invention consists in a novel method of constructing the frame, whereby the glass globe can be readily detached and replaced, as hereinafter more fully set forth.

Figure 1 is a perspective view showing the parts separated for the removal of the globe. Fig. 2 is a transverse vertical section showing the parts assembled, and Fig. 3 shows a modification.

To construct a lantern on my plan, I make a frame, which consists of a band, B, of the proper size to receive and hold the lower end of the globe A, as shown in Figs. 1 and 2, and secure thereto a series of vertical guard-wires, c, which extend to near the top of the globe and have their upper ends bent inward at a right angle, or nearly so, as shown. I then construct a sheet-metal cap or collar, D, as shown in Fig. 1, with a lateral flange, b, at its lower end, this flange b having its edge turned downward and of a size to fit upon the upper end or neck of the globe A, as shown in Fig. 2, it being provided also with a series of holes or indentations, e, corresponding in size and location with the upper bent ends of the guard-wires c, for the latter to engage with, as represented in Fig. 2. The body or central vertical portion of this collar or cap D has a screw-thread, a, formed thereon, as shown in Fig. 1, and for the purpose of protecting the outer cap from the heat at its sides, a tube, L, may be secured to or formed integral with the part D, as shown. I then construct another cap, I, on which I form a corresponding screw-thread, h, as shown, and at its lower edge form a flange, b, which, when the parts are put together as shown in Fig. 2, will project down over the upper ends of the guard-wires c, thereby holding them in place, and preventing them from being drawn out of the holes e in the flange b of collar D so long as the cap I remains in place.

It will readily be seen from the foregoing description and the accompanying illustra-

tions that to remove the glass globe A, it is only necessary to first take off the cap I by unscrewing it from the collar D, then spring the wires c out of the holes e of collar D, and remove the latter, when the globe A can be lifted out of its frame, either for cleaning it or for replacing it by another when broken.

The device thus constructed is simple, cheap, and strong, besides being exceedingly handy to manipulate. Moreover, it enables the globes to be made with plain cylindrical necks, thus doing away with the locking-grooves, projections, or screw-threads ordinarily used, and which add to the trouble and expense in the manufacture of these globes.

The oil-reservoir H may be of any suitable style; but I prefer to make it as shown in the drawings, and hinge the collar B of the frame to it at one side, and on the opposite side secure a spring-catch, o, to hook over the laterally-projecting flange formed on the lower edge of collar B, as shown in Fig. 1, and also to arrange the shaft or stem of the wick-wheel to project outside of the collar B, as shown, so that the wick can be raised or lowered without opening the lantern, although this latter feature forms no part of my present invention.

While I have shown the flange b of cap or collar D as provided with holes e, for the wires c to hook into, it is obvious that instead of holes mere indentations may be formed and used for that purpose, and also that the bent ends of the wires c may be arranged to hook over and rest upon the upper surface of flange b, as shown in Fig. 3, they being held securely in place when the cap I is screwed on. Either of these modifications may be adopted, as may be found most convenient in manufacture; but I prefer the holes or indentations, as they prevent the wires c from being displaced laterally.

The lantern thus constructed is simple, cheap, and strong. There is no liability of the cap I becoming detached accidentally, and so long as it remains in place the parts are held secure.

I am aware that a patent has been granted for a lantern in which the ends of the wire guards were secured between metal bands at top and bottom, said bands being permanently fastened together by nuts and bolts, and also

that a lantern has been patented in which the wire guards were held in place by means of a metal band at top and bottom, which bands engaged with a screw-thread formed on each
5 end of the glass globe, and therefore I do not claim either of these; but,

Having thus described my invention, what I claim is—

10 1. The sheet-metal caps I and D, each having a screw-thread formed thereon, and provided with the radial and vertically-projecting flanges, substantially as and for the purpose set forth.

2. The combination, in a lantern, of the vertical guard-wires *e*, permanently secured at 15 their lower ends to the base of the lantern, with the sheet-metal caps I and D, provided each with a screw-thread and with flanges constructed and arranged to clasp and hold the free ends of the guard-wires, as set forth.

CHAS. E. MEIER.

Witnesses:

JULIUS KALLMAN,
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