

C. Jones.

Lantern.

N^o 43312.

Patented Jun. 28, 1864.

Fig. 3.

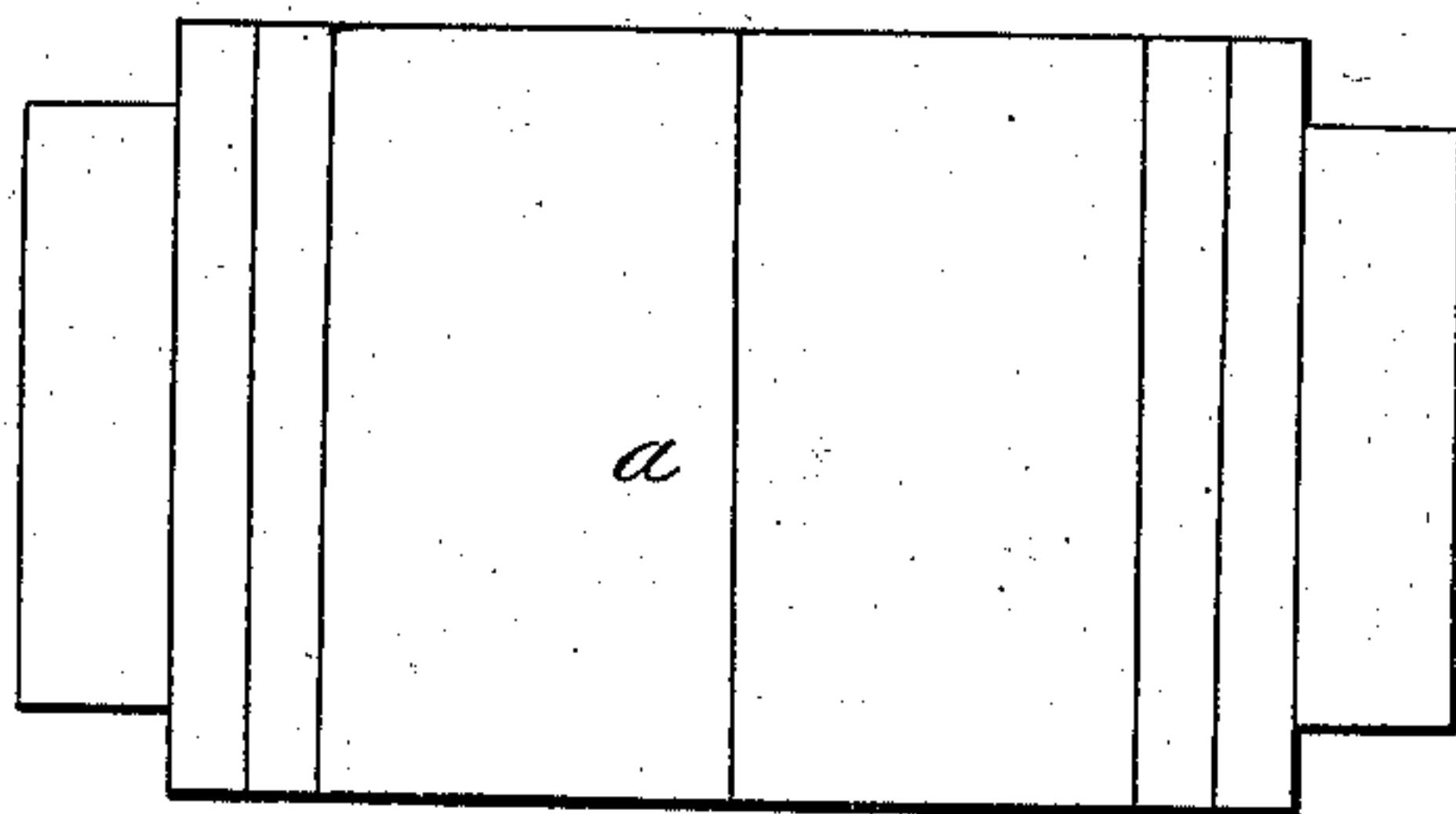


Fig. 2.

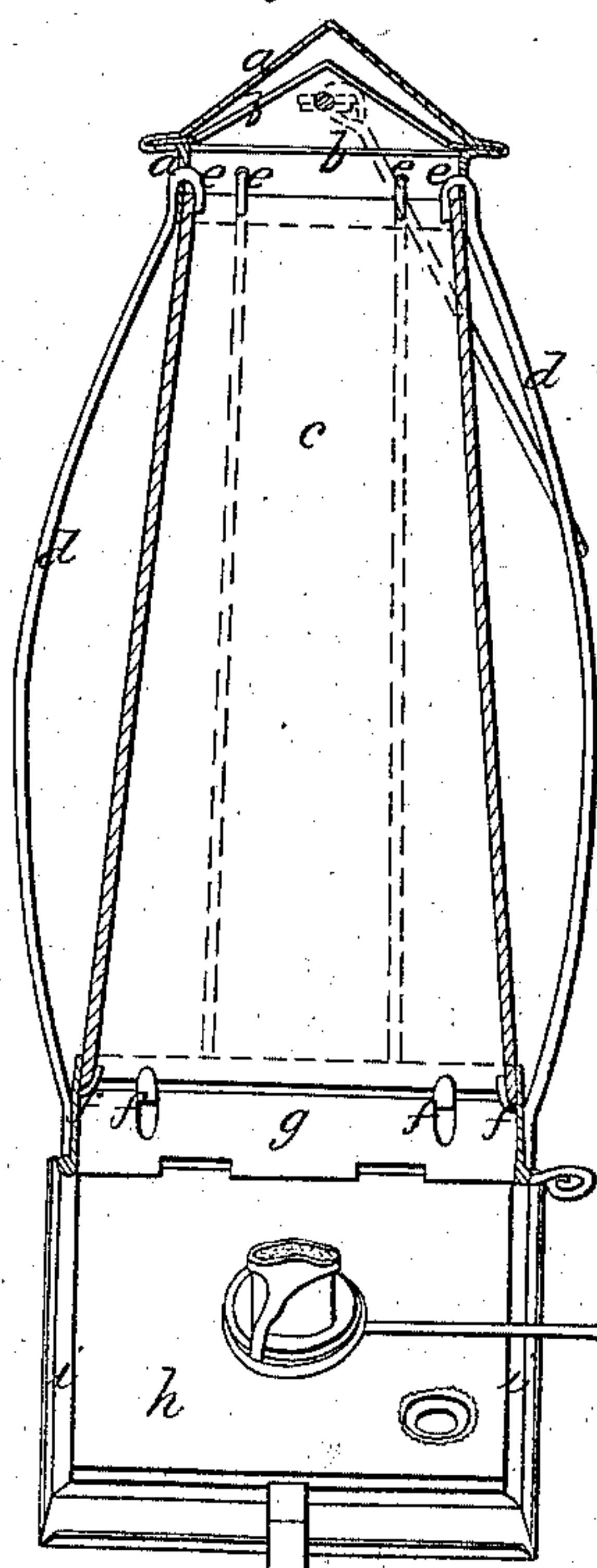


Fig. 4.

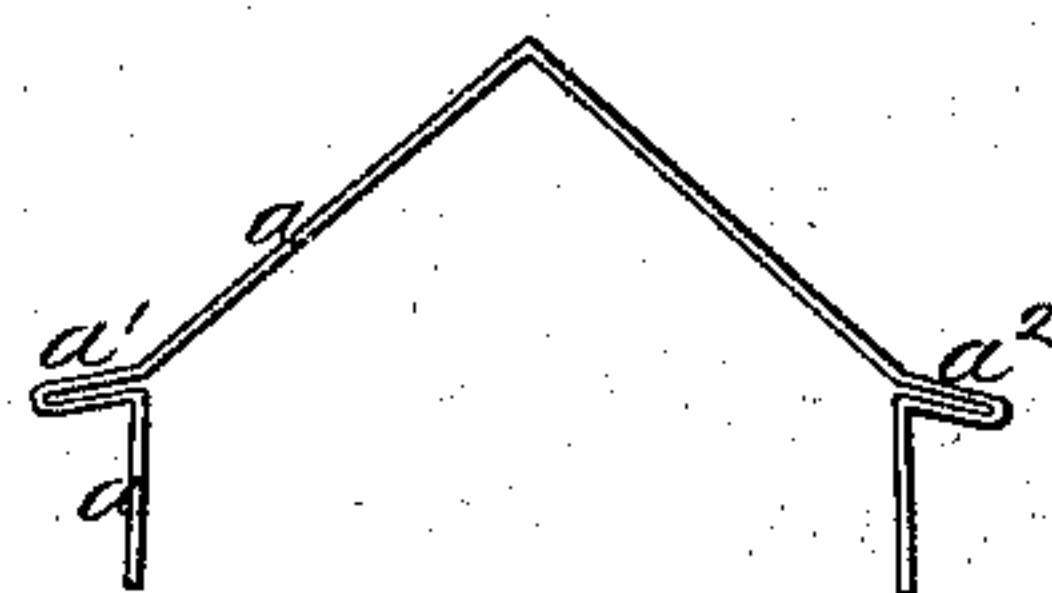


Fig. 5.

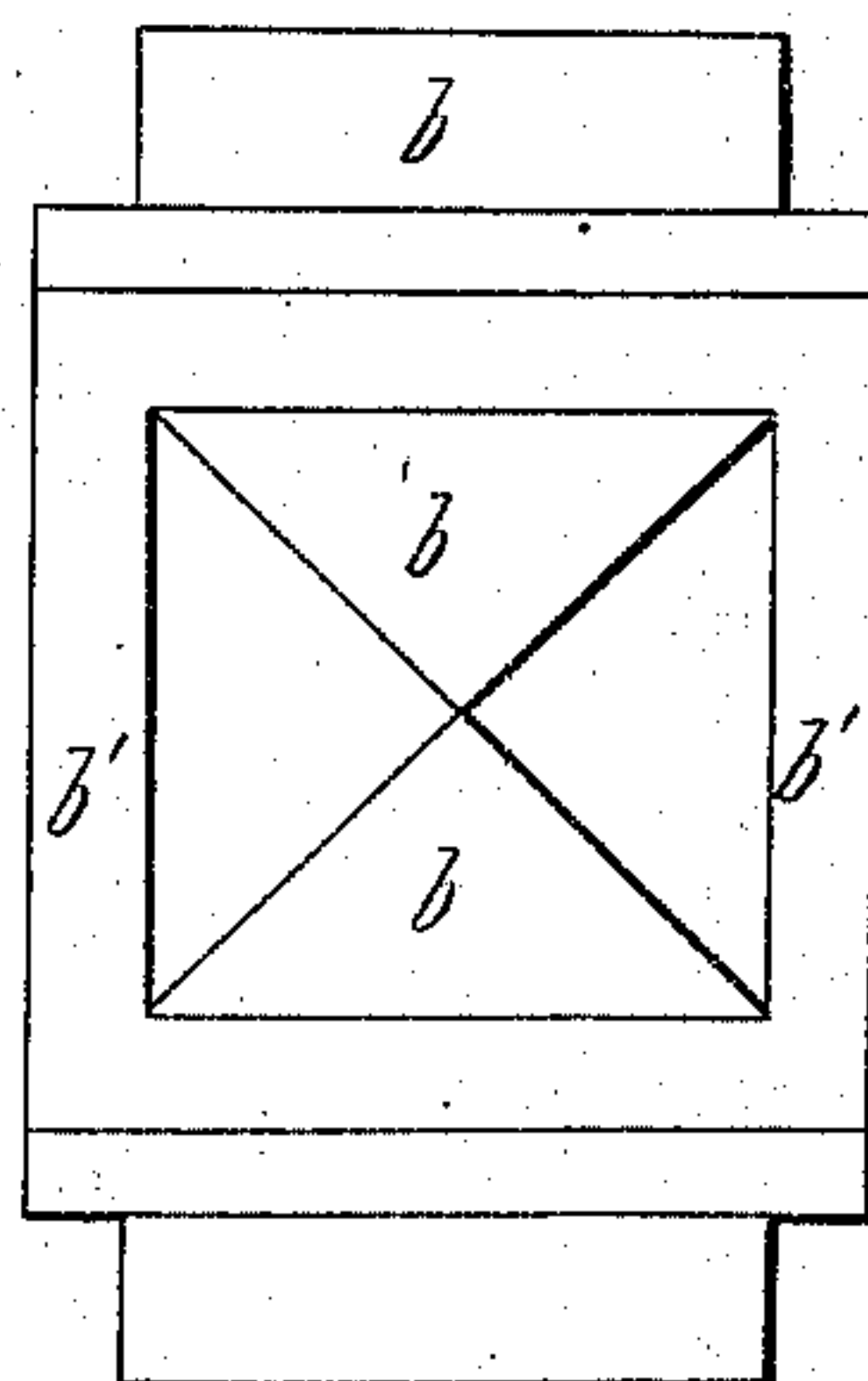


Fig. 6.

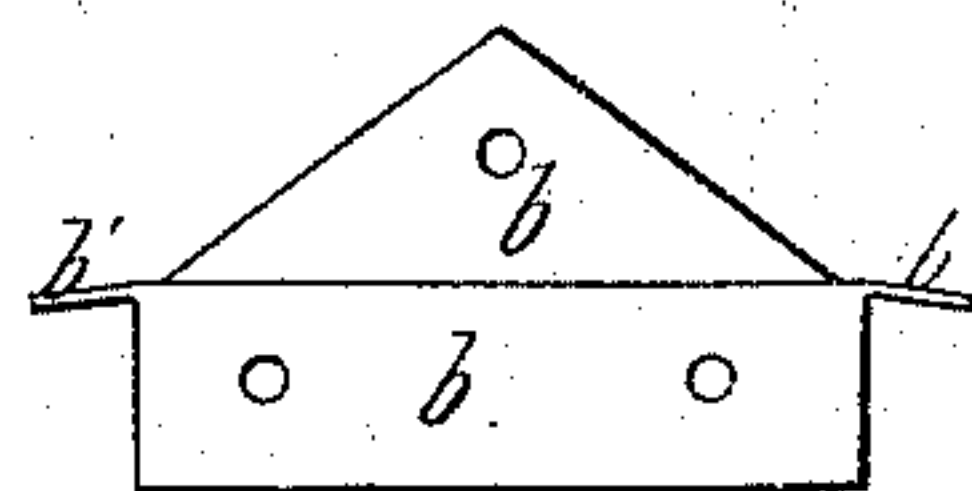
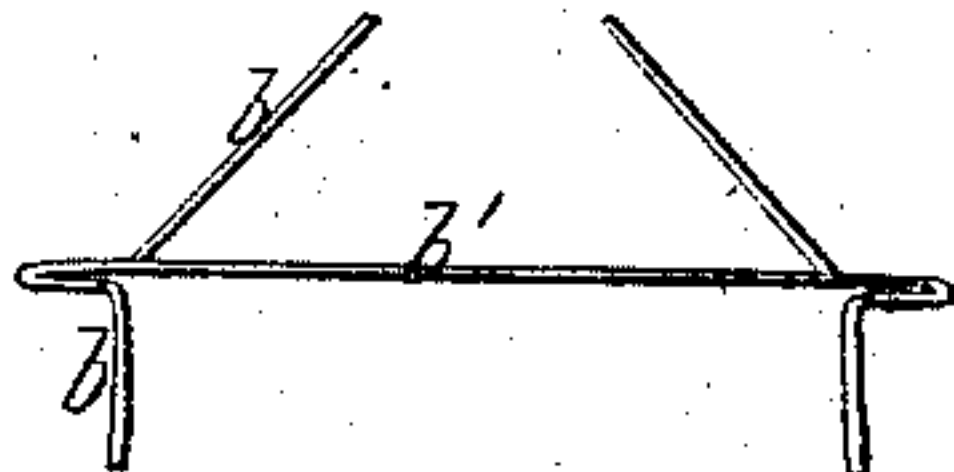


Fig. 7.



Witnesses;
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UNITED STATES PATENT OFFICE.

CHARLES JONES, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN LANTERNS.

Specification forming part of Letters Patent No. 43,312, dated June 28, 1864.

To all whom it may concern:

Be it known that I, CHARLES JONES, of the city of Brooklyn, (Eastern District,) in the county of Kings and State of New York, have invented certain new and useful Improvements in the Construction of Lanterns; and I do hereby declare that the following is a full and correct description thereof, reference being had to the annexed drawings, of which—

Figure 1 is a perspective view of the lantern; Fig. 2, a vertical section of the body of the lantern, showing a perspective view of the lamp turned down on its hinges. Figs. 3, 4, 5, 6, and 7 are detached views of the two pieces of which the top of the lantern is made.

One of my said improvements consists in making the top part of the lantern of two pieces of sheet metal as follows, viz: I cut out a flat plate, *a*, of sheet-tin or other suitable sheet metal, in manner and form as shown in Fig. 3, and bend it in manner and form as shown in the side elevation, Fig. 4, the lines across the plate, as shown in Fig. 3, indicating the places where the plate is bent to form the shape shown in Fig. 4. I also cut out another flat piece of sheet metal, *b*, in manner and form as shown in Fig. 5, and bend it up in manner and form as shown at Figs. 6 and 7, which are side elevations at right angles to each other. The two pieces, being bent as shown, are then put together by sliding the flanges *b'* of the piece *b* into folds or slides *a'* *a*² of the piece *a*, and fasten them by pressing the folds *a'* *a*² tight upon the flanges of the piece *b*, thus forming a complete top and rim, including draft-protectors, for a square or four-sided lantern made from only two pieces of sheet metal bent up and locked together, as shown in Figs. 1 and 2, and without necessarily employing rivets or solder.

Another part of my invention consists in framing panes of glass in polygonal or flat-sided lanterns without the use of vertical sash-bars at the corners commonly used to hold the base to the top of the lantern, as well as to hold the glass, as follows, viz: I cut the panes of the size and shape described for the sides of the body of the lantern, as shown at *c*, Figs. 1 and 2, so that when inclosed by the rims at the top and bottom the corner edges of the panes form sufficiently close joints for the purposes of a lantern. I make the guards *d* hooked at their upper ends, *e*, and pass them

through holes in the top rim, the hooks hooking down over the upper edges of the panes of glass. The guards, being soldered or otherwise firmly fastened to the base or lower rim, thus hold the lantern together and secure the glass in the upper rim, the glass being secured in the lower rim by the lips *f*. This forms a very cheap and secure fastening at the top, impossible to rupture by the heat of the lantern-top. I use two guards to each pane, both for protection to the glass and security of fastening; and this part of my invention further consists in making lanterns of flat panes of glass suitable for kerosene-oil burners, or, in other words, making a pyramidal glass chimney, in the form of a lantern, of flat plates of glass without light-obstructing corner-pieces, the panes being held together by the top and bottom rims and the guards; and this part of my invention does not of necessity depend upon the panes of glass being secured in place by the hooks on the ends of the guard-wires, or upon the guard-wires hooking into the rim to hold the top and bottom, although I claim this also as a new and useful fastening or mode of securing the top rim to the guards and holding the glass in place.

It is obvious that many modes of fastening the guards to the top rim may be used; also, that the upper edges of the glass may be secured in place by ears riveted inside the top rim, or in other ways, not, however, so simple and inexpensive as the hooks on the guards. The hooked guards may be tacked to the upper rim on the outside by solder, if desired, to give additional stiffness.

My invention also consists in fitting the lamp to the bottom rim of the lantern by means of a step or rebbet, *i*, on the edges of the top of the lamp, adapted to fit the rim of the lantern and give it a steady vertical and lateral support.

The lantern as a whole is very much simplified by my improvements, and can be made very cheaply. It is nevertheless strong and durable.

The glasses can be cut at small expense from scrap glass, and when broken can be replaced by a common glazier.

The lantern chimney or body thus made of separate panes is not so liable to crack from expansion as the blown chimneys or the globes of lanterns.

I claim—

1. The arrangement and combination of the two pieces of sheet metal *a* and *b*, bent and secured together, as described, to form the top and rim of a four-sided lantern, including the draft-protectors, substantially as described.

2. The pyramidal lantern body or chimney made of separate panes of glass fitted to each other and framed together by the top and bottom rings and the guards, and without corner sash-bars, substantially as described.

3. The hooked ends of the guards, in combination with the top rim and panes of glass, substantially as described.

4. In combination with the base or bottom rim of the lantern, the step or rebbet on the edges of the lamp, substantially as described.

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Witnesses:

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