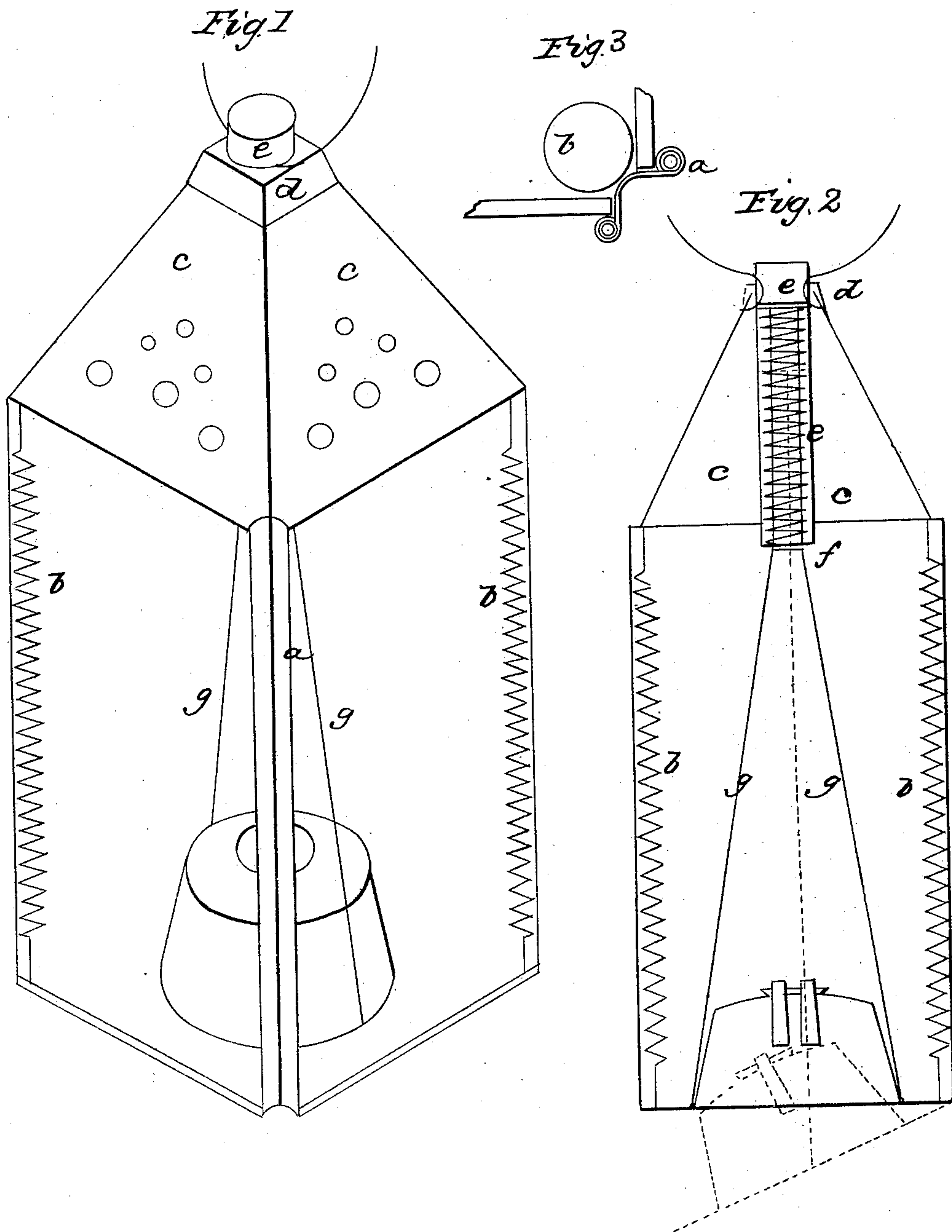


S. C. SPAULDING.

Lantern.

No. 21,521.

Patented Sept. 14, 1858.



WITNESSES
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STILLMAN C. SPAULDING, OF RUTLAND, VERMONT.

LANTERN.

Specification of Letters Patent No. 21,521, dated September 14, 1858.

To all whom it may concern:

Be it known that I, STILLMAN C. SPAULDING, of Rutland, in the county of Rutland and State of Vermont, have invented a new and Improved Mode of Constructing Lanterns; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing and the letters of reference marked therein, the same letter in all the figures indicating the same part.

Figure 1 is a view of the lantern. Fig. 2 is a perpendicular section of it. Fig. 3 is a horizontal section of a corner of the lantern.

The frame of the lantern consists of four wires, but into parallelograms, each of the size and shape of one side of the lantern. They are attached to each other by a strip of tin (*a*) clasped around two adjacent wires and between them indented deeply as seen in Fig. 3. The ends of these wires meet at the middle of the lower side and are there bent inward horizontally for a quarter of an inch, and soldered, forming a support for the glass. The bottom of the lantern hinges on the fourth side with flanges on the other sides, shutting tight over the lantern, and giving shape and firmness to the frame. (Instead of this the bottom piece may be firmly secured to the frame wires, where it is not desired to pack the lantern closely. There must then be an aperture in the bottom so that the lamp can rise through it. The lamp is to be soldered to a falling bottom which covers the aperture and turns upon a hinge under the fixed bottom). The lamp in the first case is soldered to the bottom also. The spaces in the sides are filled with four panes of glass which are kept in their place by the corner tins and a strong coil (*b*) $\frac{1}{2}$ an inch in diameter of brass wire, one in each corner being sufficient to secure both adjacent panes of glass. The coils are secured by having their ends turned over the ends of the corner tins, in the bottom of the indentation above described. To aid in giving stiffness to the frame a lid or false cover with flanges on three sides, which are pressed down between the glass panes and the frame, is hinged to the top bar on one side of the frame by two narrow flanges at each corner clasped around it, leaving half or two thirds of the bar in the middle to hinge the top piece upon. This cover

should be truncated at the corners for the escape of the smoke, the central part being left whole or nearly so to shield the tube from the heat. The top of the lantern is composed of four triangular pieces of tin (*c*), perforated for the escape of the smoke, hinged on the top bars, and fitting closely at the sides, but with an opening an inch or so square at top, where they are truncated for that purpose. They are kept in place by a tin cap, in shape the frustum of a square cone (*d*) which comes down upon their sides three quarters of an inch more or less. A strong tin tube, three quarters of an inch in diameter, is soldered into the top of this cap, rising half an inch above it, and extending nearly to the lid or false cover already described, (*E*). It is closed at the bottom and about an inch below the top, and incloses a strong spring of coiled wire. A stirrup extends from the top of the coil, down through it (*f*) and through the false cover. It is there attached to another stirrup of wire (*g*) the ends of which are carried down on each side of the lamp, and lock into eyes on the bottom of the lantern, and hold it up in its place. They may be loosed by turning down the bottom and unhooking them. Or a single wire may be attached to the falling bottom between the lamp and hinge.

The dotted lines in Fig. 2 exhibit the bottom, with the lamp attached, turned down in part, and one wire of each of the stirrups *f'* and *g'*, as drawn down; the view being at right angles with the view of those parts given in the line drawing.

The handle consists of a ring, four inches in diameter, of large brass wire. The ends enter the open part of the tube one on each side, above the lantern top. They are then bent downward, then directly out, passing through the tube, the sides of the lantern top, and the cap. By springing the ends of the handle inward, the top and tube can be disengaged.

This construction obviously secures the advantage of having the lamp safely attached, yet easily accessible, and also that of having the glass sides firmly held in their place, yet readily removed or replaced, besides being less liable to be broken. Again, the lamp may be so made as to be disengaged and the bottom folded back against the side, the tube then unhooked and withdrawn, with the cap and wires attached and the

glass withdrawn, and then the top-pieces
folded down on the outside, the top or false
cover folded into the body of the lantern,
and the whole frame compressed and flat-
5 tened into a small compass as the corner
tins (a) turn readily on the frame wires.
This will be found important where large
quantities of the article are to be trans-
ported.

10 I am aware that patents have been already
granted for attaching guards to lanterns
without solder, and also for constructing
the corner pieces so as to hold the glass
sides without solder, and I disclaim these
15 as any part of my invention. But I do
claim as my invention and desire to secure
by Letters Patent the following, viz.

1. Constructing a lantern by folding the
edges of the several parts over wire frames

as above described so that it can be com- 20
pressed and packed in a small space on re-
moving the glass sides and in the way set
forth; and so that solder is not needed to
secure the pieces composing the top and
bottom. 25

2. The use of a coiled wire in the manner
above mentioned to retain the glass sides in
their place.

3. Attaching the lamp of a lantern to a
hinged bottom, and connecting the latter 30
to a spring in the top so as to keep the lamp
securely in its place, when in ordinary use,
yet admit of ready access to it, as above
described.

STILLMAN C. SPAULDING.

Witnesses:

EDWIN EDGERTON,
S. H. HODGES.