

S. R. WILMOT.

Lantern.

No. 60,452.

Patented Dec. 11, 1866.

Fig. 2

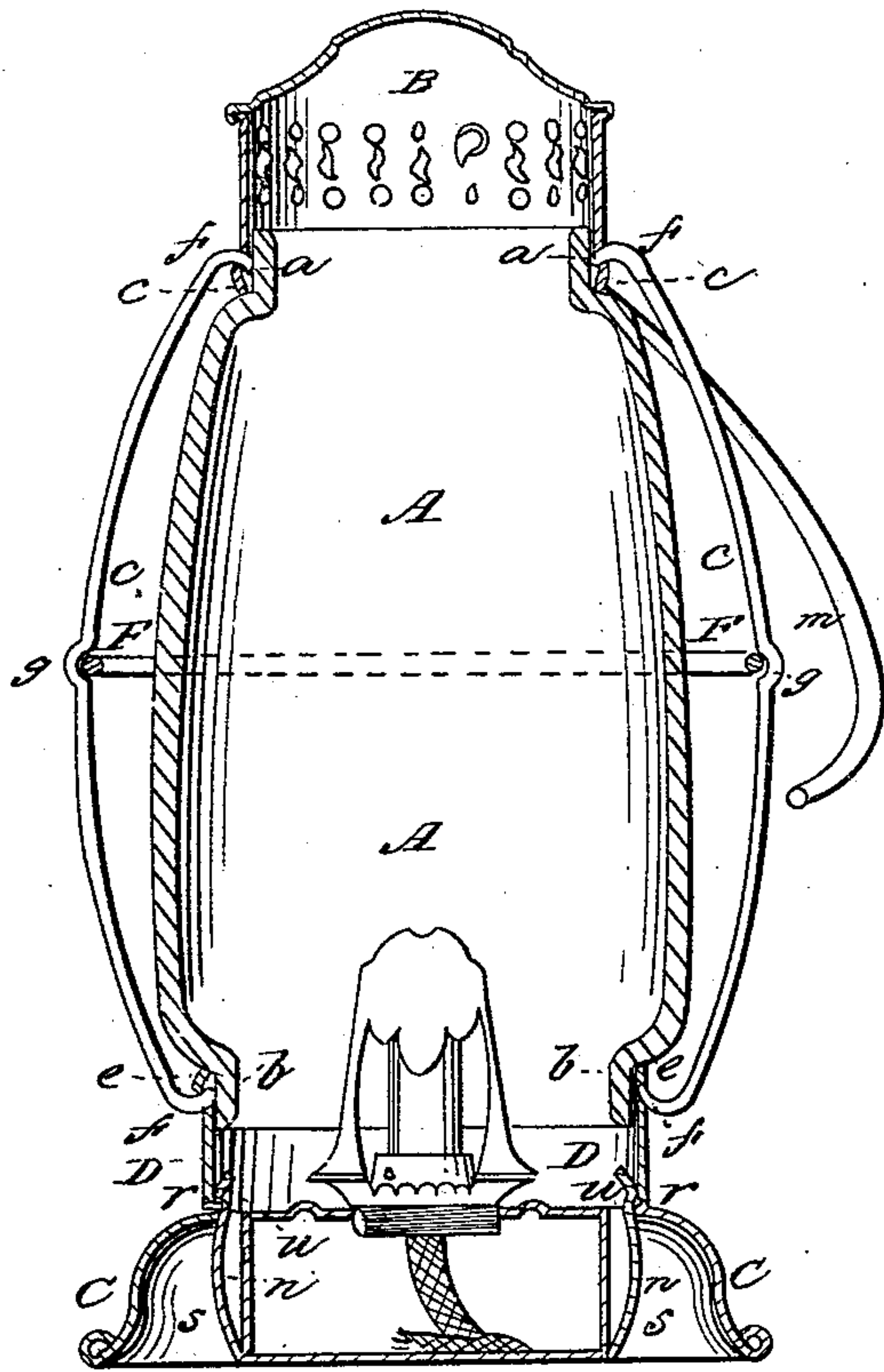


Fig. 1

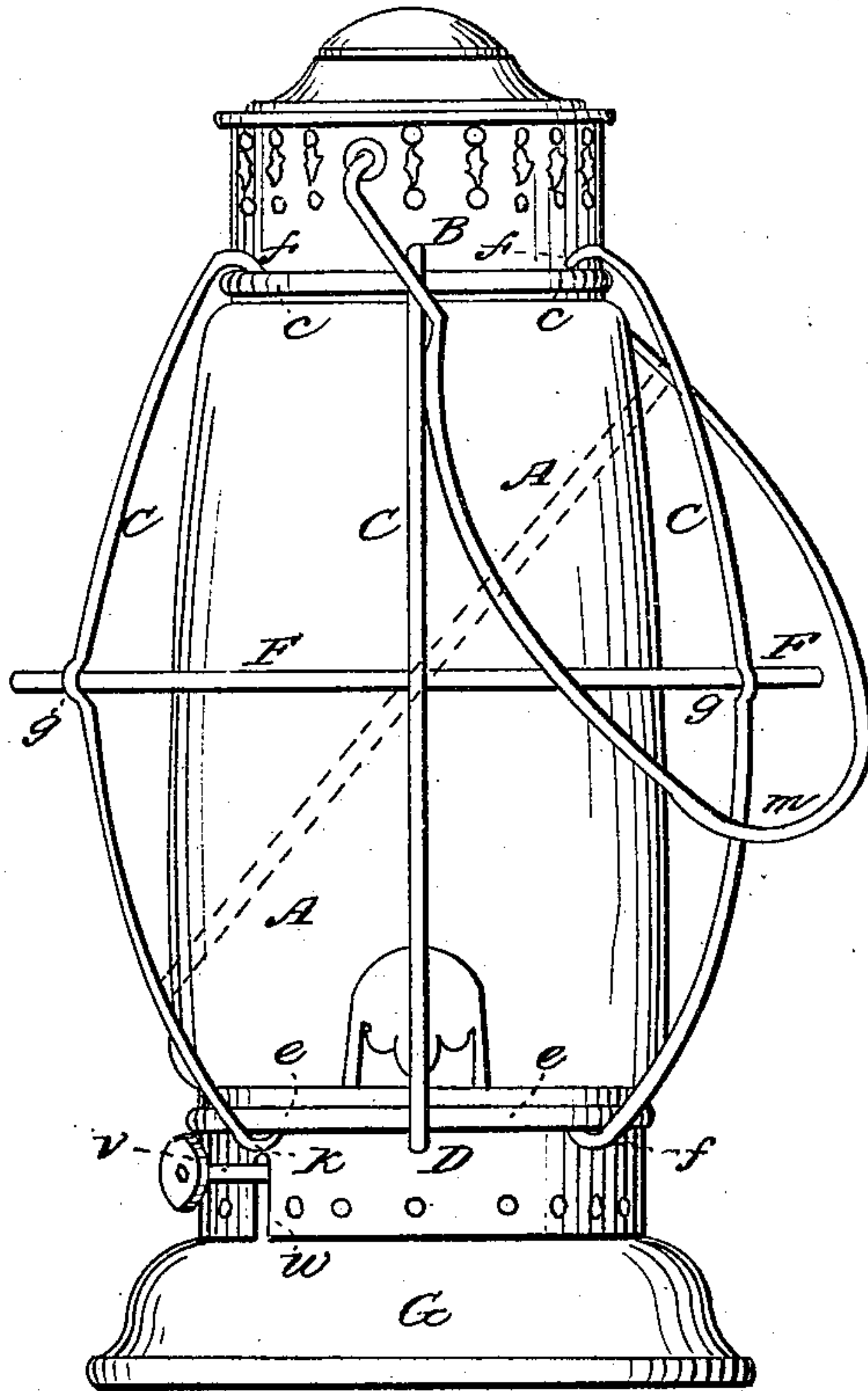


Fig. 3

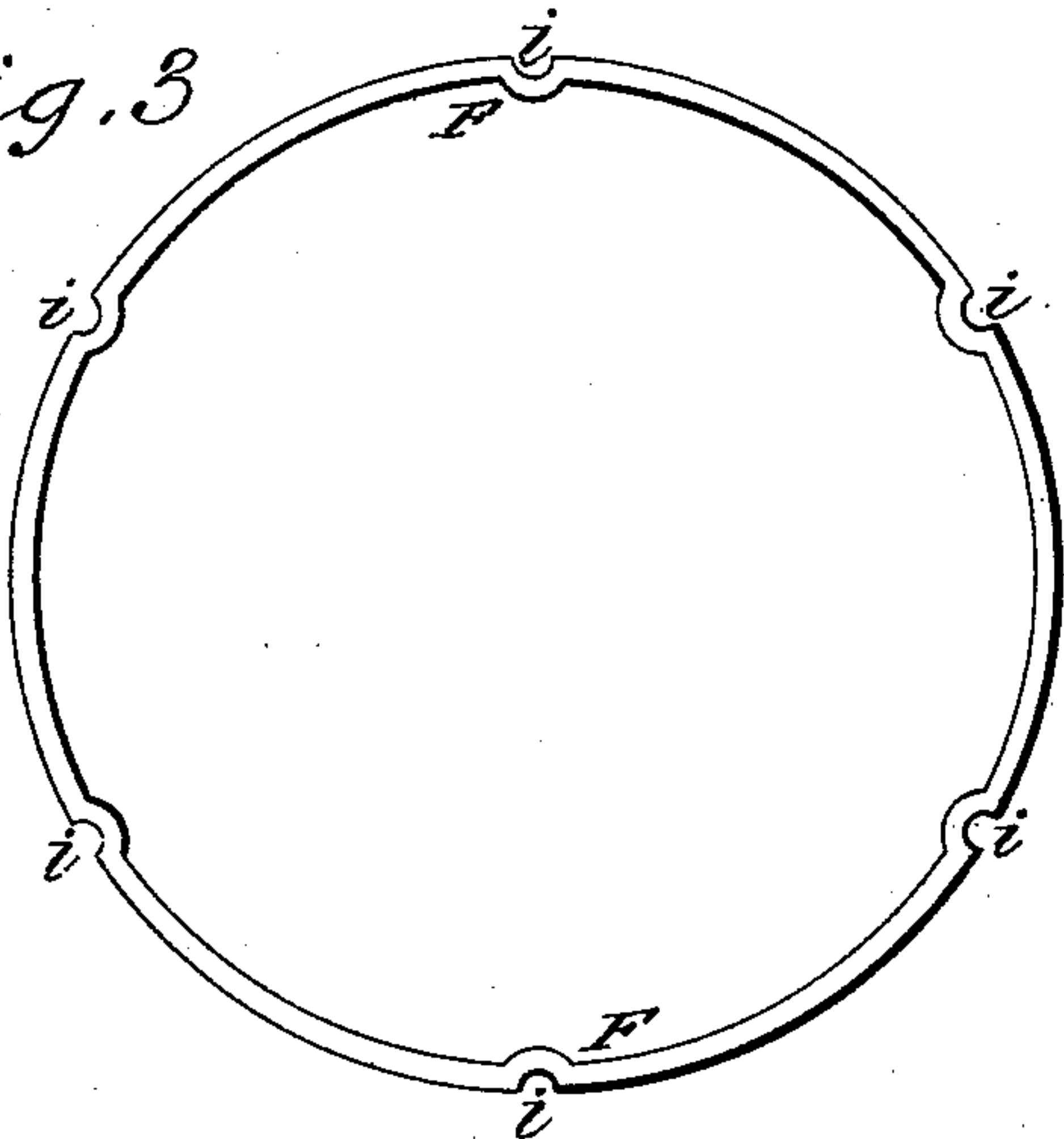
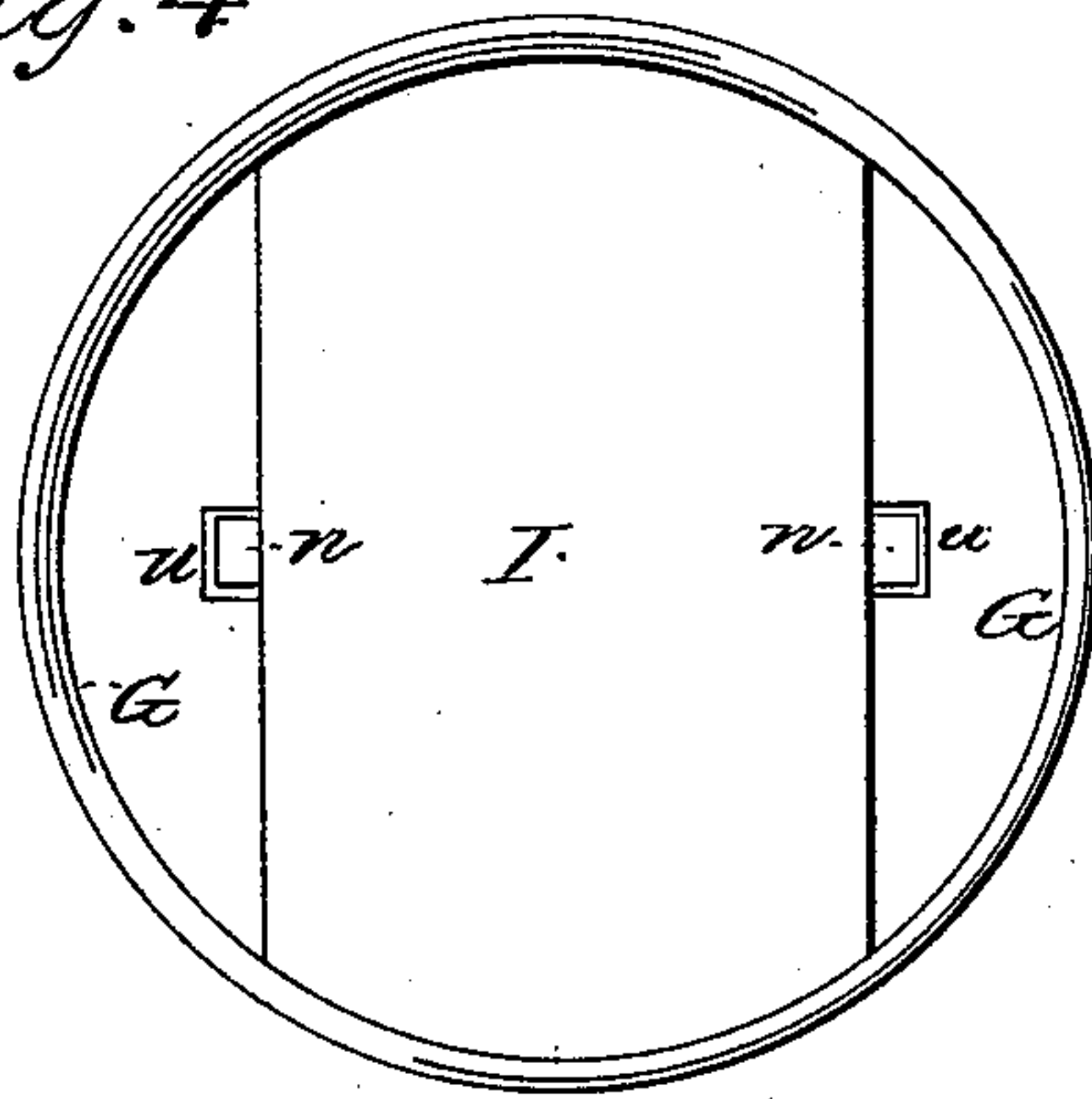


Fig. 4



Witnesses:

J. W. Coombs
G. W. Reed

Inventor:

S. R. Wilmot

United States Patent Office.

IMPROVEMENTS IN LANTERNS.

SAMUEL R. WILMOT, OF BRIDGEPORT, CONNECTICUT.

Letters Patent No. 60,452, dated December 11, 1866.

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, SAMUEL R. WILMOT, of Bridgeport, in the county of Fairfield, and State of Connecticut, have invented certain new and useful Improvements in Lanterns; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of a lantern constructed according to my invention.

Figure 2 is a central vertical section of the same.

Figure 3 is a detached view of a portion of the same.

Figure 4 is an inverted plan view of the base of the lantern.

The invention consists in the construction of the base of the lantern with an oil reservoir enclosed therein, and with cavities at the sides of the said reservoirs for the reception and manipulation of the spring-catches, by which the base is attached to the body of the lantern.

To enable others to understand the nature and construction of my invention, I will proceed to describe it with reference to the drawings.

A represents the glass portion of the body of the lantern, which may be of any ordinary or suitable shape. Formed upon the upper end of this glass portion, A, is a vertical annular rim or neck, *a*, around which is placed the lower edge of the cap or cover B, the said cover being made of sheet metal and furnished in the usual manner with holes or openings for the escape of the gaseous products of combustion from the lantern, and to which the bail *m*, by which the lantern is carried, is attached. Formed circumferentially around the lower edge of the said cap, B, outside of the rim *a*, is an outwardly projecting corrugation, *c*, and formed in the upper sides of this corrugation, *c*, at suitable distances apart, are any desired number of holes, in which the upper ends of the vertical braces C are placed, as will be presently fully set forth. Formed upon the lower end of the before-mentioned glass portion of the body, A, of the lantern is a downwardly projecting rim or neck, *b*, corresponding to the upwardly projecting rim *a* upon the upper end of the said glass portion, and fitted upon and around this lower neck, *b*, is an annular band, D, which may be made of sheet metal and furnished with holes or openings to permit the passage of air to the flame. This annular band, D, has an outwardly projecting corrugation, *e*, formed upon it around its upper edge, the said corrugation corresponding with the corrugation *c* upon the cap B, and having holes formed in its lower sides at points below and opposite to the holes formed in the upper side of the corrugation *c*, as hereinbefore set forth. C represents curved upright ribs or braces, formed of stiff wire, and having their ends bent over and inward so as to form hooks, as shown at *f*. Each of these braces, C, has a short and sharp outward bend or curve at or near its centre, so that a notch, *g*, is formed in the inner side thereof. F is a stiff ring, also formed of wire, and provided at distances apart equal to those at which it is designed to place the braces C, with short inwardly projecting bends or curves, so that notches, *i*, are formed in its outer sides or circumference, as shown more clearly in fig. 3. The ring F is first placed around the glass portion A of the lantern in an inclined position, as shown in red lines in fig. 1. The hooks *f* upon the upper ends of the ribs or braces C are then inserted in the holes formed in the upper side of the corrugation *c* of the cap B, while the hooks *f* upon the lower ends thereof, are inserted in the corresponding holes formed in the under side of the corrugation *e* of the annular band D, the ring F is then sprung or forced into a horizontal position, as shown in figs. 1 and 2, with the notches *i*, formed in the outer circumference of the said ring, fitted into the notches *g* in the inner sides of the aforesaid ribs or braces C, which not only effectually prevents the ring from slipping up and down, but also prevents any lateral displacement of the tension-braces C, at the same time that the central parts of the braces, being forced and kept outward by the ring F, have their hooked ends, *f*, brought inward toward the centre of the glass portion A, so that the said hooked ends, being inserted respectively in the holes formed in the corrugations *c* and *e* of the cap B and annular band D, as hereinbefore fully set forth, rigidly hold the said cap and band upon their respective ends of the glass portion A; or, in other words, the cap, annular band, and central portion of the said body of the lantern, are held together by the tension of the braces C, produced by the outward thrust of the ring F, the cap B being situated upon the neck *a*, and the band D being placed upon the neck, *b*, as shown in fig. 2. By this means the glass portion A, the cap B, and annular band D, together with the ribs or tension-braces C and ring F, the whole constituting the body of the

lantern, are securely held together without soldering or riveting, and without the use of cement to secure the top and bottom, while the several parts may be readily separated or detached from each other, when desired, by simply springing or forcing the ring F into the inclined position shown in red lines in fig. 1, and then springing the hooked ends *f* of the braces C out of the holes in which they are placed, as hereinbefore fully set forth. The lower edge of the annular band D is turned inward so as to form a horizontal ledge or shoulder, *r*, which enables the spring-catches *n* to attach the base to the body of the lantern, as will be presently set forth. Formed in one side of the annular band D is a vertical notch or slot, *w*, which accommodates the stem *v* by which the wick in the burner is operated, and which projects from one side of the said burner. G represents the base of the lantern, which is made of sheet metal, stamped or formed into any suitable shape, and which has formed or secured within it, the reservoir I, which is less in width than the interior of the base, so that a cavity, *s*, is formed upon its opposite sides, as shown in figs. 1 and 2. J is a burner, of any suitable construction, situated centrally upon the upper side of the base, and communicating with the oil reservoir in the usual or any proper manner. Formed in the top or upper side of the base, at opposite sides thereof, and communicating with the cavities *s*, are two openings, *u*. The spring-catches *n* are placed in the cavities *s*, with their lower ends secured to the flat sides of the reservoir I, while their upper ends project upward through the openings *u* in such manner that, when the base G is pressed upward against the annular band D, the said catches will catch upon the ledge *r*, as shown more clearly in fig. 2, and thus securely hold the base to the body of the lantern; the stem *v* passing up into the slot *w*, as shown in fig. 1, and the upper ends of the catches *n* being made sloping, in the usual way, to enable the said catches to be properly forced back when the base is pushed upward into its place, as just explained. By placing the thumb and fingers in the cavities *s*, and pressing upon the spring-catches *n*, the said catches, *n*, will be brought inward, away from the ledge or shoulder *r*, and thus permit the base G with its appurtenances to be removed from the body of the lantern; while, by grasping the reservoir by its two sides, the base C may be conveniently handled in attaching the base to the said body of the lantern, as just hereinbefore fully set forth.

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

The construction of the base of the lantern with an internal oil reservoir, and with cavities, *s*, on opposite sides of the said reservoir for the reception and manipulation of the spring-catches *n*, by which the base is attached to the body of the lantern, substantially as herein set forth for the purpose specified.

S. R. WILMOT.

Witnesses:

A. LECLERC,

J. W. COOMBS.