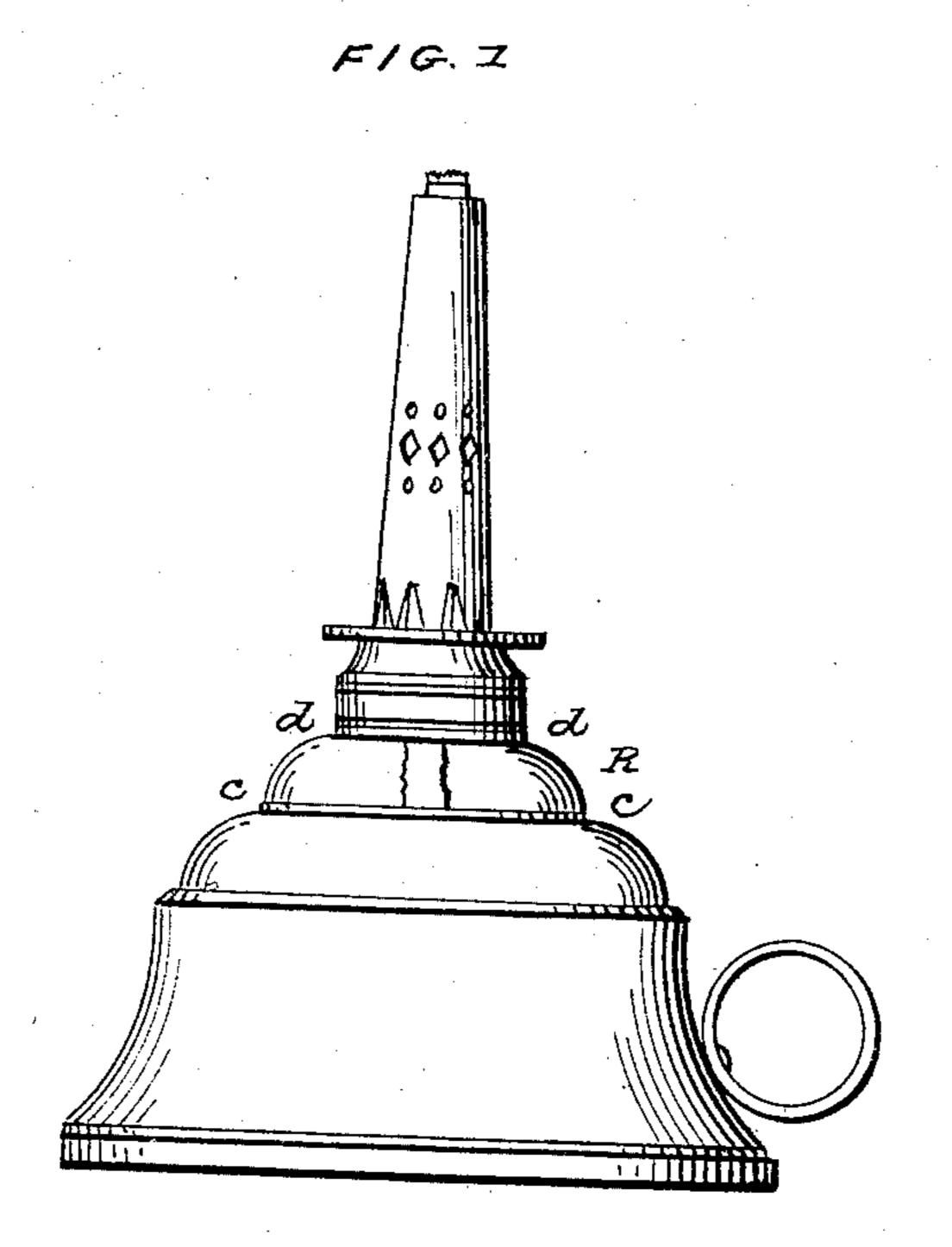
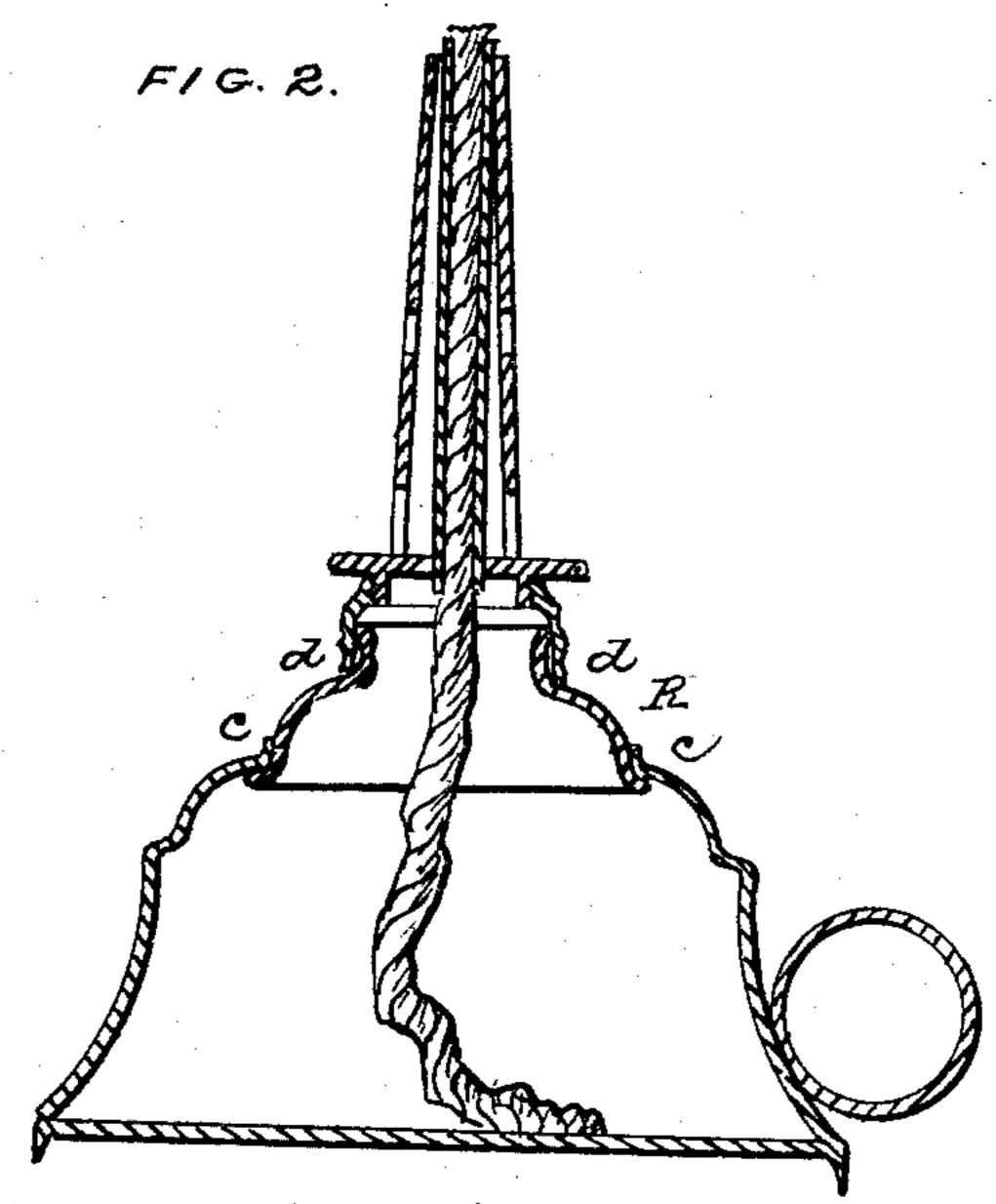
## D. HOWARTH.

No. 55,771.

Patented June 19, 1866.





WITNESSES: William Halfford George J. Clifford

INVENTOR. David Lowarth

## United States Patent Office.

DAVID HOWARTH, OF PORTLAND, MAINE, ASSIGNOR TO HIMSELF, W. N. GOURLAY, AND S. C. RUNDLETT, OF SAME PLACE.

## IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. 55,771, dated June 19, 1866.

To all whom it may concern:

Be it known that I, DAVID HOWARTH, of Portland, in the county of Cumberland and State of Maine, have invented a new and useful Improvement in Lamps; and I hereby declare the following to be a full, clear, and exact description thereof, reference being made to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows a side elevation of a lamp containing my improvement; Fig. 2, a section

of Fig. 1.

There are many circumstances, as is well known, under which lamps of various sizes are employed. Where safety requires, they should be made of brass, tin, &c.—that is, of some metal so as to preclude the danger of fracture and explosion. There is always an inconvenience, however, attendant upon the use of lamps constructed of a non-transparent material, viz., in ascertaining when it requires refilling and in the act of refilling itself. A lamp so made as to possess all the safety of a metal body and yet to have some means by which its contents can be inspected without removing the top would be an article of great convenience.

To accomplish this result is the object of my invention.

It consists in inserting in the body of a lamp a ring of glass constructed as hereinafter set forth and in such position in the lamp as is least likely to receive any blow or injury from the violent contact of the lamp with any object.

The ring is attached at the top to the top of the lamp. This is effected by fitting the ring

with a shoulder and a screw, so that the top of the lamp can be screwed thereon in the ordinary manner.

The bottom of the ring is connected to the body of the lamp by means of another shoulder, against which the metal rests, and is secured by any of the ordinary methods. The ring thus inserted at this place is effectually secured from accident by the swell of the body of the lamp below and the projecting top thereof above.

In the accompanying drawings, R shows the ring of glass inserted at the described place in the body of the lamp. d dshow the shoulders on the upper side, and c c on the lower side, thereof. The drawings also show the form in which the ring is made.

I am aware of Letters Patent granted to Chas. W. Cahoon, February 19, 1861; but my invention embraces a different mechanical construction and arrangement from his.

I do not claim the combination of an opaque lamp body with a transparent plate secured into one side of the lamp.

What I claim as my invention, and desire

to secure by Letters Patent, is-

Inserting into a lamp constructed of any opaque substance a transparent ring of the form, in the place and manner, and for the purpose substantially as set forth.

DAVID HOWARTH.

Witnesses:

WILLIAM H. CLIFFORD, HENRY C. HOUSTON.