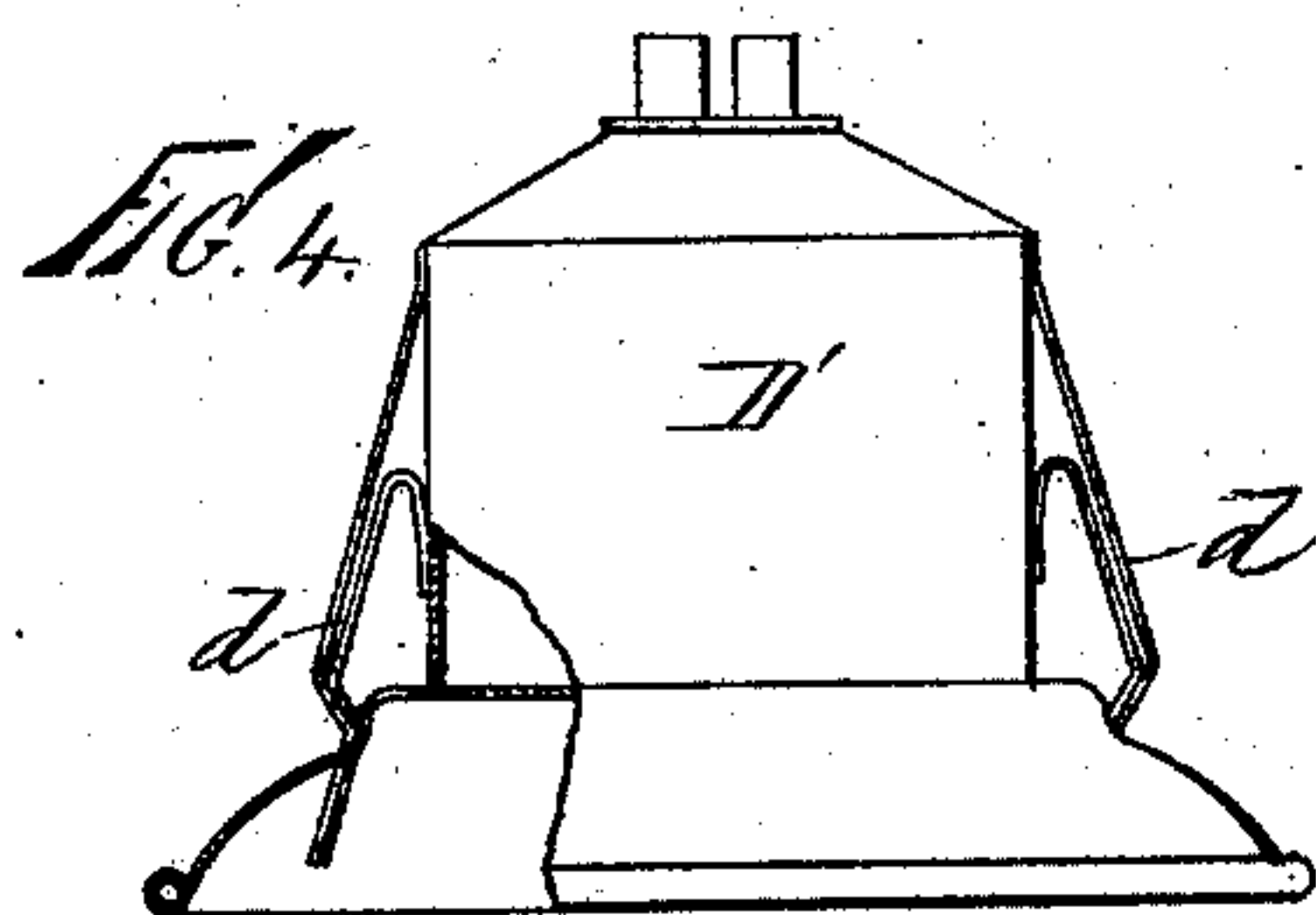
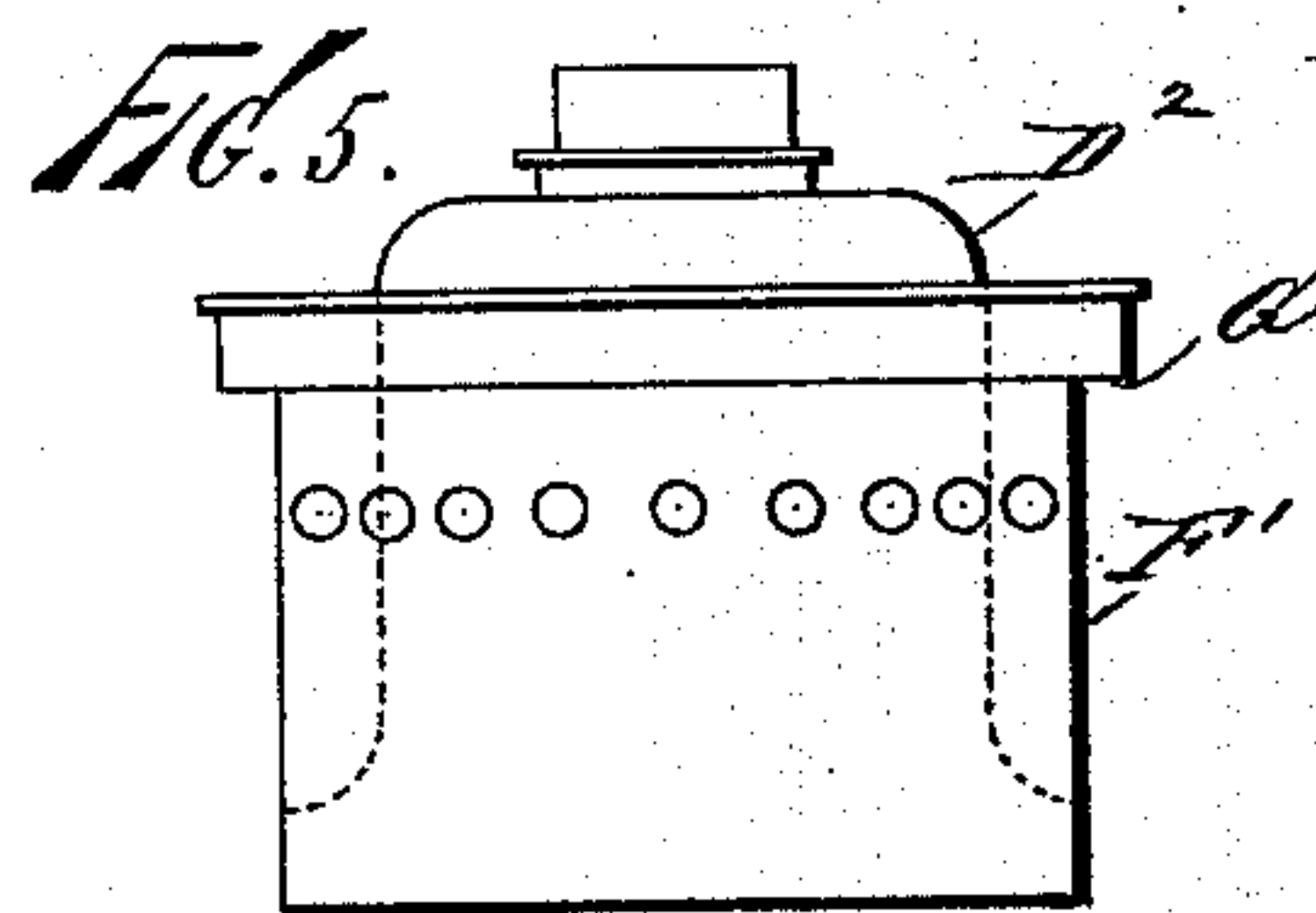
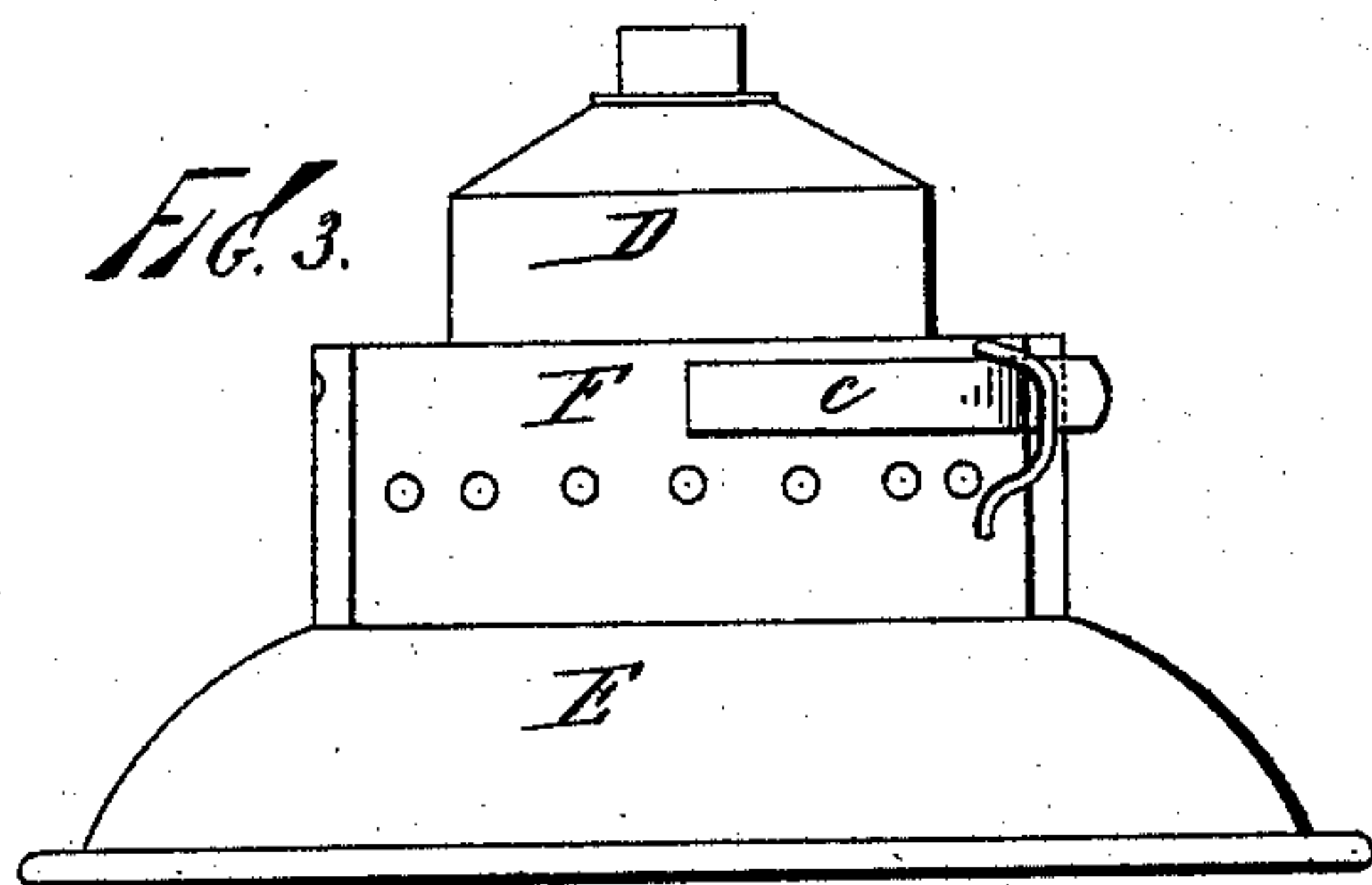
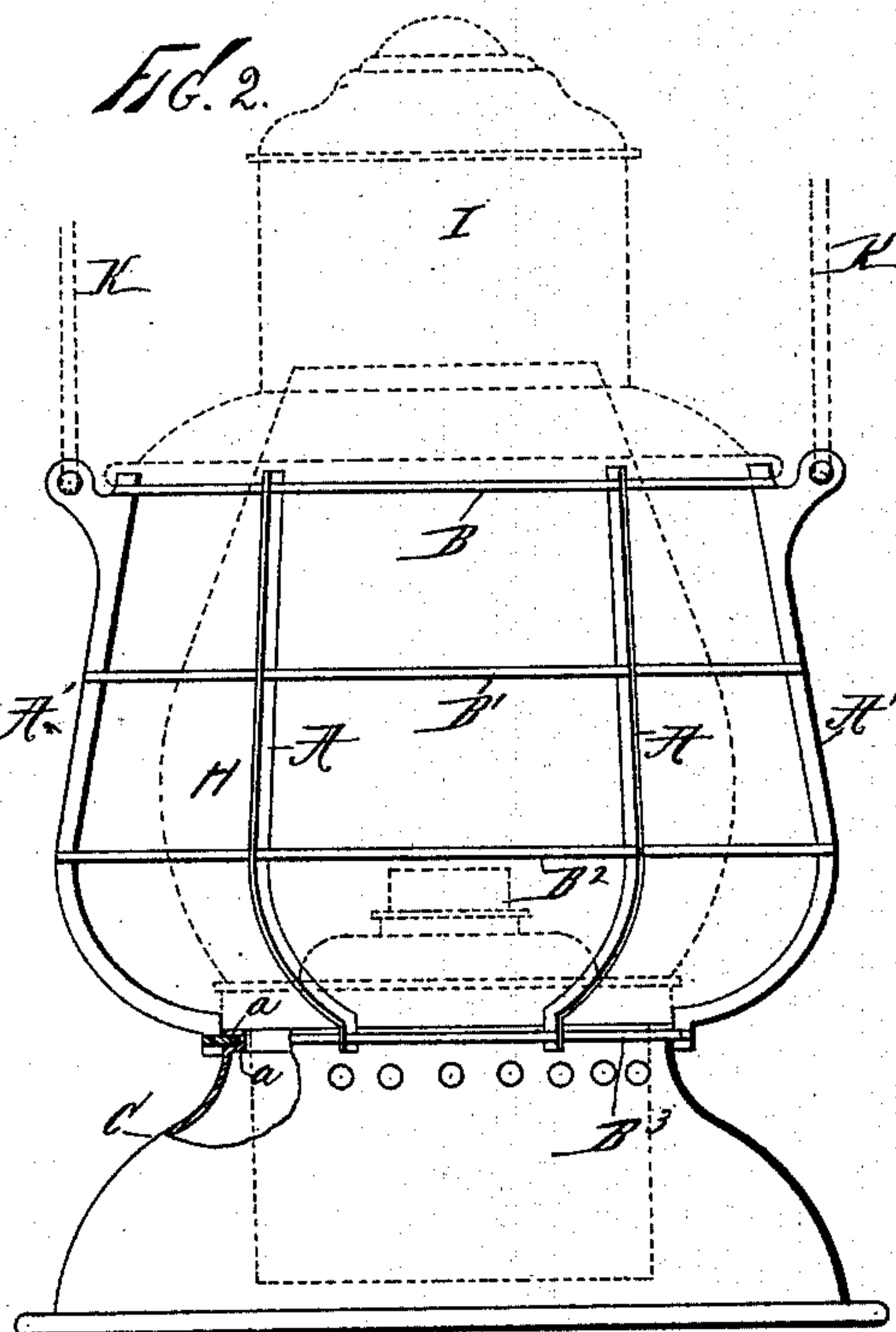
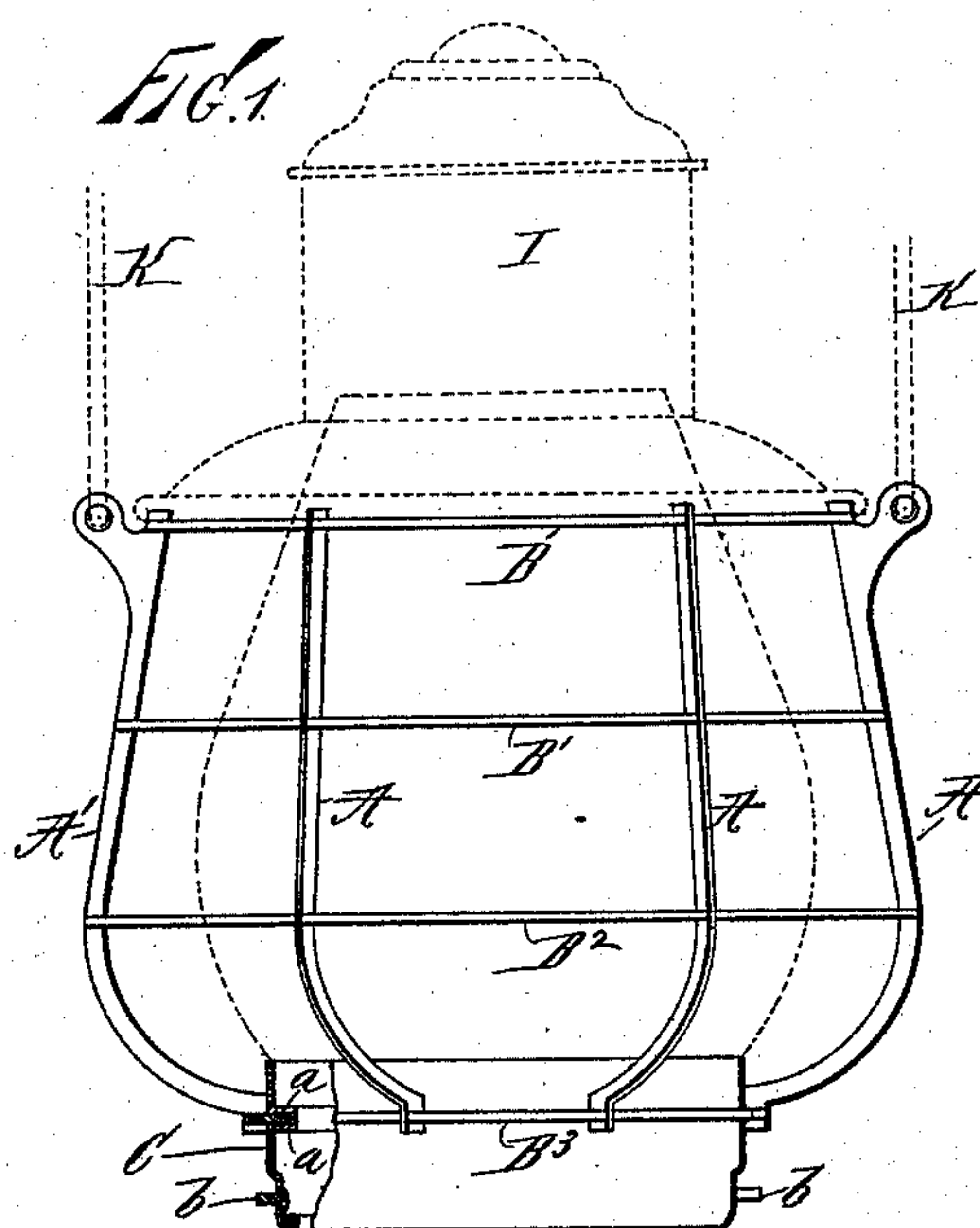


(No Model.)

F. D. SPEAR.
LANTERN.

No. 413,464.

Patented Oct. 22, 1889.



Witnesses:
John Buckle,
L. H. Orgood.

Inventor:
Herman D. Spear,
By North Ogden
Attorney

UNITED STATES PATENT OFFICE.

FURMAN D. SPEAR, OF BROOKLYN, NEW YORK.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 413,464, dated October 22, 1889.

Application filed July 21, 1888. Serial No. 280,633. (No model.)

To all whom it may concern:

Be it known that I, FURMAN D. SPEAR, of Brooklyn, county of Kings, and State of New York, have invented certain new and useful
5 Improvements in Lanterns, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

10 My invention relates, chiefly, to lanterns, but is applicable to analogous illuminating apparatus wherein a guard-frame is employed in sustaining the different parts.

The object of my present invention is to
15 provide a simple, cheap, durable, and easily applicable means of uniting the oil-pot and chimney or globe with the guard-frame, the union being such as to increase the strength and rigidity of the structure at or in the re-
20 gion of the union, so that it will effectually withstand any damaging force or strain to which it is likely to be subjected. To accomplish all of this and to secure other advantages in the matters of construction and
25 operation my improvements involve certain new and useful arrangements or combinations of parts and peculiarities of construction, as will be herein first fully described, and then pointed out in the claims.

30 In the accompanying drawings, forming part of this specification, Figure 1 is an elevation and partial sectional view of a lantern-frame having a body-hoop applied thereon in accordance with my invention, the
35 hoop being short and arranged to receive a removable or detachable oil-pot from below; and Fig. 2 is a similar view wherein the body-hoop is shown as extended or enlarged to form the base or foot of the lantern. Fig. 3 is an
40 elevation of an oil-pot carrying a base or foot, which oil-pot may be secured upon the exterior of the lower end of the body-hoop in Fig. 1; and Fig. 4 is a similar view of an oil-pot which may be also used. Fig. 5 is an eleva-
45 tion of an oil-pot which may be inserted in the body-hoop of Fig. 2 from the top thereof, to be held to its seat by the chimney. The dotted lines in Figs. 1 and 2 represent the positions of various adjuncts of the lantern.

50 In all the figures like letters of reference, wherever they occur, indicate corresponding parts.

A A' are the upright guards, and B B' B² B³ are the horizontal ring-guards of the lantern-frame. These parts are notched together and
55 interlocked or interwoven, as set forth in a separate application for patent of even date of filing herewith, Serial No. 280,632, by me made, and are preferably all made of flat metal considerably wider than it is thick. It
60 is to this form of frame that my present improvements are especially applicable; but obviously other forms might be substituted if a horizontal body-hoop frame-ring be employed and rigidly secured to the upright guards by
65 notching them together. The body-hoop is applied to the body-hoop frame-ring B³ and receives the oil-pot. This hoop may be short, as at C in Fig. 1, extending a little above and
70 a little below the bottom of the body-hoop frame-ring, or it may extend considerably below that ring, as at C, Fig. 2, constituting also the base or foot of the lantern.

The hoop C is formed to enter the body-hoop frame-ring B³, and it is secured in and
75 on said ring, preferably, by being buckled under and over the inner margin thereof, as shown in the sectional part at *a a*, and afterward "dipped" or "tinned," if required. By
80 thus uniting the body-hoop with the body-hoop frame-ring, (which may be easily and quickly accomplished by use of ordinary beading or reeding tools,) the said hoop is not only securely held in place against any
85 possibility of disarrangement, but the form of joint adds to the strength and stiffness of the structure in the region of the frame always most liable to damage; and it further
90 dispenses with the use of solder, enabling me to complete the union easier, quicker, and with much less expense than in other meth-
95 ods; but other methods may be adopted.

The oil-pots to be used are of a great variety of forms and are secured in various ways. The pot D, Fig. 3, is mounted upon a base or
95 foot E, which is supplied with a band F, arranged to slip over the body-hoop, pins, as *b b*, entering recesses provided for them and being locked by a spring, as *c*, in a manner well understood. 100

The pot D', Fig. 4, is locked to any base or other hoop by side springs, as *d d*. The oil-pot D², Fig. 5, may be arranged to be withdrawn from the top of the body-hoop, in which

case it is provided with a band F', having a shoulder G, which rests as indicated by the dotted lines in Fig. 2, and also receives the chimney or globe.

5 H represents the chimney or globe, I the lantern top or dome, and K the bail or handle.

The oil-pot, chimney, dome, and bail are no essential parts of the present invention, and may be made and mounted after any of the
10 usual plans.

Having now fully described my invention, what I claim as new herein, and desire to secure by Letters Patent, is—

1. In a lantern, the combination, with the
15 horizontal frame-ring B³, secured to the upright guards, substantially as explained, of a body-hoop secured upon said frame-ring, substantially as and for the purposes set forth.

2. In a lantern, the combination, with the

flat metal horizontal frame-ring notched upon 20 and secured to the upright guards, of the body-hoop bent or buckled upon said flat metal ring, substantially as shown and described.

3. In a lantern, the combination, with the 25 flat metal horizontal frame-ring secured upon the upright guards, of the body-hoop bent or buckled upon said flat metal ring and extended down to form the base or foot of the frame, substantially as shown and described. 30

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

FURMAN D. SPEAR.

Witnesses:

W. J. MORGAN,
WORTH OSGOOD.