

No. 638,294.

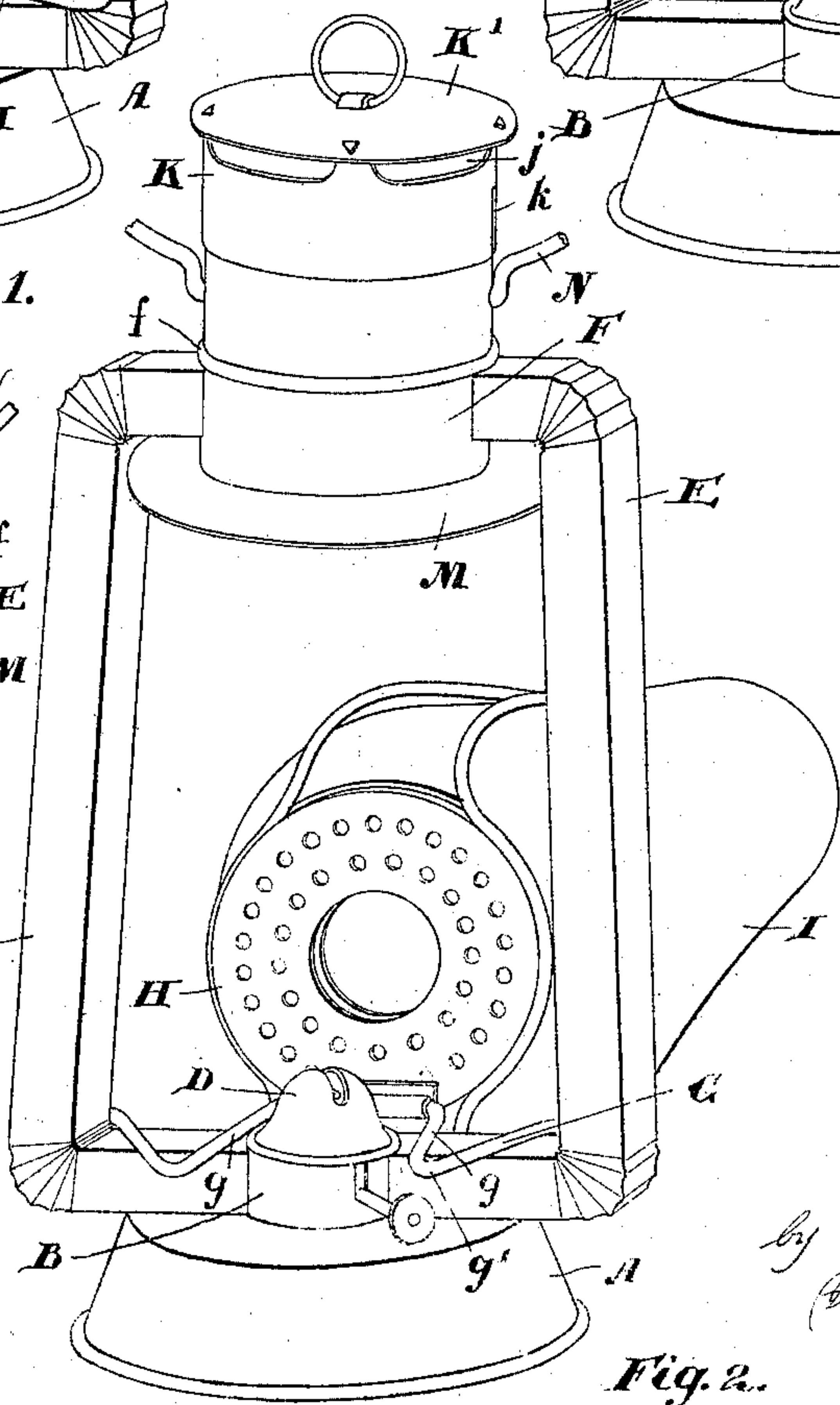
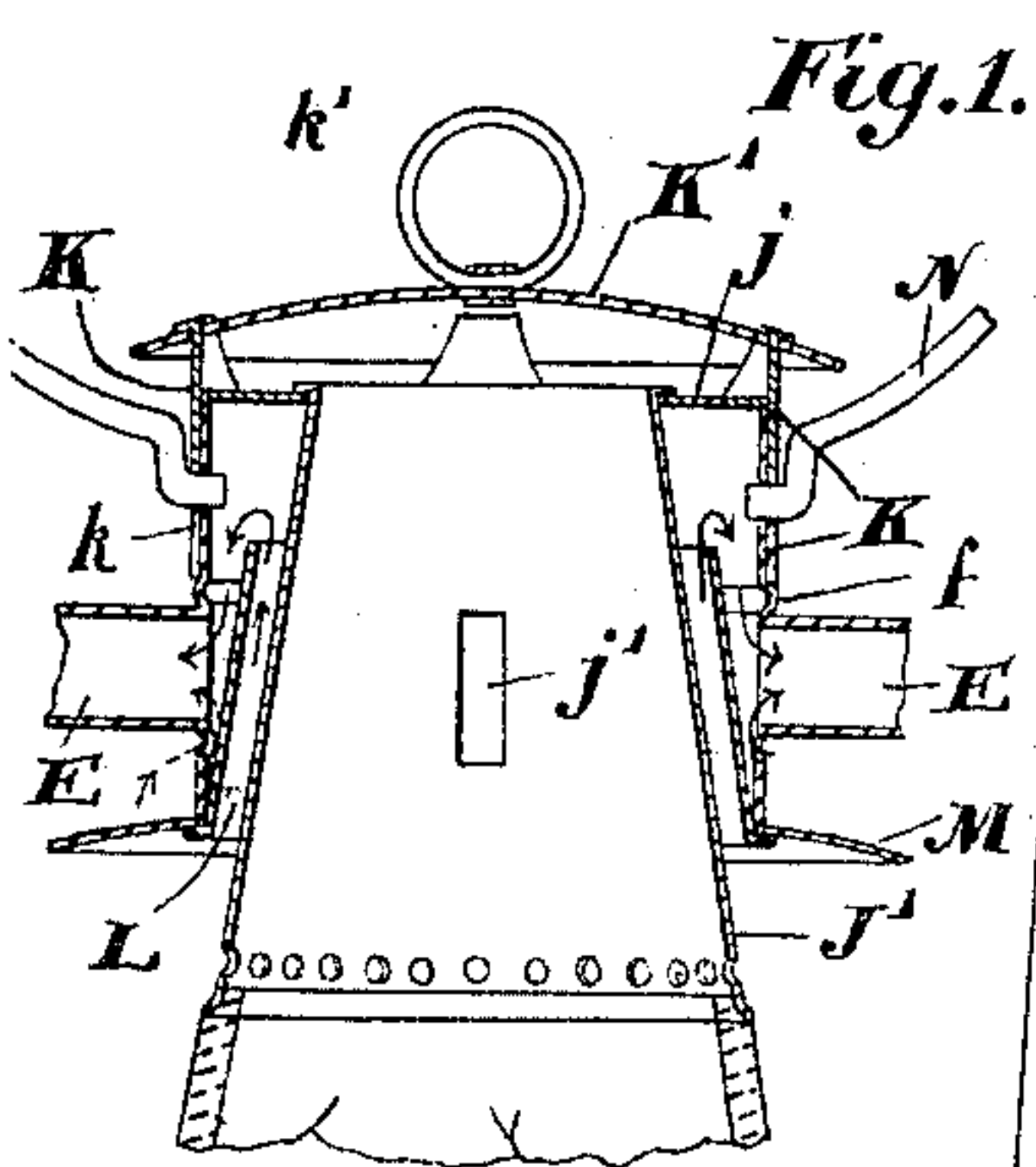
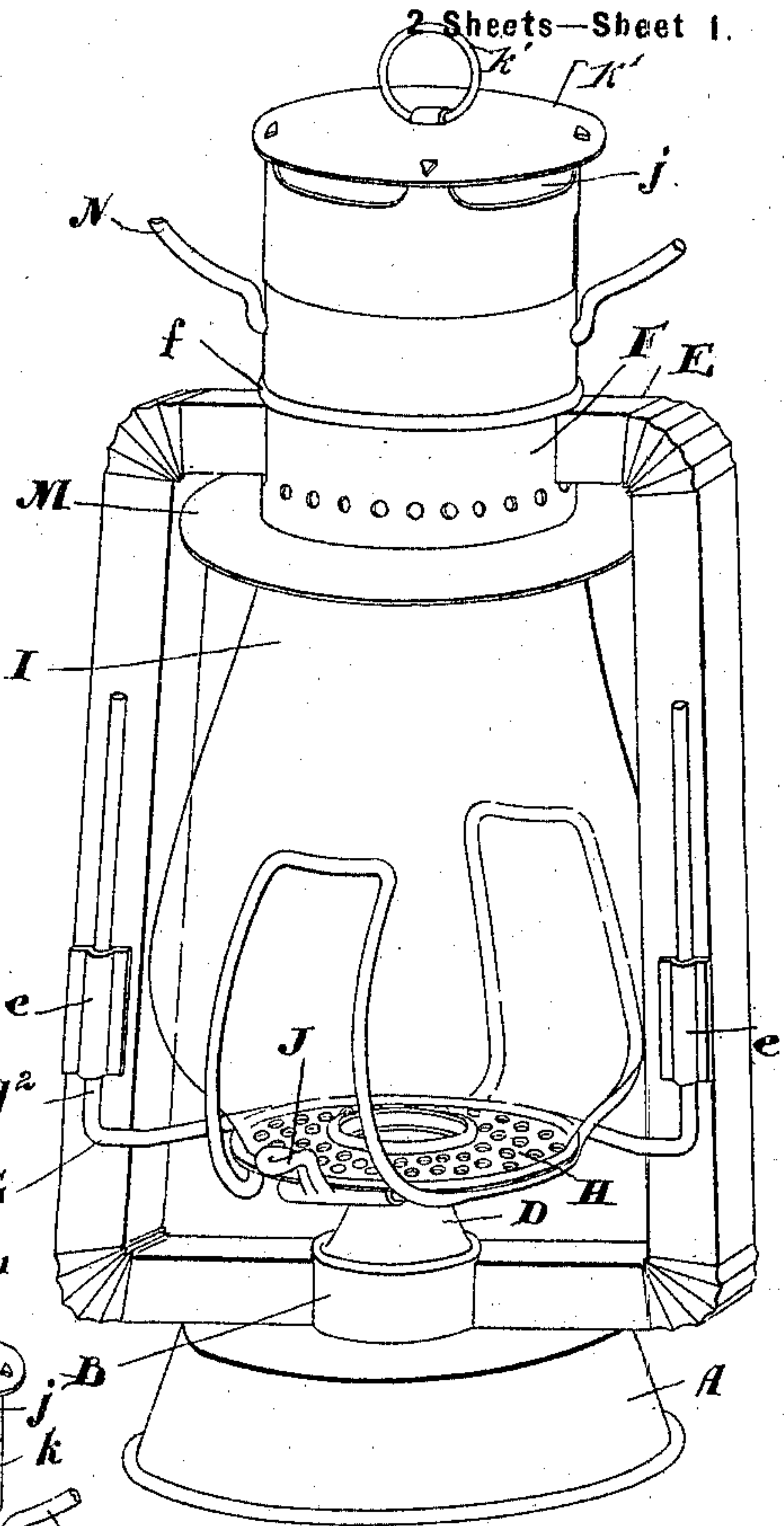
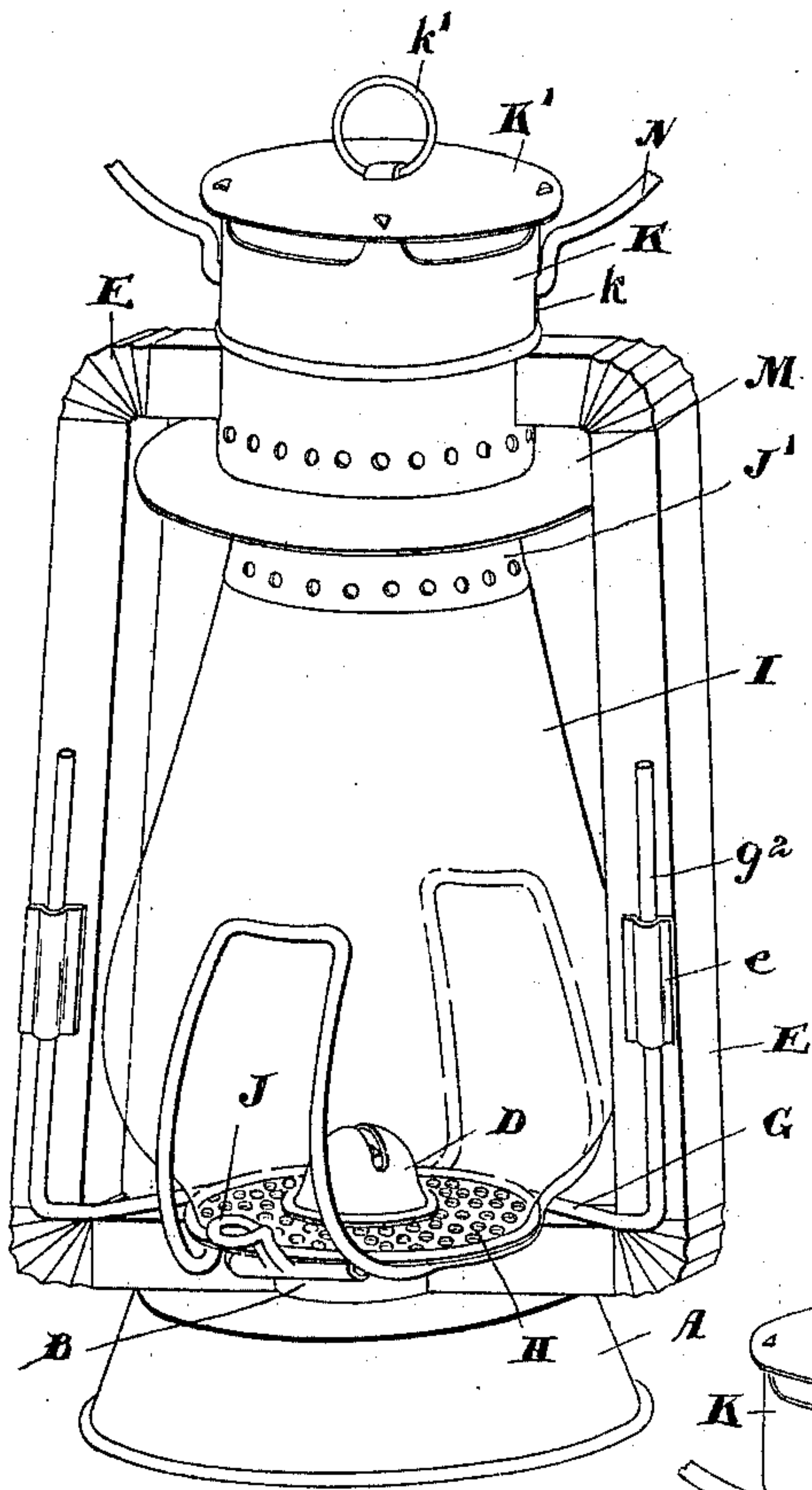
Patented Dec. 5, 1899.

J. H. STONE.
LANTERN.

(Application filed Jan. 9, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses.

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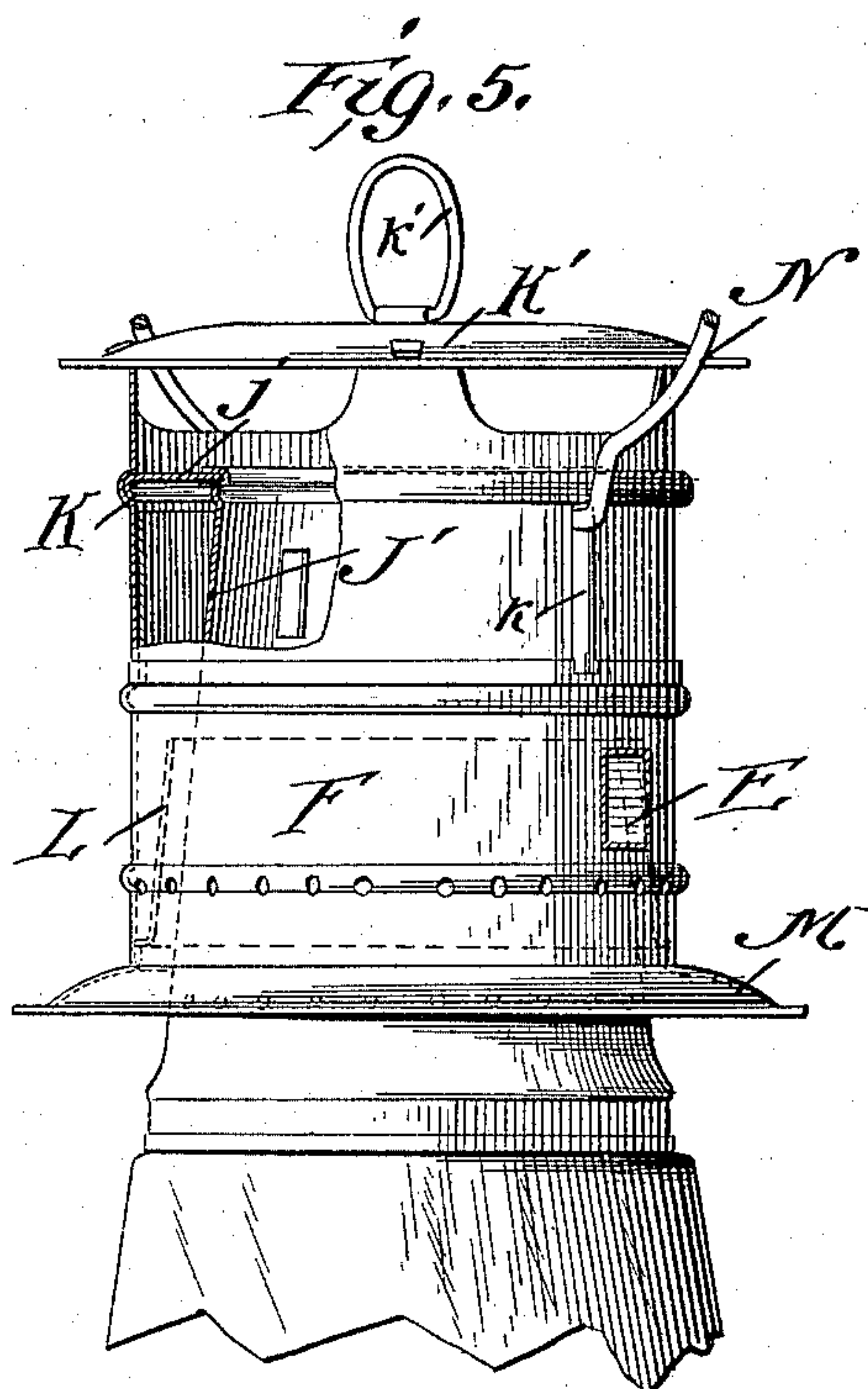
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2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

JOHN HENRY STONE, OF TORONTO, CANADA.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 638,294, dated December 5, 1899.

Application filed January 9, 1899. Serial No. 701,647. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY STONE, manufacturer, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Lanterns, of which the following is a specification.

My invention relates to improvements in lanterns; and the object of the invention is, first, to devise a suitable globe-holder for the bottom edge of the globe whereby it may be either raised or swung to enable the lantern to be lighted, and, secondly, to provide a suitable holder for the top of the globe capable of being raised and yet so constructed as to permit of perfect ventilation when such holder is in its normal position; and it consists, essentially, first, of a wire support hinged to the bottom perforated plate of the globe and having the side substantially vertical portion supported in guides attached to the side tubes, the side of the perforated plate being provided with a thumb-piece in order to provide for the raising of the globe or tilting of the same, as may be desired, and, secondly, of an upper holder formed in the shape of a truncated cone, the top of which is provided with an outwardly-extending flange, to which the cap is secured by means of a downwardly-extending flange having side notches designed to fit over the carrying-bail of the lantern, which is pivoted in the top outer jacket, to which the upper ends of the side tubes are connected, a minor deflecting truncated cone-shaped casing being also provided, secured to the bottom of the outer casing and arranged to direct the air, as in the manner hereinafter more particularly explained.

Figure 1 is a perspective view of a lantern constructed in accordance with my invention. Fig. 2 is a similar view showing the globe swung out of the way on its hinge, so as to enable the lantern to be lighted. Fig. 3 is a similar view showing the globe raised in order to light the lantern. Fig. 4 is a detail of the upper holder and air-chambers formed around the same. Fig. 5 is a detail view, parts being broken away, of the upper part of the lantern.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the base or oil-bowl, which is provided with a collar B, designed to receive the burner.

D is the cap of the burner.

E E are the side bent tubes of the lantern, which are connected at the bottom to the collar B and at the top to the outer jacket F.

G is a wire support having a U-shaped bend *g* in the center and a hinge at the base of the U, by which it is connected to the bottom perforated plate H in which the globe I is held. The wire support G has V-shaped bends *g'* on each side of the U-shaped bend *g* and upwardly-extending portions *g*², which extend through guides *e*, securely soldered on one side of the side tubes of the lantern. The upper extensions *g*² of the wire support have sufficient spring in them, so as to hold the globe and support in any position to which they may be vertically adjusted.

J is a thumb-piece which is secured to or forms part of the hinge to the outside thereof. By pressing under the thumb-piece the globe may be raised sufficiently so as to bring the bottom perforated plate H sufficiently above the cap of the burner in order to enable the lantern to be lighted, and the raised position is shown in Fig. 3. It is of course to be understood that the upper globe-holder will recede, and the construction of the same for such apparatus is as will hereinafter appear. By pressing down upon the thumb-piece when the upper globe-holder has been raised sufficiently, as hereinafter explained, the globe may be swung down substantially at right angles to the main body of the lantern, and this position is indicated in Fig. 2.

The upper globe-holder consists of a truncated cone-shaped casing J', perforated at the bottom, as indicated, and formed at the top, so as to receive the top of the globe. The upper end has connected to it a flange *j*, to which is connected the downwardly-extending flange K, upon which is secured the top cap K' of the lantern. The flange K is provided with side notches *k*. The outer jacket F, hereinbefore referred to, is provided with a series of perforations beneath the top ends of the side tubes E. An internal supplemental truncated cone-shaped casing L is provided outside of the truncated upper

holder J, such casing being secured at the bottom to the bottom of the jacket, which is provided with the usual deflecting-plate M. To raise the holder in order that the globe 5 may be swung out into the position shown in Fig. 2, it is simply necessary to pull upon the top ring *k'*, when the holder J' will be necessarily moved upwardly and find a stop by coming in contact with the similarly-formed 10 casing L. When pushing the cap K', and consequently the holder J', down, the bail or handle N will form a stop on account of the notches *k*. A bead *f* also forms a stop to limit the downward throw of the holder in 15 consequence of the flange K coming in contact with it. When the holder J' is in position, the draft of air passes up between the holder and the casing L, whence it is directed downwardly and follows the course indicated by arrow. This draft or passage of air 20 meets the air passing through from the perforations *f*, as indicated by arrow, and I find in practice that the air thus deflected and fed into the tubes passes down in a steady course 25 into the burner and supplies the necessary oxygen thereto without any danger of any flicker or of blowing out. I also provide ports *j* in the globe-holder, which admit the air direct through between the supplemental 30 truncated cone and the globe-holder.

What I claim as my invention is—

1. The combination with the globe suitably held at the bottom and the side tubes, of the upper truncated cone-shaped holder, the jacket 35 secured to the upper end of the tubes, the cap slidable vertically connected to the truncated cone-shaped holder and the truncated cone-shaped casing located outside the holder and connected to the bottom of the jacket as and 40 for the purpose specified.

2. The combination with the globe suitably

held at the bottom and the side tubes, of the upper truncated cone-shaped holder, the jacket secured to the upper end of the tubes, the 45 slidable cap, the downwardly-extending flange provided with notches, the bail extending into the jacket through such notches, the flange connecting the downwardly-extending flange to the top of the holder and the truncated cone-shaped casing located outside the holder 50 and connected to the bottom of the jacket to form an air-space around said holder communicating with said tubes, substantially as described.

3. The combination with the globe suitably 55 held at the bottom and the side tubes, of the upper truncated cone-shaped holder, the jacket secured to the outer end of the tubes, the cap slidable on said jacket, the downwardly-extending flange and the flange connecting such 60 flange to the top of the truncated cone-shaped holder, the truncated cone-shaped casing located outside the holder and extending upwardly above the mouth of the tubes and connected to the bottom of the jacket and the row 65 of perforations in the jacket located beneath the top ends of the tubes as and for the purpose specified.

4. The combination with the outer jacket and the tubes connected thereto and the deflecting truncated cone-shaped casing connected to the bottom of the jacket and extending above the tube-openings, of the upper truncated cone-shaped globe-holder suitably 70 supported on the jacket and provided with openings communicating with the chamber formed between the outer jacket and the holder as and for the purpose specified.

JOHN HENRY STONE.

Witnesses:

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