

(No Model.)

J. KIRBY, Jr.
LAMP.

No. 274,003.

Patented Mar. 13, 1883.

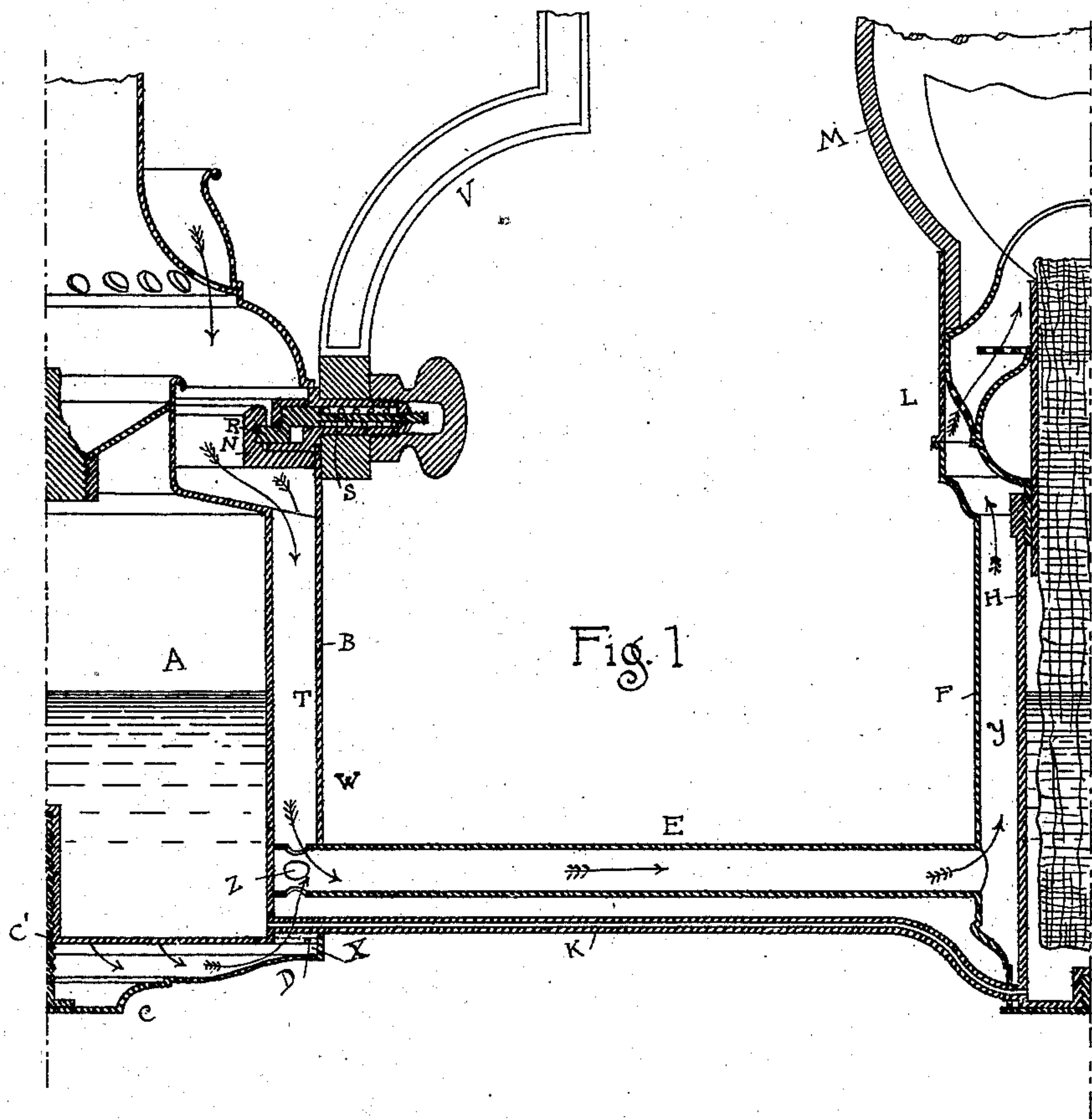
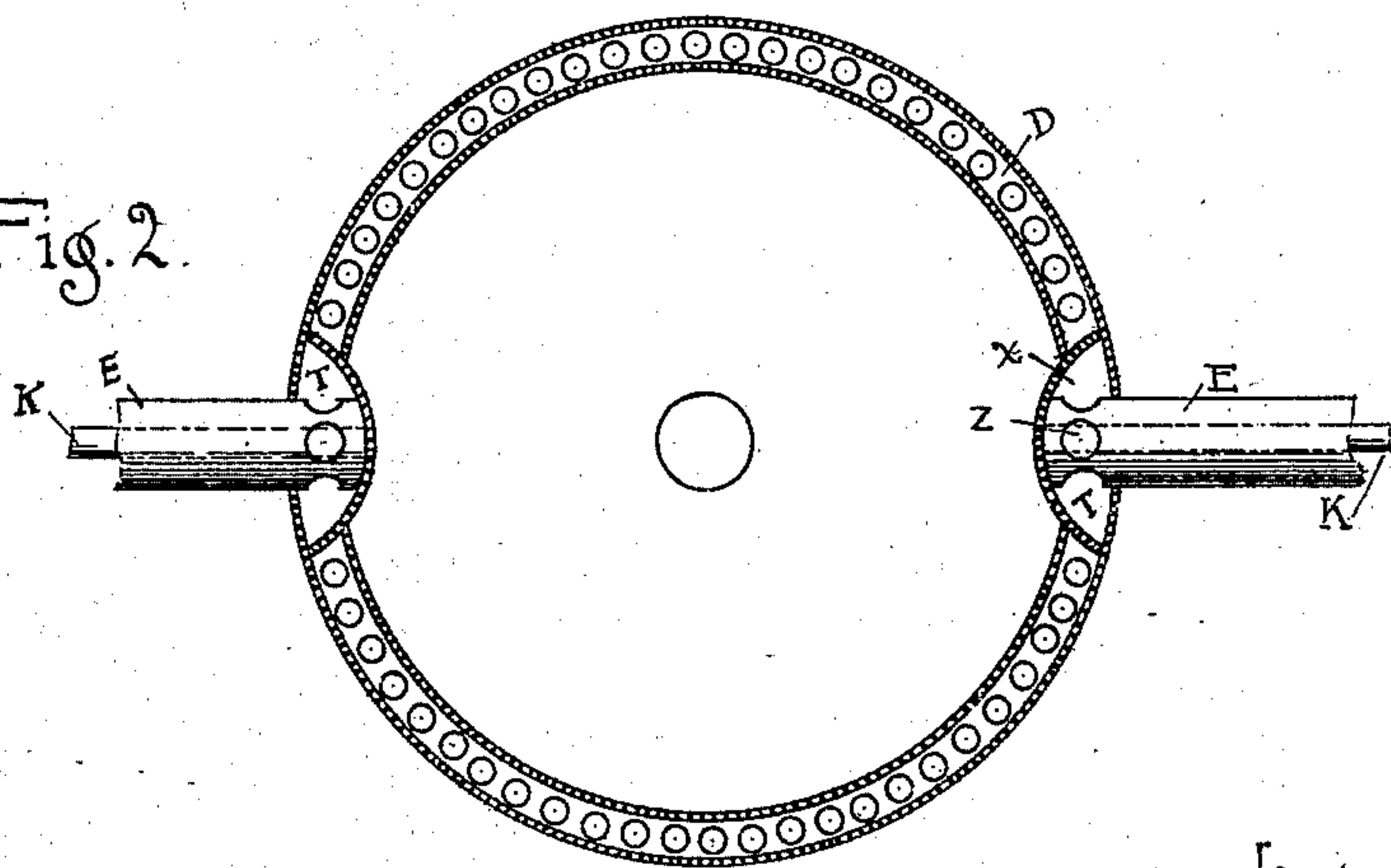


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN KIRBY, JR., OF LUDLOW, KENTUCKY, ASSIGNOR TO POST & CO., OF CINCINNATI, OHIO.

LAMP.

SPECIFICATION forming part of Letters Patent No. 274,003, dated March 13, 1883.

Application filed July 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN KIRBY, Jr., of Ludlow, Kenton county, Kentucky, have invented a certain new and useful Improvement in Lamps, of which the following is a full, exact, and clear description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a section of one-half of lamp. Fig. 2 is a plan of oil-reservoir and air-chamber, showing air and oil tubes leading to burners on each side.

Similar letters of reference denote the same parts.

A is an oil-reservoir; B, air-chamber; C, cap closing bottom of air-chamber; D, flange on bottom of reservoir; C', screw on cap; E, air-tubes leading to inclosed burner; F, inclosing air-tube of burner; H, inclosed wick-tube; K, oil-tube leading from reservoir to wick-tube; Y, air-space between F and H; Z, perforations in tube E. X indicates points where flange is cut away; T, air-space between reservoir and air-chamber; N, projecting grooved ring on upper surface of air-chamber; R, spring-lug of coupling-ring; S, coupling-ring; L, metallic cap fitted on tube F; M, chimney fitting into metallic cap L.

My invention relates to lamps, more especially to the class known as "railway-car lamps;" and it consists in making a lamp as follows:

I place the oil-reservoir A within the air-chamber B, so that there is an air-space, T, between them. The reservoir is connected to the air-chamber by a flange, D, on its bottom edge. This flange is perforated with air-holes, and on opposite sides, where the air-tube E leads off to the burner-tube F, it is cut out, as shown at *x* in Figs. 1 and 2. The bottom of the air-chamber is a detachable cup, C, held to the oil-reservoir by the screw *c*. The apertures X in flange D insure the changing of the air between the bottom of the reservoir A and the bottom of the cylinder B. These apertures are not provided as conduits of air to the tubes E, but as a means of keeping an equal temperature on all sides of the

reservoir A. I then pass the air-tube E through the side of the air-chamber B with an air-tight joint, and attach it directly (usually by solder) to the side of the inclosed reservoir. This tube E, between its point of attachment to the reservoir and the point where it passes through the side of the air-chamber, is perforated with air-holes, as at Z, Figs. 1 and 2. I join the air-tube to the air-chamber in this way because it is a firm attachment; but the tube may be soldered to the side of the air-chamber or fit onto a boss on the side of the chamber. This tube E leads to the air-tube F of the burner, to which it is connected by an air-tight joint. Tube F incloses the oil-and-wick tube H of the burner. Between these burner-tubes is an air-space, Y. The oil passes from the reservoir to the wick-tube H through the pipe K. (Shown in Fig. 1 and dotted lines in Fig. 2.) Tube F is closed against the admission of air at its upper end by a metallic cap, L, into which the chimney M fits. Thus the air admitted through the top of the air-chamber to support combustion at the wick is forced to come through the air-chamber and around the reservoir.

I am aware that air and oil tubes leading from a reservoir of oil to burners on each side thereof are in use in railway-car lamps. I do not claim them, broadly, but in connection with my reservoir inclosed in an air-chamber.

The air-chamber B, as shown in the drawings, has a grooved ring, N, projecting from its upper surface. The air-chamber, with the parts of the lamp attached to it, is connected to the other parts of the lamp and to the supporting-brackets V by lugs R on a coupling-ring, S, engaging in this grooved ring.

The drawings show a coupling-ring, with spring-lugs of my invention, for which I am about to apply for Letters Patent. Any other suitable coupling may be used.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

1. In a lamp, an oil-reservoir inclosed in an

air-chamber having a grooved ring projecting from its upper surface and detachable from its supports, in combination with a coupling-ring, substantially as described.

- 5 2. In a lamp, an oil-reservoir inclosed in an air-chamber detachable from its supports, in combination with a coupling-ring and the supporting-brackets, substantially as described.

The foregoing specification of my invention signed by me this 7th day of July, A. D. 1882. 10

JOHN KIRBY, JR.

Witnesses:

RICHARD L. AYER,
JEPHTHA GARRARD.