

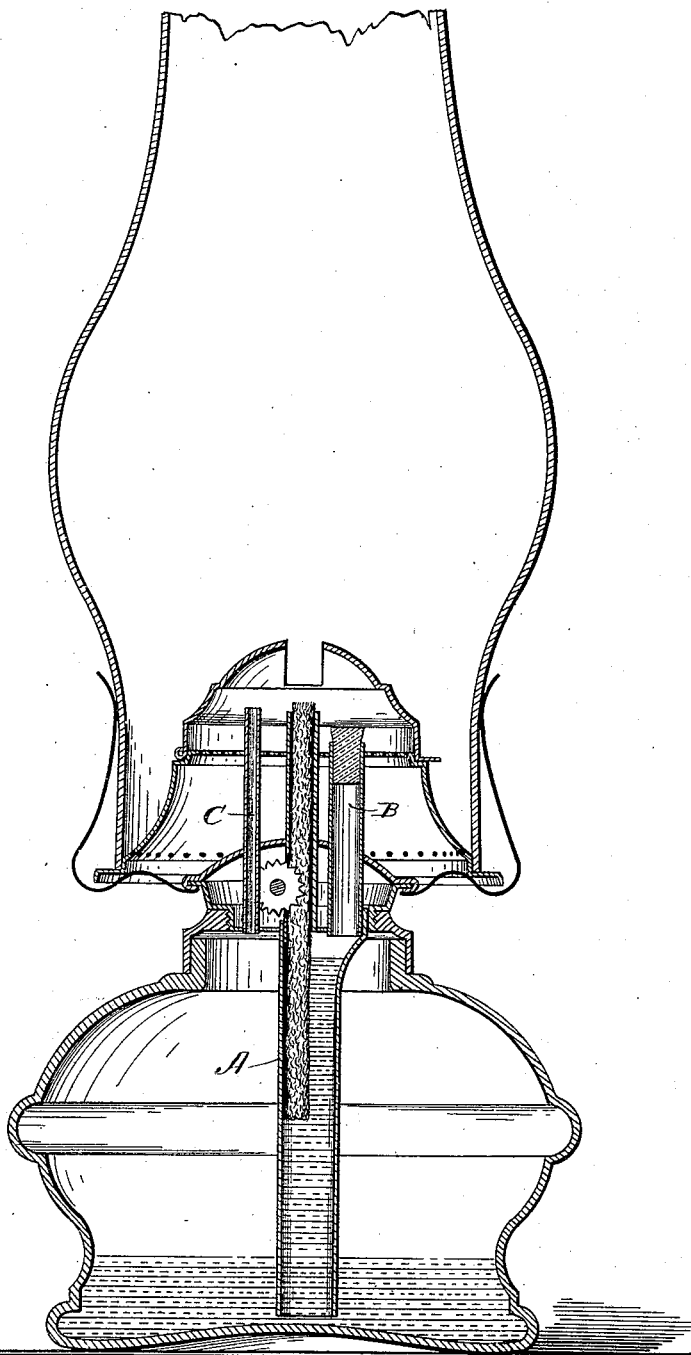
(No Model.)

D. H. MURPHY.

LAMP.

No. 343,137.

Patented June 1, 1886.



WITNESSES:
C. S. Gooding.
O. Mayo

INVENTOR:
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UNITED STATES PATENT OFFICE.

DANIEL H. MURPHY, OF LYNN, MASSACHUSETTS.

LAMP.

SPECIFICATION forming part of Letters Patent No. 343,137, dated June 1, 1886.

Application filed February 19, 1886. Serial No. 192,500. (No model.)

To all whom it may concern:

Be it known that I, DANIEL H. MURPHY, of Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented certain Improvements in Lamps, of which the following, taken in connection with the accompanying drawing, is a specification.

This invention relates to improvements in lamps, and the nature thereof is fully described and specifically claimed hereinafter.

Referring to the drawing, the figure is a vertical central section of a lamp constructed in accordance with and embodying my invention.

15 The wick-tube A is extended downward into the lamp oil-chamber, and terminates near the bottom of the chamber, as shown. The top of this tube is designed to fit closely to the wick in the usual way; but the portion thereof that
20 extends down into the lamp-chamber is more or less enlarged, to leave space not filled by the wick, to the end that oil may come up in the tube and surround the wick. The tube B has its bottom end terminating in the wick-tube A, as shown, and is designed to allow the
25 escape of air from the tube, to the end that oil may arise up in the tube when the lamp is filled.

30 The lamp and tube being filled, the end of the tube B is closed with any suitable air-tight stopper. The lamp-wick may then be lighted in the usual way, and as the oil is consumed a vacuum is formed in the tube A, and the outer air, communicating with the lamp chamber through the ventilating-tube C, bears upon
35 the oil, and constantly forces it upward into the tube A, thus keeping the tube filled.

It will be understood from the foregoing description that the wick is compelled to draw
40 oil only from the surface of the oil within the tube A, and the tube is kept full by atmospheric pressure until the oil in the lamp-

chamber descends below the end of the tube, so that if the tube terminates at the bottom of the lamp-chamber the oil will be about all
45 consumed before the wick is compelled to draw from the bottom of the chamber.

I have described the tube B as an air-tube, and the size thereof is not important to the operation of the lamp; but in some cases it
50 may be convenient to introduce the oil into the lamp-chamber through this tube. To effect this it is only necessary that the tube should be sufficiently large for the purpose.

The lamp and the burner may be of any
55 usual and ordinary construction in all particulars, except as above described, and I do not limit myself to any particular form or arrangement of the tubes A B C.

What I claim as of my invention, and desire
60 by Letters Patent to secure, is—

1. The combination, in a lamp, of an oil-reservoir, a burner and tube attached to the bottom of the burner, surrounding the wick-tube, and extending to near the bottom of the
65 oil-reservoir, an air-passage connecting with the upper portion of the said tube and the outer air, and a passage communicating with the upper portion of the oil reservoir and the outer air, substantially as described. 7c

2. The combination, with a lamp-burner, of a tube attached to the bottom thereof, surrounding the wick-tube and extending downwardly therefrom, an air-passage communicating with the said tube at the upper end
75 thereof and the outer air, and the air-passage C, extending through the burner and through the collar thereof, substantially as described and shown.

DANIEL H. MURPHY.

Witnesses:

G. HOLLIDAY,
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