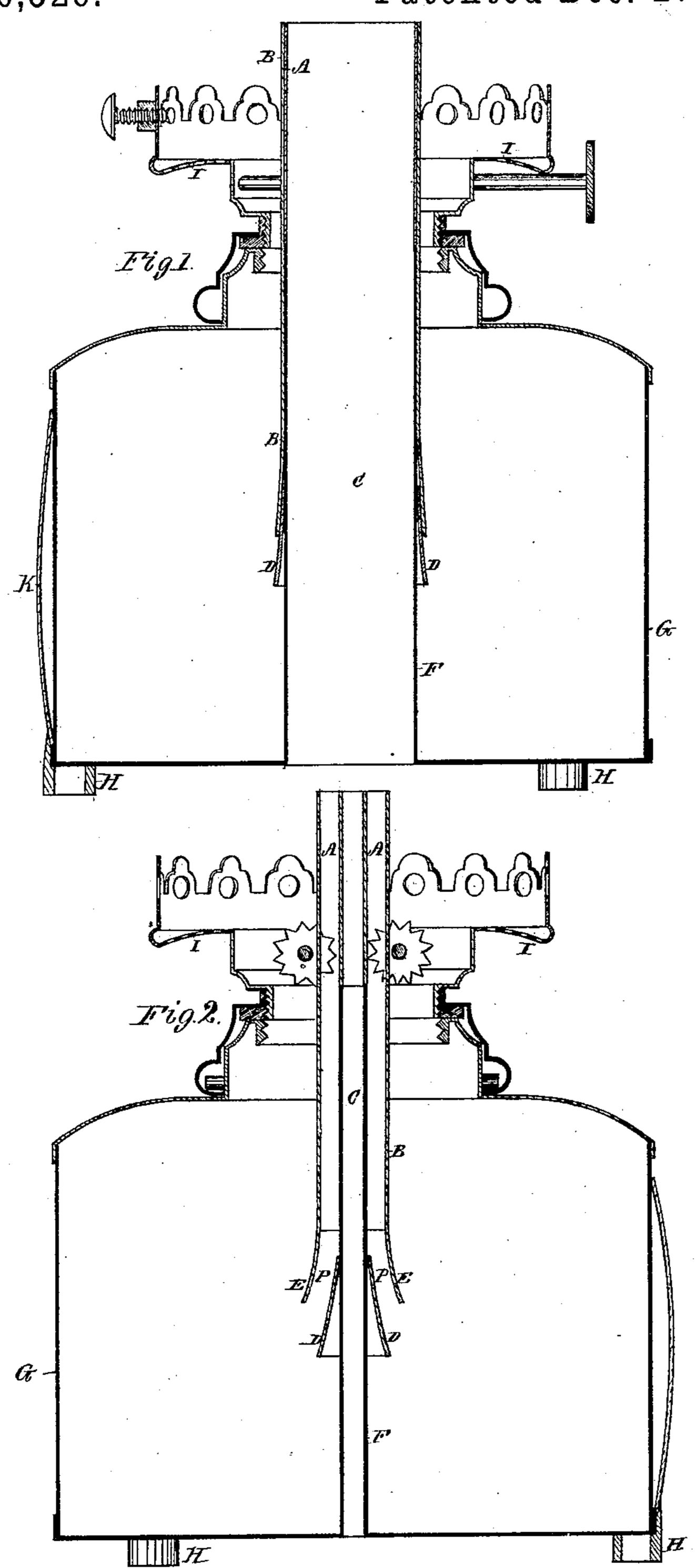
## T. S. WILLIAMS.

LAMP.

No. 110,526.

Patented Dec. 27, 1870.



Nitnesses. N. Pher T. S. Williams.

by his attorney.

R. W. Eddy

N. PETERS, Photo-Lithographer, Washington, D. C.

## Anited States Patent Office.

THOMAS SCOTT WILLIAMS, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND PHILLIP S. PAGE, OF SAME PLACE.

Letters Patent No. 110,526, dated December 27, 1870.

## IMPROVEMENT IN LAMPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, Thomas Scott Williams, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Lamps for burning kerosene or oil rich in carbon; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawing, of which—

Figures 1 and 2 are vertical sections of one of my improved lamps, the planes of the sections being at

right angles to each other.

The lamp as improved by me is analogous to that described in Letters Patent No. 29,203, dated July 17, 1860, and granted to Isaiah W. Taber, inasmuch as it has two separate wick-tubes or holders, and a central draught or air-duct arranged directly between them.

I dispense, however, with the lateral inducts as used by the said Taber to convey air to the central duct, and, instead of such, I employ with such central duct a tube, to be arranged in the lamp-reservoir, and open through the bottom or outside thereof, and to extend up therefrom to or into such central duct.

Furthermore, I combine with the central duct and the wick-holders a trumpet or guide-mouth, arranged therewith substantially as represented in the drawing, the object of it being to guide the wick-carrier tube or tubes upon the auxiliary air-tube or duct, and the latter into the air-duct or space between the two wick-carriers.

In the drawing—

A A denote the two wick-carriers or tubes, formed within a longer tube, B, and having between them an

air-duct, open space, or passage, C.

At its lower end the tube B is open and provided with a flaring guide or mouth-piece, D, and wings, E E, arranged therewith as represented, so as to form passages, P P, for reception of the two wicks.

The two wicks are to be run between the said mouth-piece and the wings, and thence are to pass up into the tube B, and thence up through the two holders A A.

The air-supply duct or tube is shown at F as extended up from the bottom of the oil-reservoir G, and through the guide-mouth, and into the passage between the two wicks or their holders.

The reservoir being provided with feet H to support it, air will pass from beneath it up through the duct F to the wick or the space between them.

The air for supplying the outer surfaces of the flames of the wicks rushes through the foraminous base I, and thence into and through the cone-deflector usually placed on such base, and employed with the two wick-tubes A A and control-draught C, as described.

The burner may be held to the oil-reservoir by a bayonet-catch ring, or an annular collar arranged to revolve on the burner, and to screw upon or into the neck of the reservoir.

I claim-

1. The arrangement and combination of the guide or flaring mouth-piece D with the tube B, the wick-holders, the central passage, and the tube F, the whole being applied to the burner and the lamp-reservoir, substantially in manner as explained.

2. The combination of the wick-passages P P, on opposite sides of the flaring mouth-piece, with such mouth-piece, the tube B, the two wick-holders A A, and their passage C, arranged between them, all as

set forth.

THOMAS S. WILLIAMS.

Witnesses:

R. H. Eddy,

J. R. Snow.