

J. MULVANY.

Lamp.

No. 33,791.

Patented Nov. 26, 1861.

Fig. 1

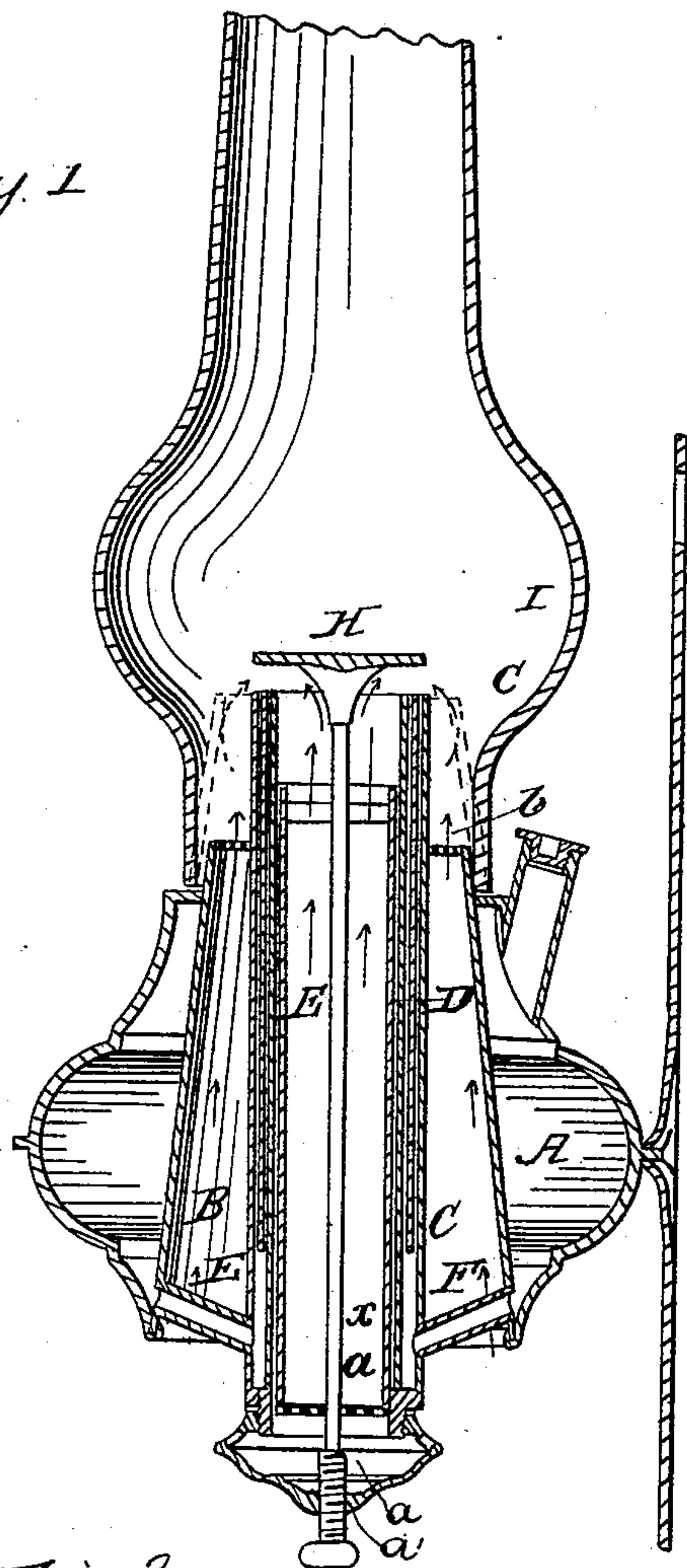
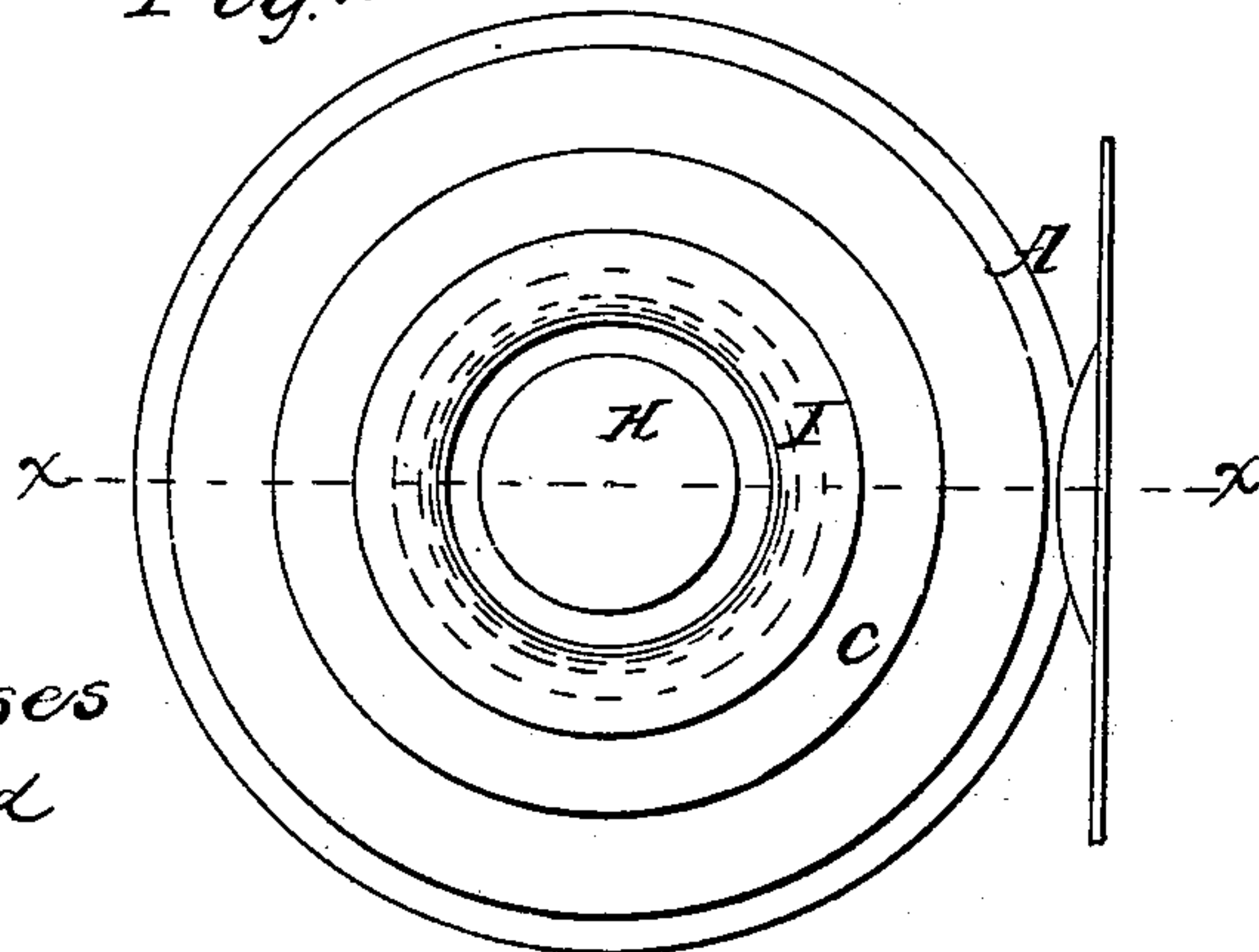


Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN MULVANY, OF NEW YORK, N. Y.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. 33,791, dated November 26, 1861.

To all whom it may concern:

Be it known that I, JOHN MULVANY, of 82 Catherine street, in the city, county, and State of New York, have invented a new and Improved Lamp for Burning Coal-Oils; and I do declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a vertical central section of my invention, taken in the line xx of Fig. 2; and Fig. 2, a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention has for its object the converting of ordinary camphene-lamps into coal-oil lamps by an extremely simple and economical modification. Camphene-lamps at present are virtually useless on account of the enormous price of turpentine caused by our domestic difficulties. Coal-oil is cheap and affords a brilliant light, and is consequently being substituted for camphene.

By my invention the consumer in making the necessary change of burning material will not be compelled to purchase new lamps, but may have the old camphene-lamps altered at a trifling expense to answer equally as well as lamps constructed specially for burning coal-oil.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the body or fountain of a camphene-lamp.

B is the conical air-chamber, which passes through its center, and C the tube, which contains the wick D and the wick-tube E.

F F are tubes, which form a communication between the lower part of the body or fountain A of the lamp and the tube C, as shown clearly in Fig. 1.

In the tube C there is placed a rod G, on the top of which a button H is fitted, the lower part of rod G having a screw a on it, which screw fits in a nut or female screw-thread a' at the bottom of tube C. The above-named parts are common to all camphene-lamps, and comprise, in connection with a cone, hereinafter referred to, the ordinary camphene-lamp hitherto in general use, and therefore do not require a minute description.

In the lower part of the tube C there is fitted a perforated metal or wire-cloth disk a^x , and an annular perforated metal or wire-cloth disk b is placed at the upper end of the conical air-chamber B, both disks being shown in Fig. 1.

I is the glass chimney of the lamp. This chimney rests on the top of the body or fountain A, and its lower part is of globe form, as shown at c in Fig. 1.

The perforated or wire-cloth disks $a^x b$ serve to equalize the supply of air up through the air-chamber B and tube C, while the globe portion c of the chimney serves to retain a body of air around the flame, the latter being consequently supplied with warm oxygen.

The ordinary camphene-lamp has a cone J, which encompasses the upper part of tube C, as shown by the dotted lines in Fig. 1. This cone serves to throw a rapid current of air upon the base of the flame, and this is essential in burning camphene, as a great amount of oxygen is required in order to support proper combustion. The absence of this cone prevents the strong or rapid draft, which is not required in burning coal-oil, and insures the globe portion c of the chimney being supplied with oxygen, which is warmed by the heat radiated from the flame, and causes the latter to be supplied with pure warm oxygen. Thus by this very simple arrangement the ordinary camphene-lamp may be transformed into a coal-oil lamp.

I do not claim separately any of the parts herein shown and described; but

I do claim as new and desire to secure by Letters Patent—

The employment or use of perforated or wire-cloth disks $a^x b$ in the tube C and air or draft chamber B of a camphene-lamp, when said disks are used in combination with the glass chimney I, provided with a lower globe portion c , and without the ordinary draft-cone J, which encompasses the upper part of tube C, substantially as and for the purpose set forth.

JOHN MULVANY.

Witnesses:

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