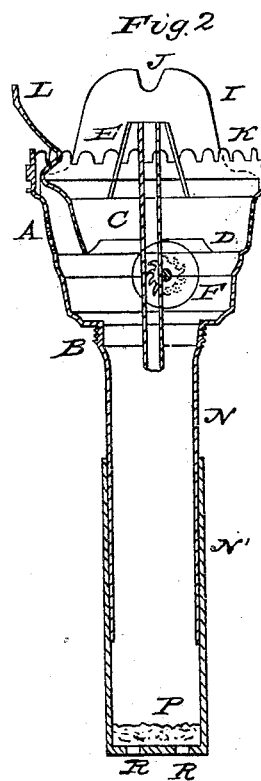
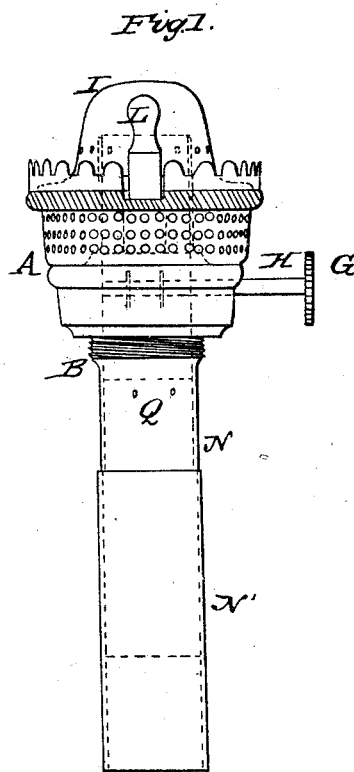


W. LASSELL.
Lamp.

No. 49,769.

Patented Sept. 5, 1865.



Witnesses.
Nathan Nichols
Oliver Hadaway

Inventor
William Lassell
By his Atty C. Dennis Jr

UNITED STATES PATENT OFFICE.

WILLIAM LASSELL, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. 49,769, dated September 5, 1865.

To all whom it may concern:

Be it known that I, WILLIAM LASSELL, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Lamps; and I do hereby declare that the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The nature of the improvement consists in surrounding the lower part of the wick-tube and wick with an enlarged tube, made in two parts, one sliding within the other, to adapt it to lamps of different depths.

In the accompanying drawings, Figure 1 is an elevation of a lamp-tube with my improvements. Fig. 2 is a section of the same, cut perpendicularly through the center.

In these drawings a lamp-top is represented, such as are in common use for burning kerosene or coal oil, consisting of the perforated cup A, provided with a screw, B, to connect it to the socket of the oil or lamp vessel.

C is the wick-tube, fastened in the bottom of the cup A and projecting a short distance below it, and extending up through and above the horizontal diaphragm-plate D a proper distance, and provided with a draft cup or tube, E, (shown in Fig. 2 of the drawings.) The diaphragm-plate D is fastened in the cup in the position shown in the drawings, to support the wick-tube C and form a chamber in the bottom of the cup for the ratchet-wheels F, which project into the wick-tube to raise and lower the wick by turning the disk G fastened to the shaft H, to which shaft the ratchet-wheels F are also fastened.

I is the blaze-cap, made in the form shown, and resting on a projection on the cup A. It is perforated at J for the blaze to pass through; and upon this cap the glass chimney rests, and is held in place by bending over one or more of the jagged projections of the cup, as shown at K, and by the spring L, fastened in the cup below the plate D.

All the parts above described are well known and in common use in lamps; and I will now describe my improvements, which consist in the tube N, made larger, or several times as large as the wick-tube C, but small enough to pass readily through the socket of the lamp,

which fits the screw B. This tube N is soldered or otherwise fastened to the bottom of the screw B, and may extend down nearly or quite to the bottom of the oil-vessel around the wick, and made open or perforated at its lower end to admit the oil to the wick. To adapt this tube to lamps of different depths I make it in two parts, as shown in the drawings, and arrange one part to slide within the other, as the part N' is arranged to slide on the part N, and may be moved either up or down to suit the depth of the oil-vessel.

It is apparent that most or all of the oil that supplies the wick must enter at the bottom of the tube N, and in order to filter the oil I place a piece of sponge or other suitable material to filter the oil in the bottom of the tube, as shown at P, Fig. 2, so that the oil in entering the tube is filtered by the sponge.

I have shown some small holes Q in the tube N near the screw B, but am not certain whether they will prove useful or not from the experiments tried.

R R are holes in the bottom of the tube to admit the oil.

The tube N prevents the swashing of the oil from materially affecting the burning of the lamp when it is moved or carried about.

The holes in the bottom of the tube may be made to graduate the supply of oil to the wick, if desired. Besides, filtering the oil as it is burned is a great advantage, and when the tube is made in two parts it is easily adapted to lamps of different depths.

By my improvements a better and clearer light is obtained, more free from smoke, and there is far less danger of the oil flowing up around the wick-tube.

These improvements are applicable to most lamps, whether large or small, and the tube may be soldered into the lamp or fastened by a screw separate from the screw that holds the wick-tube.

I claim—

Surrounding the lower part of the wick-tube and wick with an enlarged tube, made in two parts, one sliding within the other, to adapt it to lamps of different depths.

WM. LASSELL.

Witnesses:

JOHN S. HUNT,
J. DENNIS, Jr.