

(No Model.)

2 Sheets—Sheet 1.

C. M. LUNGREN.
LAMP BURNER.

No. 532,077.

Patented Jan. 8, 1895.

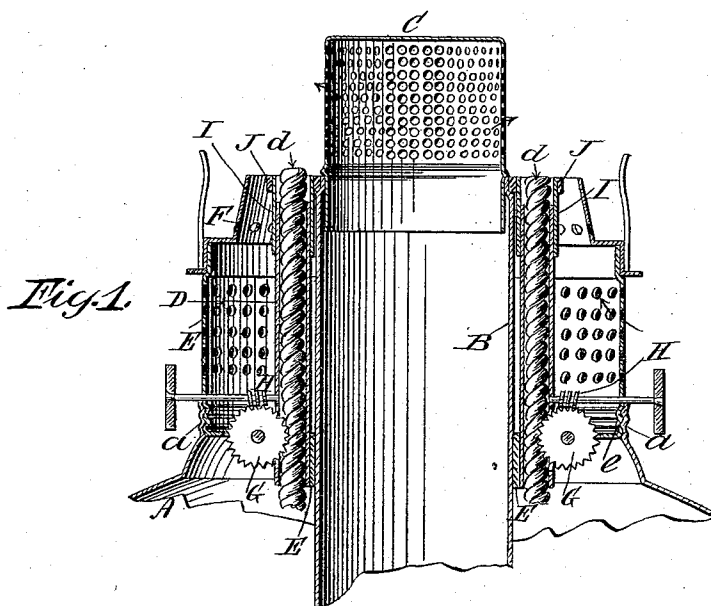
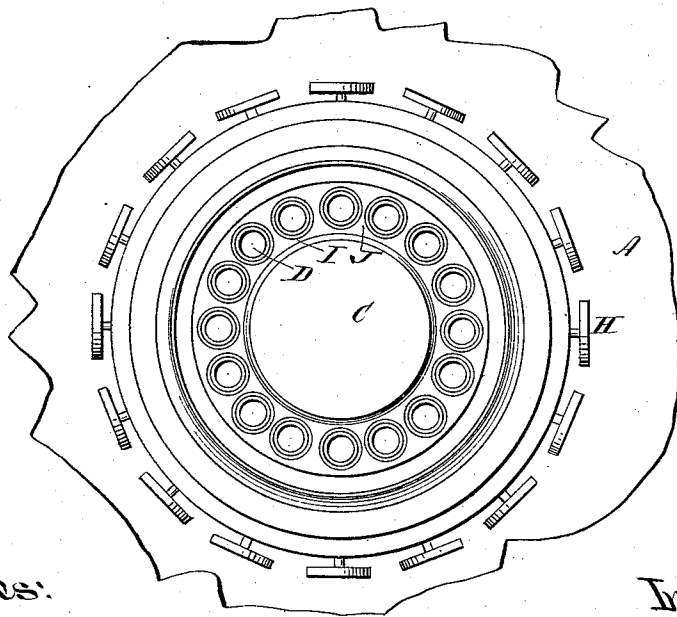


Fig. 2.



Witnesses:

D. W. Gardner.

Eugene V. Meyers.

Inventor:

Charles M. Lungren

(No Model.)

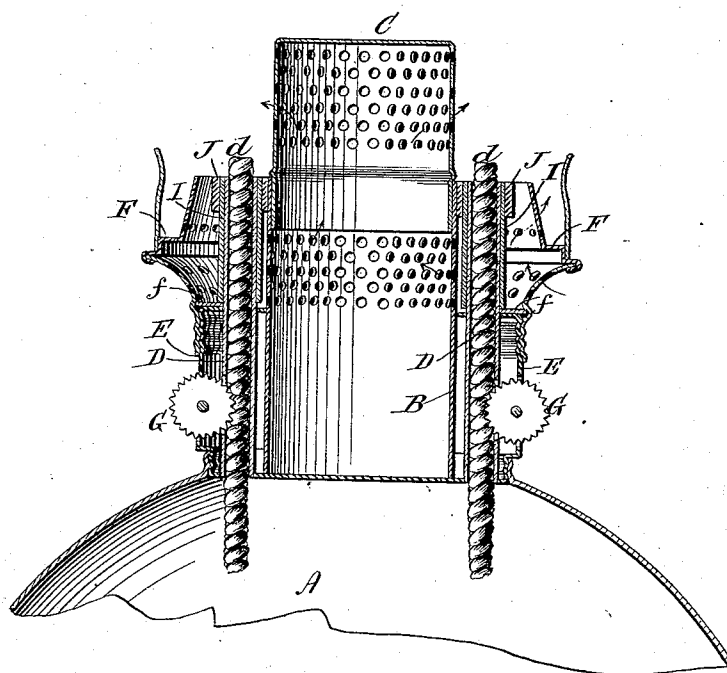
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Fig. 3.



Witnesses:

D. W. Gardner

Eugene H. Myers

Inventor:

Charles M. Lungren

UNITED STATES PATENT OFFICE.

CHARLES M. LUNGREN, OF BAYONNE, NEW JERSEY.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 532,077, dated January 8, 1895.

Application filed January 21, 1893. Renewed May 19, 1894. Serial No. 511,872. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. LUNGREN, a citizen of the United States, and a resident of Bayonne city, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Lamp-Burners, of which the following is a specification.

This invention relates to burners for oil lamps, of the kind in which a continuous flame burns from a number of separate wicks, instead of a continuous one, and has for its object the production of a burner of this form which will maintain a uniform flame. The difficulty heretofore experienced with burners of this type has been the unevenness of the flame, due to the varying feeding power of the wicks. It has been found in practice that no two wicks will feed quite alike, and hence the flame from a ring of such wicks, no matter how even it is at the start, rapidly becomes ragged.

My invention, by means of which I overcome this difficulty, consists, first, in making each wick independently adjustable, and, second, in making the flame adjustable as a whole, independently of the separate movements of the individual wicks. Under these circumstances, it makes no difference whether all the wicks feed alike or not, as by adjusting each wick above the end of the wick tube so that all the flames are of the same height, the uniformity of the flame will be maintained, provided each particular wick feeds at a uniform rate, whatever that rate may be.

In the drawings, I have shown in Figure 1, in vertical section, an application of the burner to a center draft lamp, and in Fig. 2, a plan of the same. Fig. 3, shows in vertical section, a burner separate from the lamp, and adapted to screw into the neck of an ordinary lamp fount.

Referring to the drawings, A, is the lamp fount, and B, the central air tube capped by the perforated air distributor C. The wick tubes D, D, are arranged in a circle around the air tube B, and are set in the base of the shell E, on the top of which is placed the chimney gallery F. Each wick is provided with a separate wick raiser, so that it can be moved independently of any other, as above stated. The mechanism for doing this may be of any suitable kind.

In the drawings I have shown the wicks *d*, operated by means of the ordinary toothed disk G, in common use, in flat-wick burners. These disks may be set so as to project through the casing of the burner and be turned directly by the hand, as shown in Fig. 3, or they may be turned by means of a worm H, as shown in Fig. 1.

The flame may be controlled as a whole, without disturbing the special adjustment of the individual wicks, in several ways. The method shown in the drawings consists in providing each wick tube with a sleeve I, arranged so that it can slide upon the tube, and thus expose a greater or less length of wick above its top. The relative movement of the wick tubes and sleeves may be obtained by a number of arrangements. In the construction shown in Fig. 1, the sleeves have no vertical movement, but the wick tubes are made to slide up and down within them, while in that shown in Fig. 3, the wick tubes are stationary and the sleeves slide upon and down upon them. In Fig. 1, the sleeves are set in a ring J, which is supported upon the step on the air tube B, as shown, and which is prevented from rising by the bead on the air cap C. This ring with its sleeves, while thus prevented from moving vertically, is free to move around the air tube. To cause the wick tubes, to move up and down within these sleeves, the air shell E, in the base of which these tubes are set, is provided with a thread *e*, fitting into the threaded neck *a*, of the lamp fount A, so that when it is turned it will rise or fall, and cause the wick tubes to slide up or down within the sleeves.

In the construction shown in the separate burner in Fig. 3, the shell E, is attached to the air tube B, which in this case is closed at the bottom, the air entering it through the perforations in the wall, as shown. The wick tubes are set in the base of this shell as in Fig. 1, but in this case they are of course stationary. The sleeves are mounted in the ring J, the same as in the previous figure and are given a vertical movement by the rotation of the gallery F, which supports the sleeves by means of the offset *f*, and which screws upon the shell E.

By means of these improvements this type of burner is rendered practical. The flame

is as completely under control as in burners with a continuous wick, while it can always be kept uniform by the adjustment of the individual wicks.

5 I claim—

1. In a lamp burner, the combination of a number of wick tubes arranged in sufficient proximity to produce a continuous flame, means for separately adjusting each wick, and means for adjusting the flame as a whole without disturbing the relative adjustment of the individual wicks, substantially as specified.

2. In a lamp burner, the combination of a number of wick tubes arranged in sufficient proximity to produce a continuous flame, means for separately adjusting each wick, and means for adjusting the flame as a whole consisting of sleeves adapted to slide upon the wick tubes and expose a greater or less amount of the wicks above their tops, substantially as specified.

3. In a center draft lamp burner, the combination of a ring of wick tubes arranged in sufficient proximity to produce a continuous flame, a central draft space adapted to deliver air to the interior of the flame, means for separately adjusting each wick, and means for

adjusting the flame as a whole, substantially as specified.

4. In a center draft burner, the combination of a ring of wick tubes arranged in sufficient proximity to produce a continuous flame, a central draft space adapted to deliver air to the interior of the flame, a central air director extending above the tops of the wick tubes, means for separately adjusting each wick, and means for adjusting the flame as a whole, substantially as specified.

5. In a center draft burner, the combination of a ring of wick tubes arranged in sufficient proximity to produce a continuous flame, a central draft space adapted to deliver air to the interior of the flame, a central air director extending above the tops of the wick tubes, an air casing surrounding the wick tubes, means for separately adjusting each wick, and means for adjusting the flame as a whole, substantially as specified.

Signed at New York, in the county of New York and State of New York, this 6th day of January, A. D. 1893.

CHARLES M. LUNGREN.

Witnesses:

FREDERIC CARRAGAN,
CHARLES C. PETERS.