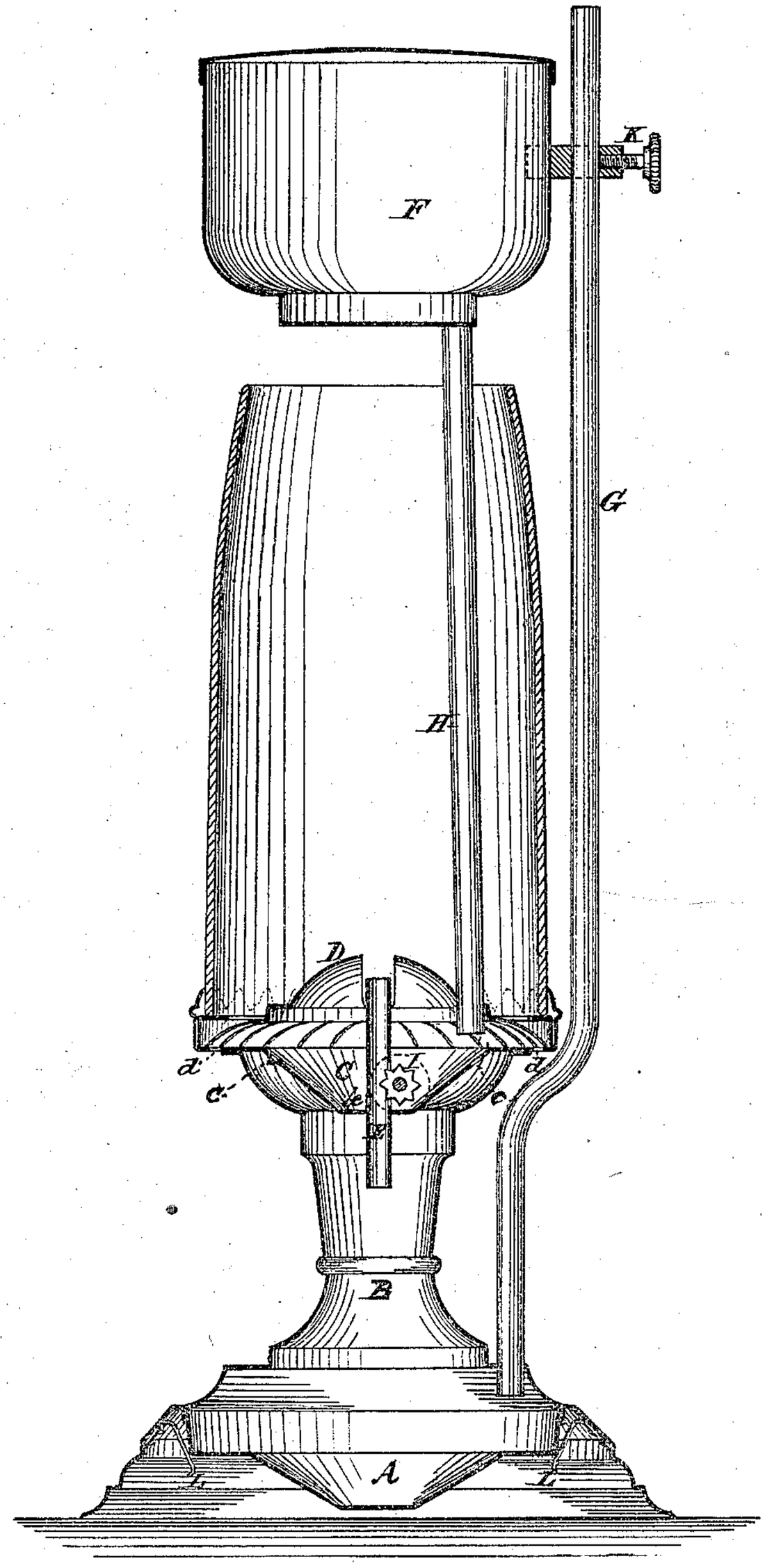
J. A. PEASE.

Lamps.

No. 138,185. Patented April 22, 1873.



Witnesses:

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JULIUS A. PEASE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **138,185,** dated April 22, 1873; application filed November 27, 1872.

To all whom it may concern:

Be it known that I, JULIUS A. PEASE, of Boston, State of Massachusetts, have made certain Improvements in Lamps, of which the following is a specification:

This invention relates to that class of lamps used in burning solid or semi-solid oils or fats, such as paraffine, adamantine, tallow, or any similar fatty substance that requires to be melted before use; and it consists in providing a cup adjustably suspended above the flame or chimney, and communicating by means of a feed-tube with a shallow basin surrounding the wick-tube, said basin having outlets or overflow openings, so that if the oil is fed down faster than it is consumed the surplus oil will run into a drip-cup or reservoir contained within the pedestal of the lamp, arranged to receive and retain the overflow or waste fats.

In the drawing referred to in this specification and making a part of the same, the figure represents a vertical section of a lamp embodying my invention.

B represents the base or pedestal of the lamp, having within it the drip-cup A, the drip-cup being held in place by springs L attached to the inner surface of the shell forming the base of the lamp. This drip-cup is represented as a pan having a central depression, but may be of any shape that will conform to the base of the lamp, and may be secured by a screw-thread, or in any other well-known manner. C is a shallow basin, similar in general outline to drip-cup A, and is placed at the point usually occupied by the lamp-bowl. Near the upper edge of basin C are overflow-openings *c*, to allow the escape of any melted matter that may accumulate more than is required to fill the basin and feed the light. *d d* are openings to supply air to the burner. The wick-tube E passes centrally through this basin, and is soldered tight, being perforated above the basin at points *e*, to allow the melted matter to saturate the wick. The wick-tube is slotted, as usual, and provided with a ratchet, I, to raise and lower the wick. D is a spreader, of any ordinary construction. F is a cup or reservoir for the fatty matter, provided with a suitable cover and secured at the proper distance above the lamp-flame by means of standard G and slide K. From reservoir F a feeding-tube, H, passes through the spreader into basin C for the delivery of the melted fats.

If the hole in this feeding-tube is properly gaged it will feed the oil only just so fast as the light will consume it.

The reservoir F having been filled with tallow, paraffine, or other suitable material, a little oil is poured into the basin around the wick-tube, saturating the wick, which is then lighted. The oil in the basin supplies the wick until the matter in reservoir F begins to melt and feed down through tube H. This is only necessary in starting the first time, as afterward there is always some material remaining in the wick-tube basin after the light is put out which will suffice for starting the light thereafter, provided the wick is wet with a little alcohol or turpentine.

It will be seen that in a lamp constructed as above described, the solid or semi-solid fats may be burned giving a light equal to the best kerosene, and without danger; and it is also evident that the light will rather increase than otherwise, as the lamp burns and becomes warmer, and the oil more limpid.

Having thus described my invention, I claim—

1. The combination of the wick-tube basin, the pedestal, and the drip-basin, substantially as and for the purpose specified.

2. The adjustable reservoir, provided with the feeding-tube, in combination with the wick-tube basin, and drip-basin within the pedestal, as and for the purpose set forth.

JULIUS A. PEASE.

Witnesses:
CHAS. A. PEASE,
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