

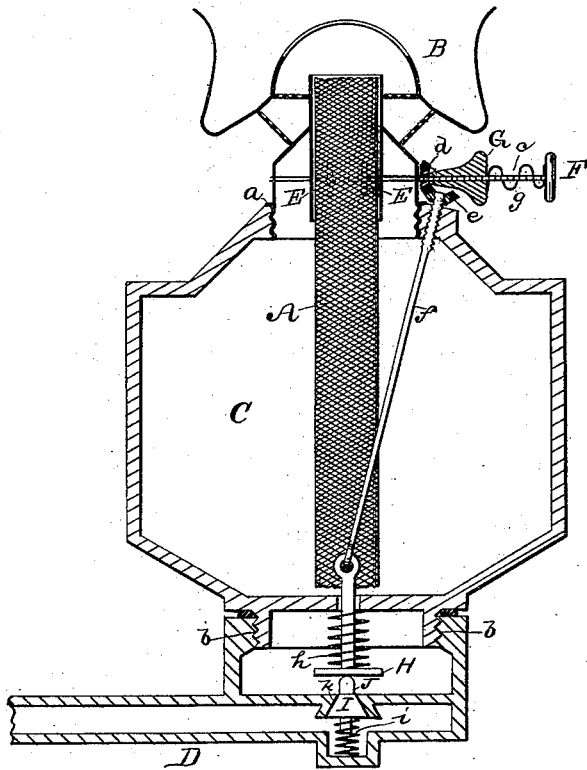
(No Model.)

W. H. DILLON.

OIL LAMP FEEDER.

No. 303,562.

Patented Aug. 12, 1884.



WITNESSES:

N. B. Brown
W. X. Stevens.

INVENTOR:

Wm. H. Gillon
BY Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM HENRY DILLON, OF GLASGOW, KENTUCKY.

OIL-LAMP FEEDER.

SPECIFICATION forming part of Letters Patent No. 303,562, dated August 12, 1884.

Application filed March 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY DILLON, a citizen of the United States, residing at Glasgow, in the county of Barren and State of Kentucky, have invented certain new and useful Improvements in Oil-Lamp Feeders, of which the following is a description.

This invention relates to that class of lamps using oil which are supplied therewith from a reservoir higher than the lamp.

It has for its object to use oil conducted like gas in pipes, to raise the lamp-wick and to open the valve which admits oil thereto at one and the same movement; also, to raise or lower the wick without operating the valve.

To this end my invention consists in the construction and combination of parts forming a lamp-feeder, hereinafter described and claimed, reference being had to the accompanying drawing, which is a vertical section, part in elevation, of a single oil-burner showing my invention.

A represents the wick, and B the burner, of usual form, adapted to screw at *a* into a body, C, corresponding to a lamp-body. This body C is provided at its lower end with a screw, *b*, like a burner-screw, by which it is attached to a supply-pipe, D. This pipe may communicate with a reservoir near by, or it may be a branch of a system of pipes extending through a city or through a manufactory, the only requirement being that oil shall be supplied to the wick A. For this purpose it is usual to connect the supply-pipe with a reservoir higher than the burner.

E represents the usual toothed-wheel wick-feeders, to be operated by a fixed knob, F. The shaft, *c*, on which the wheels E and knob F are fixed, is square, to engage another knob, G, which is provided with a square hole, to slide longitudinally on said shaft.

d is a gear-wheel attached to or a part of knob G, engaging another gear-wheel, *e*, which is internally screw-threaded, engaging a screw-rod, *f*, which is attached to the stem of a disk, H.

I is a valve actuated by a light spring, *i*, to close the hole *k*, through which oil passes from the pipe D into the body C, there being a passage through the bottom of the body C, around the stem of the disk H. The valve I is opened by means of a stem, J, which is acted upon by the disk H and the spring *h*, which is stronger than spring *i*.

The operation is as follows: By turning either knob F or G in the direction to raise the wick A, the gear-wheel *d* will operate the gear-wheel *e* to let down the screw *f* and disk H upon the stem J of valve I, thereby opening the valve and admitting oil to the wick, when the burner may be lighted. The spring *h* is strong enough to draw upon the rod *f* and hold the gear *e* in place on the outside of the body. By reversing the motion of the knobs F and G, the wick will be run down, extinguishing the light, and the disk H will be raised, allowing the spring *i* to close the valve I, thereby stopping the oil from running out through the burner, which it has a tendency to do from the pressure of the head of oil in the reservoir. When it is desirable to adjust the height of the wick without operating the valve, the gear-wheels *d* and *e* may be disengaged by drawing the knob G toward the knob F. Then the shaft *c* is free to revolve either way. The spring *g* acts between the knobs F and G, to push the latter, with the wheel *d*, into engagement with wheel *e*.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the supply-pipe D, having the hole *k*, the body C, and the burner B, attached to it, and the wick-raiser E F, of the valve I, and means, substantially as described, connecting the valve with the wick-raiser, whereby revolving the wick-raiser E F opens and closes the valve, for the purpose specified.

2. The combination, with the pipe D, the body C, the burner B, the wick-raiser E, having the square shaft *c*, and knob F, of the valve I, the spring *i*, operating it, the disk H, the spring *h*, the screw-rod *f*, the screw-threaded gear-wheel *e*, and the gear-wheel *d* on the shaft *c*, as and for the purpose specified.

3. The combination, with the spring-operated valve *i*, the spring-operated disk H, the screw-rod *f*, and the gear-wheel *e*, of the wick-raiser E, the knob F, and the square shaft *c* of the knob G, and gear-wheel *d*, provided with a square hole fitting said shaft, and the spring *g*, acting between knobs F and G, as shown and described.

WILLIAM HENRY DILLON.

Witnesses:

SAML. W. BRENTS,
J. A. SHOBY.