C. F. A. HINRICHS.

Lamp.

No. 198,300. Patented Dec. 18, 1877.

Fig. 1.

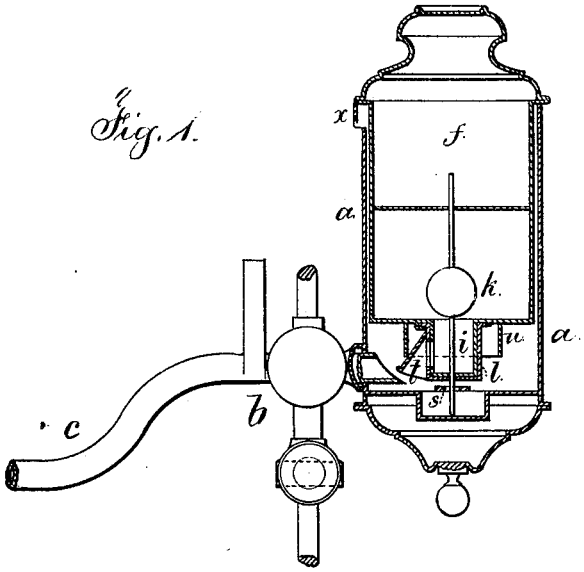


Fig. 4.

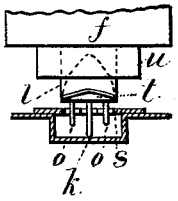


Fig. 2.

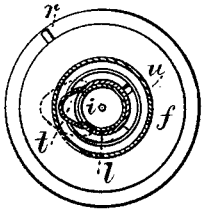
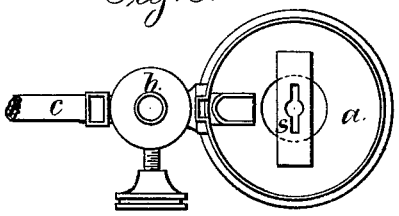


Fig. 3.



Witnesses

Chas. N. Smith

Harold Serrell

Inventor

Chas. F. A. Hinrichs.

per Lemuel W. Serrell

atty

UNITED STATES PATENT OFFICE.

CHARLES F. A. HINRICHS, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **198,300**, dated December 18, 1877; application filed June 25, 1877.

To all whom it may concern:

Be it known that I, CHARLES F. A. HINRICHS, of the city of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Lamps, of which the following is a specification:

In fountain-lamps a valve has been made use of to close the inlet-opening when the fountain is inverted, for insertion into its containing-cup, and in other instances a register-plate has been used to cut off the oil and prevent its escape until the fountain is properly secured within the cup; but in the latter case the oil will run out if the fountain is inverted before the register-plate is closed.

In my lamp I make use of a tubular cut-off, in combination with the valve, so that the fountain is closed by the valve when inverted, and the tubular cut-off serves to retain the contents of the fountain, if desired, when the lamp is not in use. I also make use of a pouring-lip, in connection with the tubular cut-off, so that the oil can be poured into the opening through the tubular cut-off without tipping the lamp sidewise. There is an overflow-vessel, to catch any surplus oil that may be spilled in filling the lamp, and means are made use of for operating the tubular cut-off by turning the fountain in its cup.

In the drawings, Figure 1 is a vertical section of the lamp-fountain and pipe passing to the burner. Fig. 2 is an inverted plan of the fountain, partially in section, and Fig. 3 shows the slotted key at the bottom of the cup.

The cup *a*, standard-slide *b*, and tube *c* to the burner are of any usual or desired character, and the oil-fountain *f* is of a size and shape adapted to the cup *a*. The tube *i* and valve *k* are of usual character, except that the tube *i* is closed at the outer end and surrounded by the tubular cut-off *l*, through which and the tube *i* there are holes that allow the oil to be poured into the fountain when the tubular cut-off has been turned to make the holes coincide.

This tubular cut-off serves to close the oil-inlet tightly when the lamp is to be inverted, and in cases where an effort is made to invert the lamp without turning the tubular cut-off the valve *k* closes by the action of the oil and prevents the same spilling.

In order to operate the cut-off after the fountain is in place I make use of the projections *o* (see Fig. 4) that pass into the slotted plate *s*, that is fastened into the cup *a*, and hence the cut-off is held while the fountain *f* and tube *i* are turned for the holes to correspond.

There is upon the upper part of the fountain a guide locking-pin, *r*, and upon the top portion of the cup an L-shaped slot, *x*. Those parts are positioned so that when the pin *r* passes into the vertical portion of the slot the pins *o* will enter the slotted plate *s*, and when the pin *r* is turned along the horizontal slot to the end the cut-off will be opened. This pin *r* may rest upon the top edge of the cup and allow the valve and cut-off to remain closed when the lamp is not in use, and the cut-off will remain closed after the fountain is inserted into the cup, if said fountain is not partially rotated.

In order to facilitate the pouring of oil into the fountain I make use of the pouring-lip *t*, that is fastened to the side of the cut-off tube below the opening, and extending up above and around such opening, so that when the fountain is in the position for receiving the oil the pouring-lip will conduct it properly to the cut-off opening.

This pouring-lip is also convenient for returning to the oil-can any surplus oil that may remain within such pouring-lip.

I also make use of the overflow-vessel *u* that surrounds the parts through which oil is introduced to the fountain, in order that any surplus oil may be caught and returned to the can instead of running over the outside of the fountain.

There may be a stop for the tubular cut-off to limit its rotary movement in both directions.

I do not claim a valve provided with a key adapted to be turned by a stationary wrench, in combination with a fountain locking device.

I claim as my invention—

1. The combination, with the inverted lamp-

fountain, of the cut-off and the self-closing valve, substantially as set forth.

2. The combination, with the tubular cut-off on the lamp-fountain, of the pouring-spout *t*, substantially as set forth.

3. In combination with the inverted fountain and self-closing valve, the tubular cut-off, turning projections *o*, and locking device *r*, substantially as specified.

4. The combination, with the inverted fountain, of the overflow-vessel *u*, around the opening into the fountain, for the purposes and substantially as set forth.

Signed by me this 16th day of June, A. D. 1877.

C. F. A. HINRICHS.

Witnesses:
GEO. T. PINCKNEY,
HAROLD SERRELL.