W. STAEHLEN & W. STAEHLEN, Jr.

LAMPS.

No. 184,923. Patented Nov. 28, 1876.

Fig. 2.

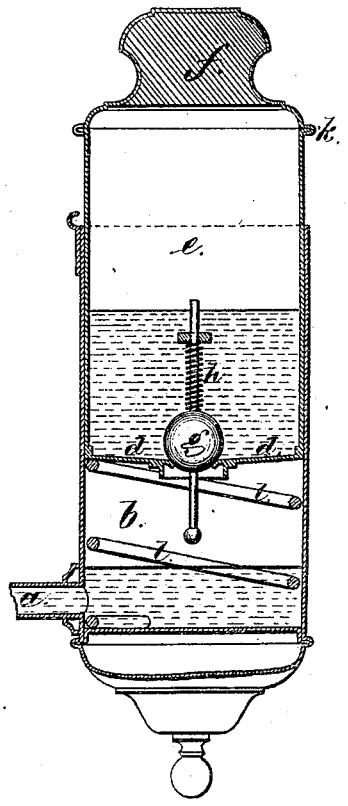
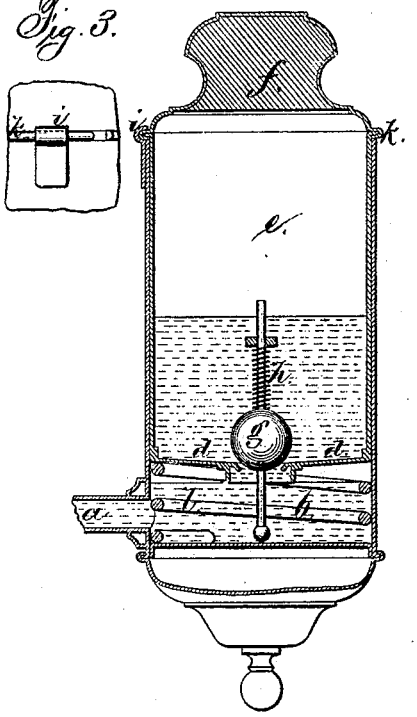


Fig. 1.

Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM STAEHLEN AND WILLIAM STAEHLEN, JR., OF BROOKLYN, E. D., NEW YORK, ASSIGNORS TO CHARLES F. A. HINRICHS, OF SAME PLACE.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **184,923**, dated November 28, 1876; application filed March 9, 1876.

To all whom it may concern:

Be it known that we, WILLIAM STAEHLEN and WILLIAM STAEHLEN, Jr., of Brooklyn, E. D., in the county of Kings and State of New York, have invented an Improvement in Lamps, of which the following is a specification:

Lamps have been made with a fountain that is removable from a cylindrical cup, and the fountain is provided with a valve at the orifice, so that the same may be closed when the fountain has been filled, and is inverted to be returned to place. It, however, sometimes happens that these lamps are upset, and the fountain is thrown out and the contents spilled.

Our invention is for closing the fountain automatically, so that the contents will be retained tightly, except when the fountain is within its cylindrical cup, for turning the fountain upside down if the lamp is upset, thereby bringing the orifice of the fountain upwardly, and insuring the further separation of the fountain from the lamp, so as to avoid risk of the oil igniting; and, lastly, our improvement is for closing the oil-orifice entirely while the reservoir is in the cylindrical cup, so as to shut off the escape of oil from such reservoir while the lamp is not in use, and thus prevent leakage from capillary attraction or otherwise.

In the drawing, Figure 1 is a section of the reservoir in position for use. Fig. 2 is a similar view as out of use, but still in the cylindrical cup.

The lamp is of the class usually known as the "German Student Lamp," and the tube *a* leads from the bottom of the reservoir-cup *b* to the burner-tube, as usual.

The inside of the reservoir-cup *b* may be an inverted cone corresponding, or nearly so, to the conical end *d* of the reservoir *e*, so that when placed together there will be but little space outside the reservoir for containing oil.

This reservoir is made with a weighted head, *f*, and with a valve, *g*, that is closed by a spring, *h*. This weight *f* is enough to open the valve when the stem thereof rests at the bottom of the cup *b*, even against the spring *h*, and said weight brings down the head of the reservoir upon the floor, and elevates the orifice for the valve *g*, to lessen the risk of the oil scattering upon the floor, if the reservoir falls out when the lamp is upset, and the weight of the head serves to carry the reservoir a distance from the lamp when thrown out; however, the spring *h* instantly closes valve *g* under the circumstances before named. A spring, *l*, is introduced between the reservoir and its cylindrical cup, sufficient to bear the weight of the reservoir when filled. Hence the reservoir may be introduced in its cup and remain closed by its valve until required for use, thereby preventing the possibility of the waste of oil; and when brought into use, the reservoir has simply to be pressed down against the spring, and its flange *k* turned beneath a hooked lock, *i*. (Shown by the detached view, Fig. 3.)

We claim as our invention—

1. The combination, with an inverted lamp-fountain, of a valve, and spring to close the same, substantially as and for the purposes set forth.

2. The lamp-reservoir with a spring-valve at the lower end, and a weight at the upper end, for the purposes set forth.

3. The spring *l* within the reservoir-cup *b*, combined with the reservoir *e*, valve *g*, and lock *i*, substantially as set forth.

Signed by us this 3d day of April, A. D. 1875.

W. STAEHLEN.
W. STAEHLEN, JR.

Witnesses:
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