C. F. A. HINRICHS.

LAMP.

No. 182,825. Patented Oct. 3, 1876.

Fig. 1.

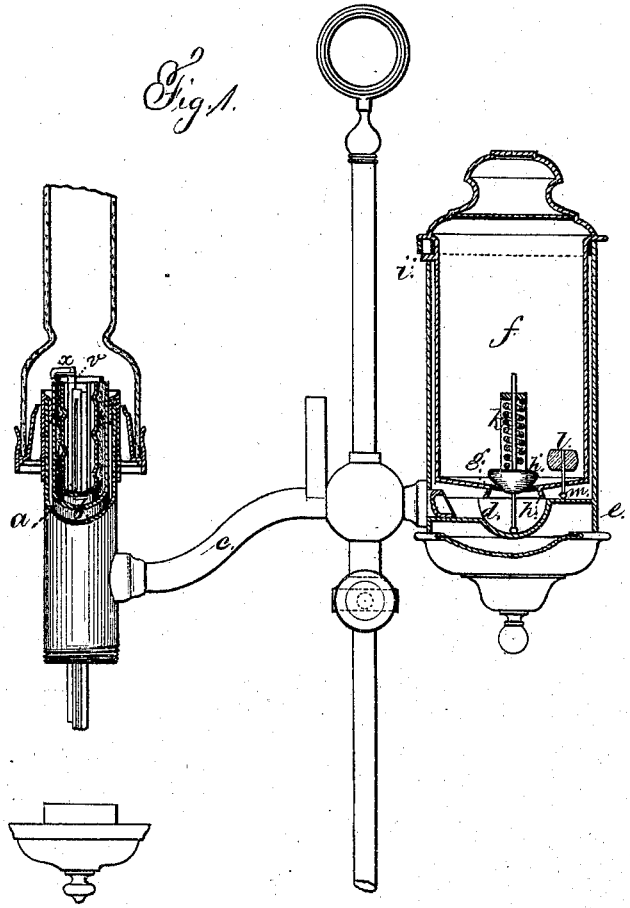


Fig. 2.

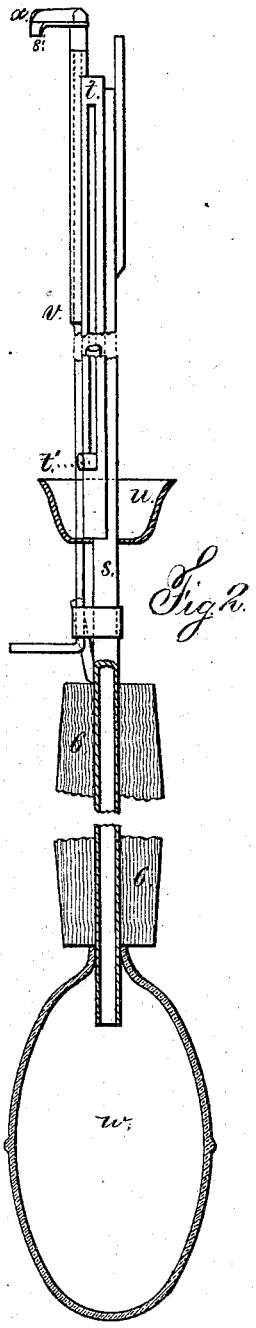
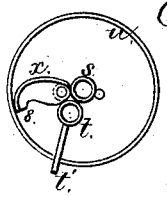


Fig. 3.



Witnesses

Chas. H. Smith

Harold Serrell

Inventor

Chas. F. A. Hinrichs.

per L. N. Serrell atty

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **182,825**, dated October 3, 1876; application filed January 4, 1876.

To all whom it may concern:

Be it known that I, CHARLES F. A. HINRICHS, 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 reissued Letters Patent No. 5,703 a fountain-lamp is shown, with a reservoir that contains a filling-opening and valve, and in some instances a spring has been applied to the valve to close the same.

My invention is made for increasing the size of the reservoir without increasing the size of the fountain or case holding the reservoir; also, for facilitating the filling without the risk of overflow; and the said reservoir is especially adapted to hanging lamps, chandeliers, and bracket-lamps where the attendant has to reach up to insert the reservoir into the case of the fountain.

In the drawing, Figure 1 is a vertical section of my lamp, with the reservoir complete and the trimmer in place. Fig. 2 is a sectional elevation of the said trimmer, and Fig. 3 is a detached plan view of the scraping-blade.

The burner is made with the air-tube *a* and exterior tube *b*, as usual, and it contains the Argand wick and wick-raiser, and to the burner the supply-tube *c* is connected. The other end of the tube *c* enters the well *d* of the fountain-case *c*, and said well is made as small as convenient, in order that there may be but little oil in the lamp-fountain should it be upset.

The inverted reservoir *f* is made with an opening at *g* and a rim, *h*, around the same, and inside the fountain is the valve *h'*, that is closed up by a spring, *k*, but it has a stem that is sufficiently long to touch the bottom of the well, and open the valve when the reservoir is inserted into the case *e*. The bayonet-lock *i* serves to hold the fountain *f* into the case *e*, and prevent its falling out if the lamp is upset, but the spring *k* closes the valve and prevents the further escape of oil should the reservoir become disconnected.

In order to indicate when the reservoir is nearly full of oil, and so prevent overflowing the reservoir, I make use of the float *l*, upon a small stem, extending through the bottom of the reservoir. Of course, when the reservoir is inverted for filling the float *l* drops and the stern *m* is scarcely visible. As the oil is poured into the reservoir it rises sufficiently to lift this float and stem, and the outer end of the stem indicates when the oil is at the proper level. When the reservoir is turned back to its normal position the float draws the head of the stem tightly against the reservoir, so that there is not any leakage around the stem.

The trimmer represented in the drawings is somewhat similar to that shown in my Patent No. 157,330. There is also an elastic bulb, *w*, that can be squeezed to force air through the tube *s* to extinguish the lamp.

I do not claim an indicating float and stem in a reservoir; but by having a head upon the stem the float causes said head to act as a valve when the reservoir is inverted.

I claim as my invention—

1. The float D and indicating-stem *m*, provided with a head outside the reservoir, acting as a valve, in combination with the removable inverted lamp-reservoir, for the purposes set forth.

2. The lamp-fountain made with the cavity *d* below the valve *h'* of the reservoir, into which cavity the tube from the burner extends, in combination with the removable reservoir and spring-valve, substantially as set forth.

Signed by me this 29th day of December, A. D. 1875.

C. F. A. HINRICHS.

Witnesses:

GEO. T. PINCKNEY,

CHAS. H. SMITH.