W. DETTE.
Petroleum Lamp.

No. 198,085. Patented Dec. 11, 1877.

Fig. 1.

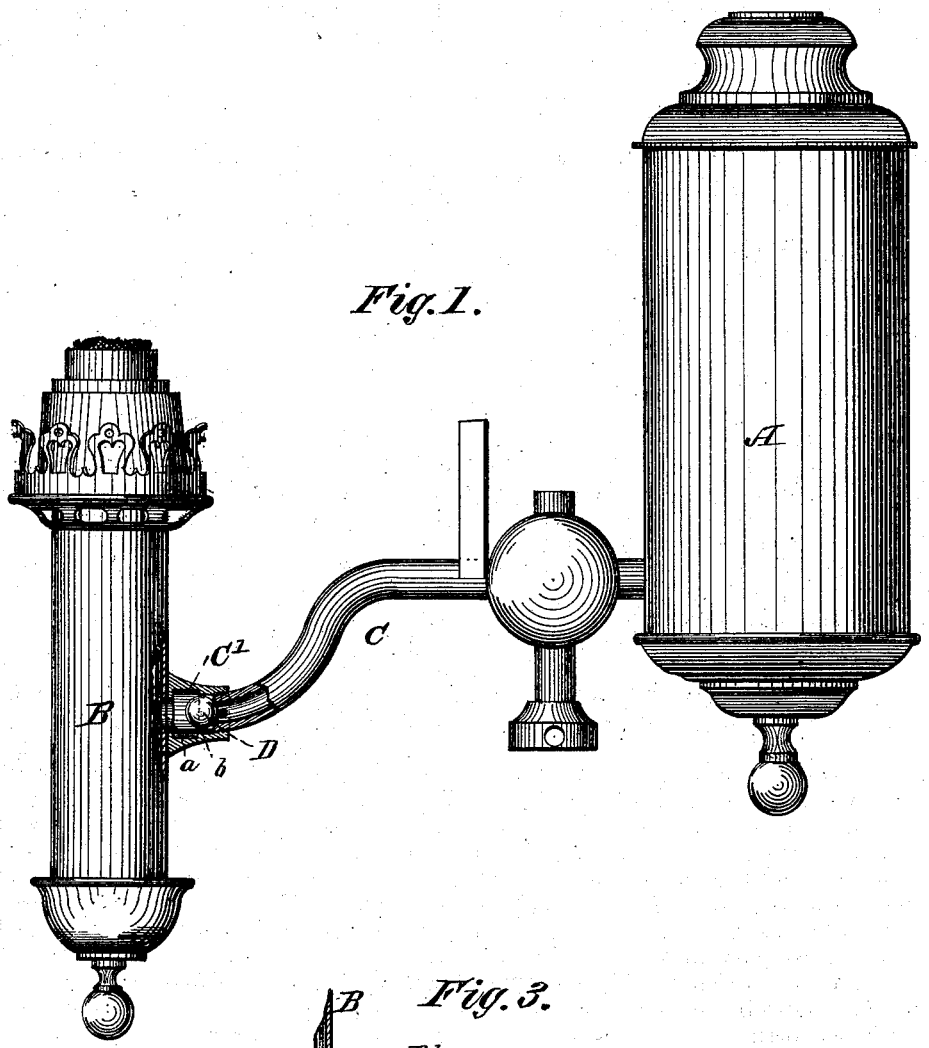


Fig. 3.

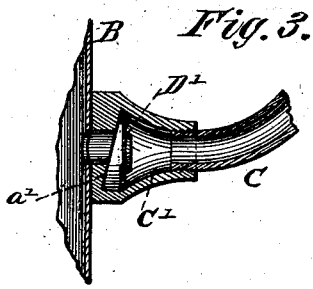
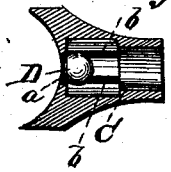


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILHELM DETTE, OF BERLIN, PRUSSIA, GERMANY, ASSIGNOR TO BENNETT B. SCHNEIDER, OF NEW YORK CITY.

IMPROVEMENT IN PETROLEUM-LAMPS.

Specification forming part of Letters Patent No. **198,085**, dated December 11, 1877; application filed October 26, 1877.

To all whom it may concern:

Be it known that I, WILHELM DETTE, of the city of Berlin, in the Kingdom of Prussia and German Empire, have invented certain new and useful Improvements in Petroleum-Lamps; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to that class of lamps or chandeliers in which the oil passes through a tube from a reservoir to a burner; and it consists in providing such tube at any point between the reservoir and the burner with an interior self-acting valve, arranged in such a manner that it will close to its seat if the lamp is tilted, and thus prevent a movement of oil from the reservoir which would cause an overflow of the wick-tube, as will be hereinafter more fully set forth.

In the annexed drawing, which fully illustrates my invention, and to which reference is made, Figure 1 is a side elevation of a study-lamp embodying my invention, a part of the oil-conducting tube being broken away to show the interior valve. Fig. 2 is a detailed view of the valve and valve-seat, and Fig. 3 shows a modification in the construction of the valve.

A represents the oil-reservoir; B, the burner, and C the intermediate connecting-tube, for conveying the oil from the reservoir to the burner.

At the point where the tube C unites with the burner B said tube is enlarged, forming a chamber, C′, with aperture or seat *a* leading into the burner-tube. In the bottom of this chamber are two parallel ribs, *b b*, forming a track, upon which a ball-valve, D, can move a short distance back and forth.

The track *b* is very slightly inclined away from the seat *a*, so that the valve D will not normally be against the seat, but the oil can flow freely into the burner.

In case the lamp is suddenly tipped or tilted out of the perpendicular, the rush of oil through the tube from the reservoir at once forces and holds the valve against the seat, preventing the oil from rushing into the burner and overflowing the wick-tube.

It is evident that this device may be located in any part of the hollow arm or tube connecting the reservoir and the wick-tube.

The valve may also be constructed in various other ways. For instance, I may use a valve hinged at the top, as shown at D′ in Fig. 3, and closing against a seat, *a′*, overhanging toward the front sufficiently to leave a passage when the lamp or chandelier stands, or is hung perpendicularly. This valve also will close by the rush of the fluid when the lamp is inclined.

This invention is applicable to all lamps or chandeliers in which the oil passes through a tube from a reservoir to a burner.

I am aware that valves have been used in lamps between the reservoir and burner, and I do not broadly claim such device; but

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a lamp or chandelier having a hollow arm or tube connecting a reservoir and a burner, a valve arranged at any point within such hollow arm or tube, operating independently of other devices by the fluid coming in contact with said valve, substantially in the manner and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILHELM DETTE.

Witnesses:

HERMANN KREISMANN,

EDWARD P. MACLEAN.