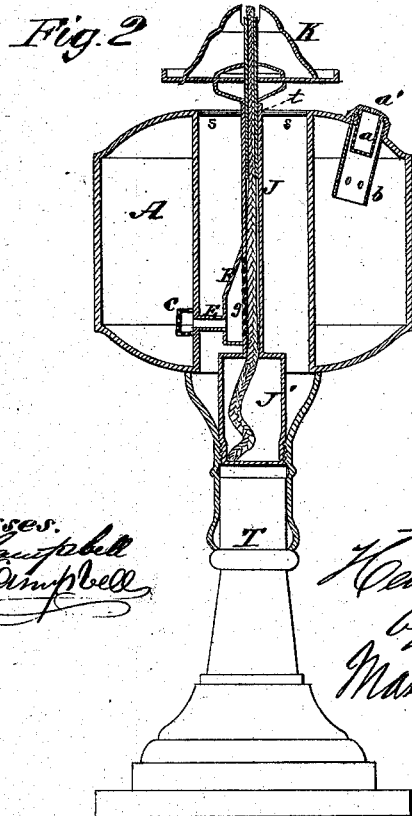
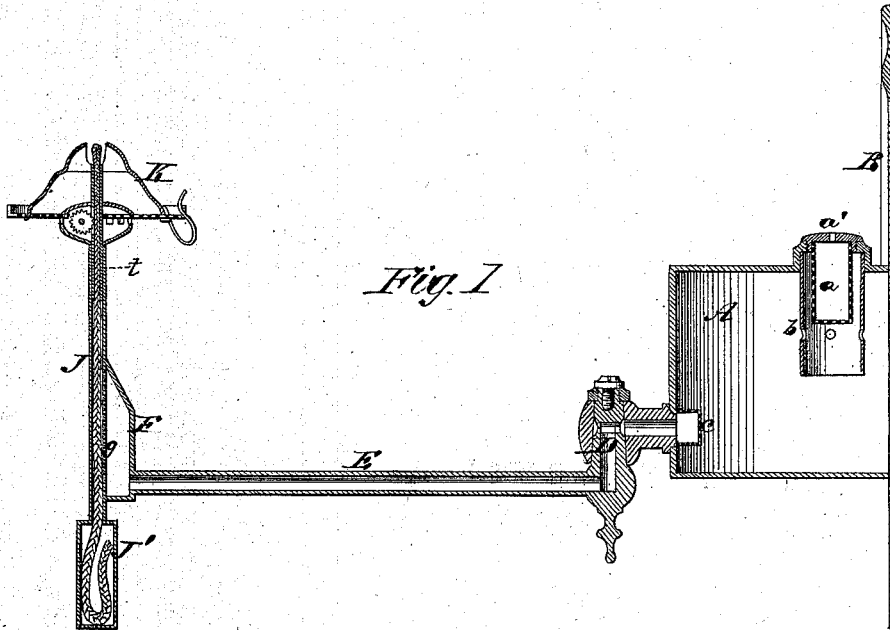


H. J. GOFF.

Lamp

No. 112,586.

Patented Mar. 14, 1871.



Witnesses.
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HENRY J. GOFF, OF DUBUQUE, IOWA.

Letters Patent No. 112,586, dated March 14, 1871.

IMPROVEMENT IN LAMPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HENRY J. GOFF, of Dubuque, in the county of Dubuque, and State of Iowa, have invented a new and improved Lamp; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a section taken centrally through my improved bracket or hanging lamp.

Figure 2 is a diametrical section through my improved stand lamp.

Similar letters of reference indicate corresponding parts in both figures.

This invention relates to that class of lamps which has the wick-tubes insulated from the oil-reservoir, but which are in communication therewith by means of small pipes or tubes.

The object of my invention is to improve these lamps.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawing I have represented my invention applied to a bracket-lamp and also to a stand lamp, but it is equally applicable to pendants, chandeliers, lanterns, and other forms of lamps adapted for burning light hydrocarbon oils.

The bracket-lamp, fig. 1, consists of a reservoir, A, applied to a stand-plate, B, and a pipe, E, extending out horizontally from said reservoir to and supporting a vertical wick-tube, J.

The pipe E forms a communication between the oil-reservoir and the wick-tube, and this pipe may be jointed, as at D, or it may be rigid.

The screw-cap *a* to the feed-hole of the reservoir A is perforated, to allow the entrance of air to the reservoir, and to the bottom of this screw-cap *a* a perforated basket, *a*, is secured, which will prevent the communication of flame with the interior of the reservoir through the air-inlet orifice.

Another gauze chamber, *c*, is applied inside of the oil-reservoir A over the opening which leads into the pipe E.

The outer end of the pipe E is connected to the wick-tube J by means of a box, F, the side *g* of which is finely perforated, or formed of wire gauze, for the purpose of preventing flame from communicating with the oil-reservoir through the pipe E.

The wick-tube is made slightly larger than the wick which it is designed to receive, and the lower end of this tube terminates in an enlargement, J', which forms a chamber beneath the wick-tube proper for receiving the surplus wick, as clearly shown.

The burner K, which may be of any of the well-known or improved forms has a short flat tube, *t*, secured to it, which fits into the upper end of the tube J, and this holds the burner in place.

It will be seen, by reference to fig. 1, that the enlarged extension J' of the wick-tube will afford a support or leg for the lamp when it is put upon a table to fill and clean it.

The lamp shown in fig. 2 consists of a cylindrical oil-reservoir, A, having a passage vertically through it, into which is arranged the wick-tube J.

The cross-rods *s s* and the short pipe E serve as means for connecting the reservoir and wick-tube together.

The lower end of the wick-tube J has a circular enlargement, J', on its lower end, which is externally screw-threaded, for securing the reservoir and its tube to a stand, T.

The tube E in this lamp is rigid. In all other respects this lamp of fig. 2 is constructed like the lamp of fig. 1.

It will be seen from the above description that I have improved the insulated wick-tube lamps by the application of finely perforated metal or gauze-wire at every point where flame would be liable to communicate with the oil reservoir, thus making this class of lamps perfectly safe.

I have also provided for the use of wicks which are longer than the wick-tubes by providing chambers below the wick-tubes for the receptacle of surplus wick.

I am aware that wire-gauze protectors have been applied in connection with the feed-opening, oil-outlet orifice, and other parts of lamps; and therefore I do not claim on this part of my lamp anything more than the special manner shown by me of applying such wire-gauze protector. Nor do I claim any lamp in which the exterior of the wick-tube is exposed to the fluid within the oil-reservoir; but

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

1. The flattened isolated wick-tube, one side of which is formed to a greater or lesser extent of wire-gauze, and said wire-gauze portion inclosed by an enlarged chamber, F, which connects with a small tube, E, leading from the oil-reservoir, all in the manner herein described and shown.

2. The flattened wick-tube J, with the enlarged surplus wick-holding tube portion J', constructed and arranged as described.

3. The flattened tube J, combining in its construction the enlarged chamber J', wire-gauze portion *g*, and enlarged chamber F, all as and for the purpose herein described.

4. The wire-gauze *a*, attached directly to the perforated cap *a*, in combination with the wire-gauze *c* in reservoirs A, and the wire-gauze *g* of wick-tube J inclosed in chamber F, as shown and described.

HENRY J. GOFF.

Witnesses:

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