

(Model.)

S. MAXIM.

OIL LAMP.

No. 275,682.

Patented Apr. 10, 1883.

fig 1.

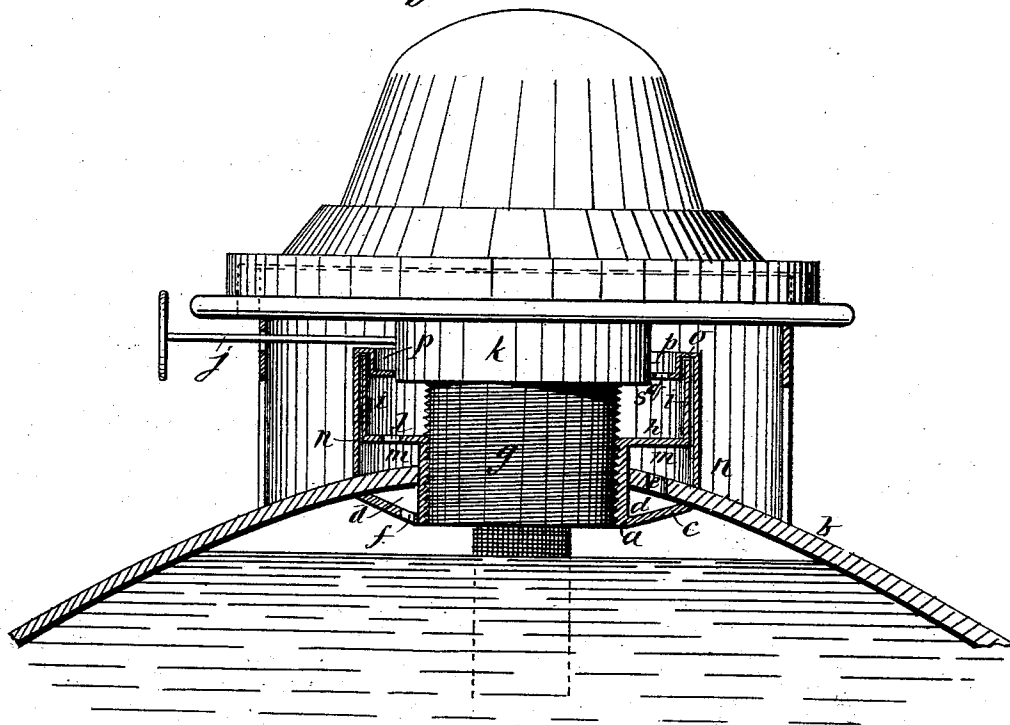
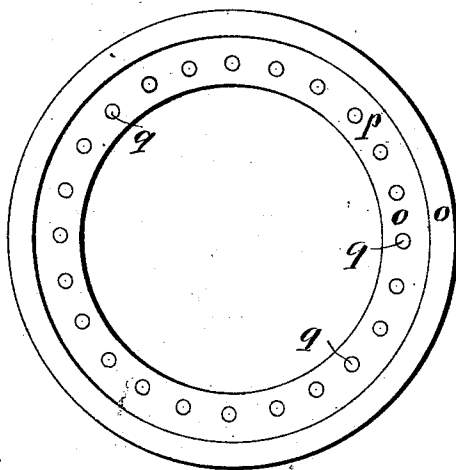


fig 2.



WITNESSES:

Chas. V. Howell
C. Sedgwick

INVENTOR:

S. Maxim

BY

Mum Ho

ATTORNEYS.

UNITED STATES PATENT OFFICE.

SAMUEL MAXIM, OF WAYNE, MAINE.

OIL-LAMP.

SPECIFICATION forming part of Letters Patent No. 275,682, dated April 10, 1883.

Application filed January 18, 1883. (Model.)

To all whom it may concern:

Be it known that I, SAMUEL MAXIM, of Wayne, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Oil-Lamps, of which the following is a full, clear, and exact description.

My invention consists of an attachment to oil-lamps, and particularly to the tubular lantern, to prevent the escape of the oil from the lamp, which in the case of the said lantern gets into the turret and the tubes on top, making bad smells and being dangerous, and another difficulty with such lanterns and other lamps is the flickering of the flame, due to the insufficient supply of air as the oil burns away, which my invention is calculated to prevent, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional elevation of a burner provided with my improved oil-catcher; and Fig. 2 is a plan or top view of the catcher.

I extend the tube *a*, into which the burner-tube *g* screws, a suitable distance into the oil-chamber below the shell *b* of the oil-chamber, and construct the lower end of said tube *a* with a flange or collar, *c*, the outer edge of which is attached to the inside of the shell *b*, making an annular chamber, *d*, into which I make a passage, *e*, through shell *b*, and out of which I make a passage, *f*, into the oil-chamber of the lamp, and I locate these passages on opposite sides of the burner-tube for making the course of the opening into the lamp the most indirect and best calculated to prevent the escape of oil in case the lamp should be overturned.

On the top of tube *a*, I make a flange, *h*, of suitable breadth, from the outer edge of which a vertical tubular extension, *i*, rises about as high as the wick-ratchet stem *j* will allow, said tube being considerably larger than the collar *k* of the lamp-burner. The flange *h* has a passage, *l*, into chamber *m* below, and tube *i* is surrounded by the outside catcher-tube, *n*, soldered or otherwise fitted oil-tight at its lower end to the shell *b*, and at the top having

a flange, *o*, turned inward and downward over the top of tube *i*, and inward again to a close-fitting joint with a lamp-collar, *k*, making an annular recess, *p*, into which any oil that escapes from the wick and around the ratchet-stem, or in any other way, will drop, and from which it will pass through numerous small holes, *q*, in flange *o* to the space *s*, from which it will drop through passage *l* into space *m*, thence passing into chamber *d*, and finally back into the oil-space, so as to prevent any overflow upon the exterior of the lamp, also to prevent the escape of the odorous vapor of the oil, which will not be generated because of the free circulation of air admitted to the lamp, which, by keeping the oil cool, will materially, if not wholly, prevent the escape of vapor. The air thus freely admitted will prevent the flickering of the lamp, which is sometimes caused for lack of oil, caused by lack of air, to allow it to ascend the wick-tube.

In the case of a glass oil-holder, the tube *n* and flange *c* must be attached to the collar that is commonly connected to the top of the oil-holder, said collar being made larger for the purpose, or the outside part of the attachment must be contrived for connection with the collar *k* and the flange *c* to the burner-tube *g*, which must be attached at its outer edge to said collar.

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

1. The combination, with an oil-lamp, of an oil-catching attachment consisting of the flange *c*, extending from the lower end of the tube *a*, and fastened to the inside of the shell of the oil-vessel, the flange *h*, extending horizontally from the upper edge of the tube *a*, tube *i*, projecting upward from the outer edge of the flange *h*, and tube *n*, having the stepped flange *o*, substantially as and for the purpose set forth.

2. In an oil-lamp, the tube *a*, extended into the oil-chamber, and the flange *c*, connected to the said inner extension of the tube, and to the inner surface of the oil-chamber *b*, forming chamber *d* within the oil chamber or vessel, the shell of the chamber *b* being provided with a passage, *e*, leading to the chamber *d*,

and the flange or bottom *c* of the latter having a passage, *f*, leading to the oil-chamber, said passages being arranged on opposite sides of the tube *a*, substantially as and for the purpose set forth.

3. The combination, in an oil-lamp, of the tube *n*, attached to the oil-holder *b*, and having flange *o*, with the tube *a*, having flange *h*, and vertical tubular extension *i*, said flange *o* forming with the collar *k* the annular recess *p*, and said flanges *o* and *h* having passages *q* and *l*, substantially as described.

4. The combination, in an oil-lamp, of the tube *n*, attached to the oil chamber or vessel *b*, and having at its upper end the stepped flange *o*, with the tube *a* of the oil chamber or vessel,

said tube *a* being extended into the oil vessel or chamber, and having at its upper end the horizontal flange *h*, flange *c*, connecting the lower end of the tube *a* to the oil-vessel, and tube *i*, extending from the outer edge of the flange *h* upwardly, said combination of parts constituting the recess *p* and chambers *s*, *m*, and *d*, said recess communicating with the chamber *s* by a passage, *q*, and the latter chamber with the chamber *m* by a passage, *l*, substantially as and for the purpose described.

SAMUEL MAXIM.

Witnesses:

STILLMAN L. HOWARD,

GEORGE B. SANBORN.