

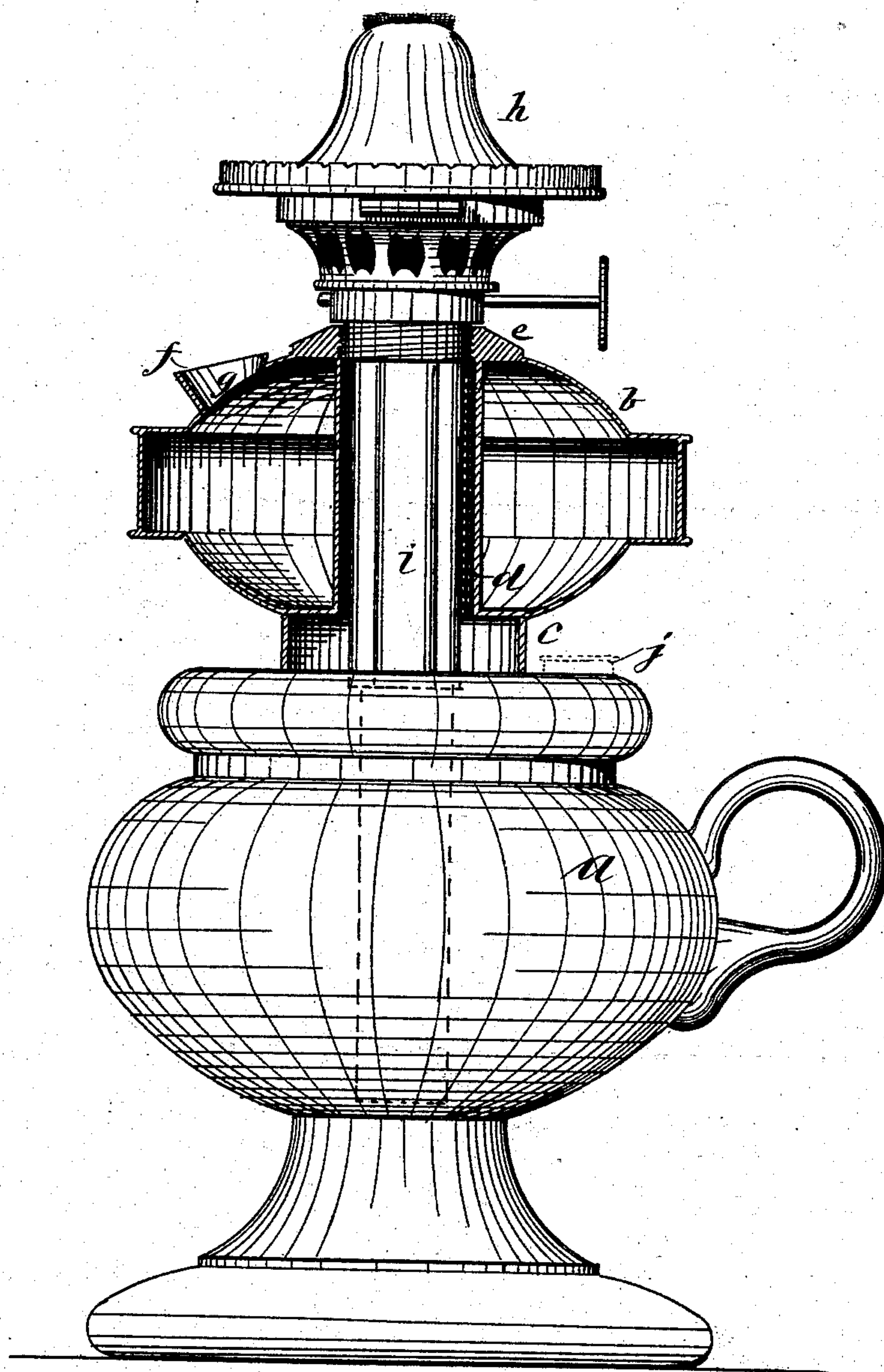
(Model.)

L. BAER, T. F. MINER & T. TAYLOR.

NON-EXPLOSIVE LAMP.

No. 284,353.

Patented Sept. 4, 1883.



WITNESSES:

Chas. C. Howell,
C. Sedgwick

INVENTOR:

T. Taylor
L. Baer
T. F. Miner
Mum & Co.

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

LEOPOLD BAER, THEODORE F. MINER, AND THEODORE TAYLOR, OF
LA GRANDE, OREGON.

NON-EXPLOSIVE LAMP.

SPECIFICATION forming part of Letters Patent No. 284,353, dated September 4, 1883.

Application filed January 23, 1883. (Model.)

To all whom it may concern:

Be it known that we, LEOPOLD BAER, THEODORE F. MINER, and THEODORE TAYLOR, all of La Grande, in the county of Union and State of Oregon, have invented a new and Improved Non-Explosive Lamp, of which the following is a full, clear, and exact description.

Our invention consists of an improved construction of lamps for burning kerosene and other illuminating-oils, with a receptacle for water or any compound or preparation for cooling the oil and preventing the formation of gas, or for extinguishing fire, interposed between the oil-receptacle and the burner, the object being to produce a non-explosive lamp of greater efficiency and lower cost than any now in use, all as hereinafter fully described.

Reference is to be had to the accompanying drawing, forming part of this specification, in which the figure is partly a side elevation and partly a sectional elevation of a lamp constructed according to our invention.

To the top of the oil-receptacle *a*, which may be of any form or kind, we propose to apply a receptacle, *b*, for water or any other substance useful for cooling the oil and extinguishing flame, connecting it by a collar, *c*, and providing it with a vertical central tube, *d*, which forms oil and gas tight joints with collar *c* on the top of *a*, and a collar, *e*, at the top of *b*, said receptacle *b*, collar *c*, tube *d*, and collar *e* being preferably blown or otherwise formed in glass, together with the oil-receptacle *a*, and said receptacle *b* having an orifice, *g*, for filling, and a collar, *f*, with cap or plug of any kind, for closing it, and the collar *e* at the top being suitably formed for attaching a burner, *h*, of any approved form, which will have a wick-tube, *i*, extending down through tube *d* into the oil-receptacle *a*. The receptacle *b* may be made of lighter weight and less strength than the oil-receptacle, in order that in case the lamp should fall or overturn the receptacle may break and its contents may extinguish the flame at the burner.

Instead of being blown with and permanently attached to *a*, the receptacle *b* may be made separately and be attached by any approved lamp-collar.

The tube *d* being surrounded by the water or other cooling substance in the receptacle *b* lowers the temperature of the air between the burner and the oil, and thus prevents the accumulation of explosive gas in the bulb *a*.

The bulb *a* can be used either with or without the filler-cap *j*, as it can be filled through the tube *d*. This improved non-explosive attachment can be applied to chandelier-lamps, head-lights, lanterns, and any other kind of lamps now in use for burning illuminating-oils.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In an oil-lamp, the combination, with its oil-vessel, of the water or cooling receptacle blown, together with a tube connecting it to the oil vessel or chamber, with the said oil-vessel, the said tube extending through the water or cooling receptacle to provide for the passage of the wick-tube through it, and the said water or cooling receptacle being arranged outside of the oil-vessel, as shown and described.

2. As a new article of manufacture, the oil-lamp having the water or cooling receptacle blown out of thin glass, together with the oil-chamber and a tube, said tube extending through the water-receptacle and connecting the water or cooling receptacle to the oil-chamber, and the said water-chamber being arranged outside of the latter, whereby in the event of the overturning or falling of the lamp the water-receptacle will break and cause the extinguishment of the flame, as set forth.

LEOPOLD BAER,

THEODORE FRELINGHUYSEN MINER.

THEODORE TAYLOR.

Witnesses:

M. S. BLACK,

J. L. CURTIS.