

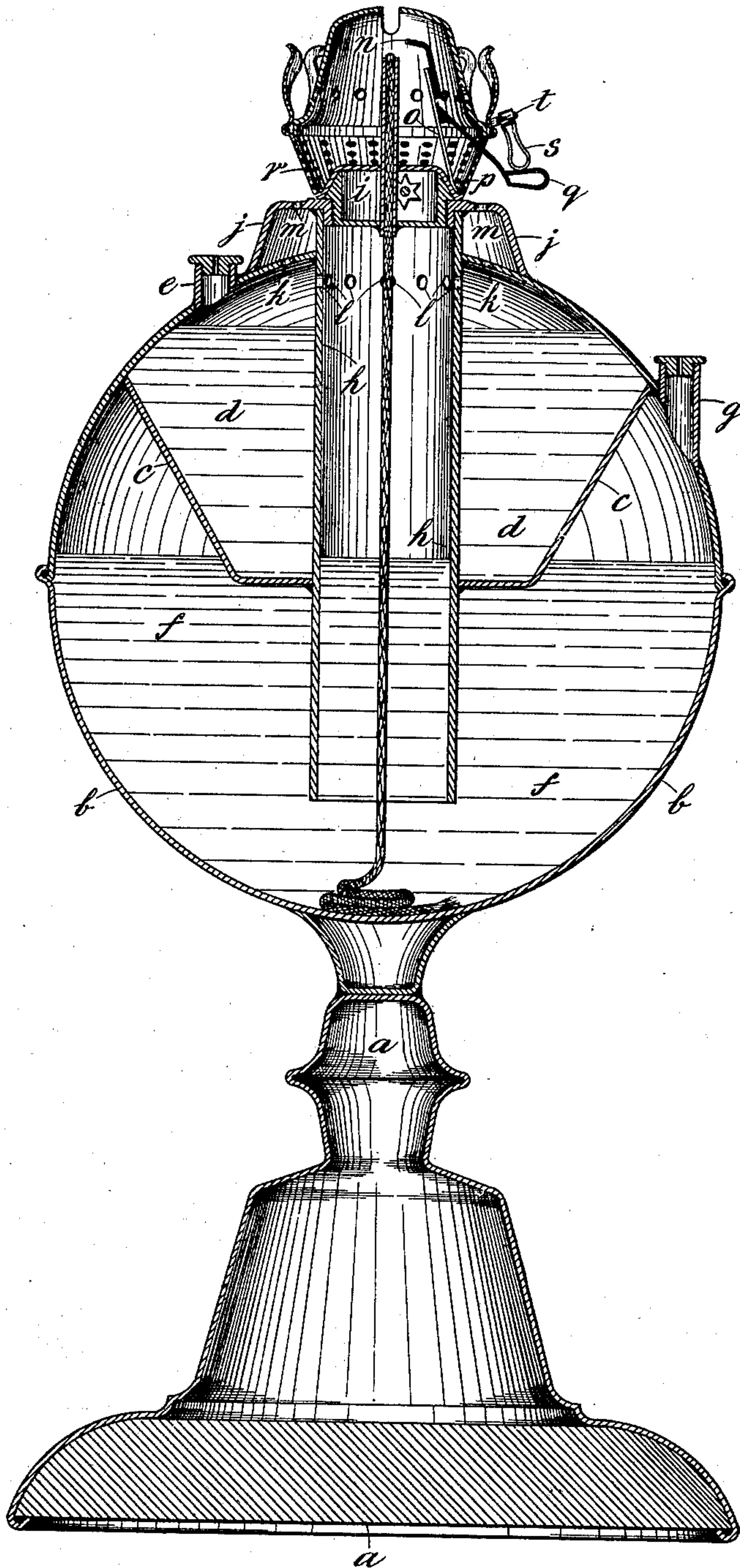
No. 757,040.

PATENTED APR. 12, 1904

A. E. HOLDAWAY.
SAFETY OIL LAMP.

APPLICATION FILED MAY 1, 1903.

NO MODEL.



Witnesses:-
H. M. Kuehne
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UNITED STATES PATENT OFFICE.

ARTHUR EDWARD HOLDAWAY, OF LONDON, ENGLAND.

SAFETY OIL-LAMP.

SPECIFICATION forming part of Letters Patent No. 757,040, dated April 12, 1904.

Application filed May 1, 1903. Serial No. 155,213. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR EDWARD HOLDAWAY, a subject of the King of Great Britain, and a resident of 235 Old Kent road, London, in the county of Middlesex, England, have invented new and useful Improvements in Safety Oil-Lamps, of which the following is a specification.

My invention relates to improvements in lamps burning mineral oils; and the objects of my improvements are, first, to provide means by which, in the event of the lamp accidentally being upset or falling, dangerous ignition of the oil is automatically prevented, and, second, to provide means by which, if the lamp is upset or falls, the flame of the wick is automatically extinguished. I attain these objects by the means illustrated in the accompanying drawing, in which the figure is a vertical section through an ordinary table-lamp burning mineral oil.

Similar letters refer to similar parts.

a is a lower heavy stand upon which the lamp is carried.

b is a tank or reservoir for the oil, which may be of any desired convenient form, but is shown spherical in the drawing. This reservoir or tank *b* is divided into separate sections, an upper one, *d*, and a lower one, *f*, by a partition *c*, the upper section *d* being filled with a quantity of water or other suitable non-inflammable fluid introduced through an opening at *e*, which is closed by a screw or other plug or stopper. The lower section *f* is filled with a sufficient quantity of the mineral oil to be burned, introduced through a similar opening *g*. A wick-tube *h* passes down from the top of the lamp through the water chamber or section *d* and nearly to the bottom of the oil section or chamber *f*. The upper end of this tube *h* extends for a short distance above the top of the upper section *d* of the tank, and into its upper open end is screwed the burner *i* of the lamp.

Round the projecting end of the wick-tube and upon the top of the water-tank *d* is fixed an inverted cup or collar *j*, inside the lower edge of which a number of holes *k* are made

through the top of the water-tank *d*, and at a short distance above a number of similar holes *l* are made through the wick-tube *h*. Finally a number of holes *m* are made through the upper side of the inverted cup or collar *j*.

By the method of construction described the upper part of the wick-tube *h* and the burner are kept cool, and if the lamp is accidentally upset or falls the water in the upper tank *d* passes through the holes *k* and those *l* into the tube *h* and prevents the oil in the lower tank *f* from running out or becoming ignited. At the same time some of the water will be thrown up through the burner and extinguish the flame.

As a further protection against danger from the upsetting or fall of the lamp I use an automatic extinguisher, consisting of a plate or cap *n*, carried by a spring *o*, which is fixed to the burner at *p*, which cap when released covers the top of the wick-tube and extinguishes the flame.

The cap *n* has fixed to it an arm *q*, the free end of which passes out through a hole in the side of the gallery *r* of the lamp.

A hinged weighted catch *s* is pivoted at *t*, and when the arm *q* is pushed down so as to remove the cap *n* from the top of the burner it is caught and held down by the catch *s*. If, however, the lamp falls or is upset, the shock shakes off the catch *s*, and the cap *n* instantly closes automatically and extinguishes the flame.

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

In combination a tank having an upper section *d* for water and a lower section *f* for oil, a wick-tube *h* arranged centrally of the tank and an inverted cup *j*, the said wick-tube, water-tank and inverted cup having perforations extending through their walls, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

ARTHUR EDWARD HOLDAWAY.

Witnesses:

ARTHUR E. EDWARDS,
ALFRED T. BRATTON.