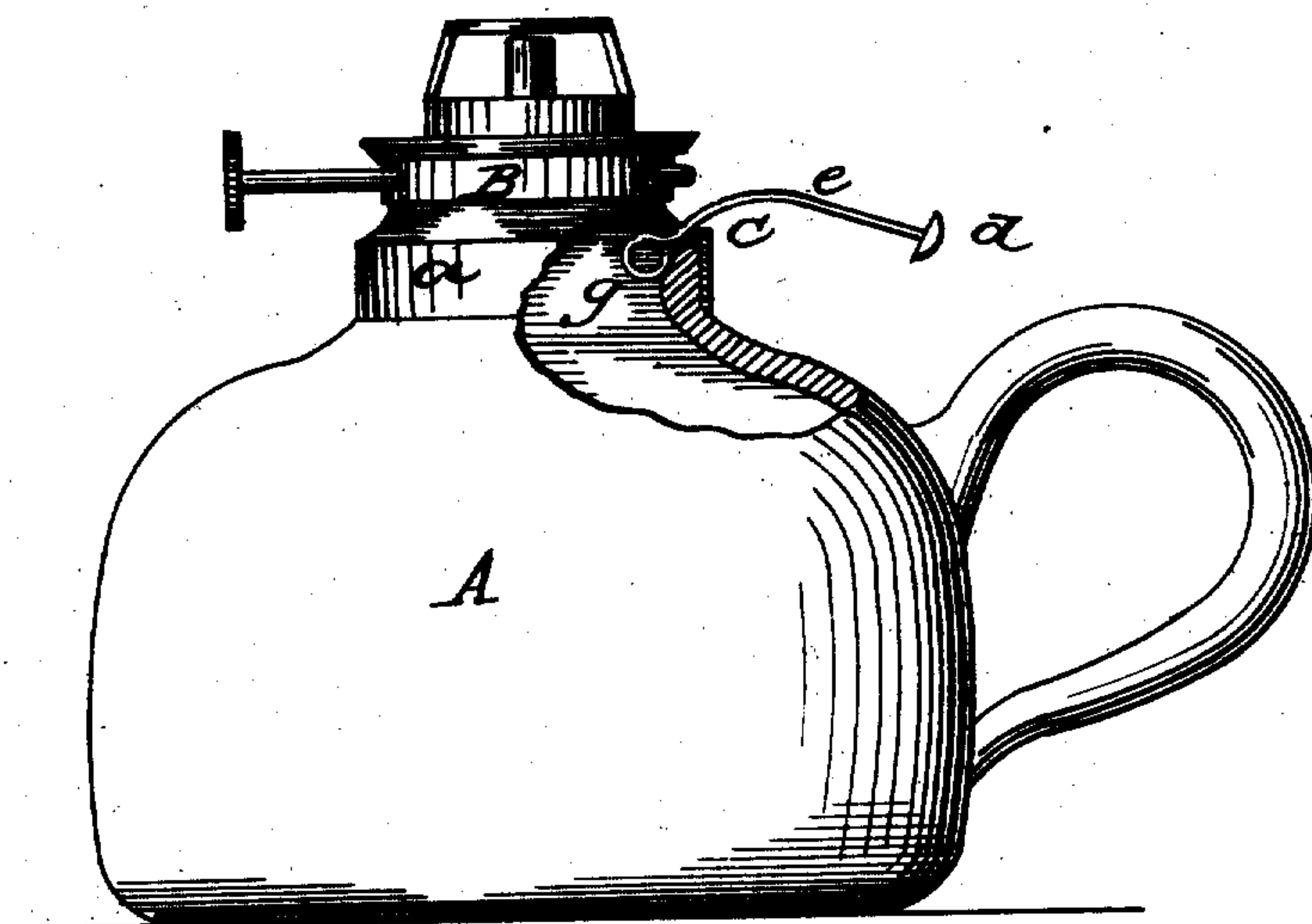


S. K. AYERS.

Lamp.

No. 74,972.

Patented March 3, 1868.



Witnesses.

W. C. Ashketter
J. A. Service

Inventor.

S. K. Ayers
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UNITED STATES PATENT OFFICE.

S. K. AYERS, OF DELTON, WISCONSIN.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. 74,972, dated March 3, 1868.

To all whom it may concern:

Be it known that I, S. K. AYERS, of Delton, in the county of Sauk and State of Wisconsin, have invented a new and useful Improvement in Lamps; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which the drawing represents a lamp having my improved air-vent.

This invention relates to a new and useful improvement in lamps for burning kerosene and other hydrocarbon oils which are explosive when the oil becomes heated and vaporizes; and my improvement consists in making a vent-hole in the base of the burner of a lamp, provided with an adjustable valve to close when the lamp is not in use, for the purpose of preventing evaporation of the oil.

In ordinary lamps the vent-holes which supply necessary air to the bowl of the lamp are made in the upper part of the burner, and it frequently happens that the hydrocarbon oils become heated to a degree which makes them throw off a vapor in volume sufficient to become inflammable, and thus cause an explosion by the direct contact of the vapor with the flame of the lamp.

In order to obviate this dangerous contingency attendant on the use of kerosene-oils, I introduce a vent or air hole in the base of the burner, through which a current of cool air is introduced into the bowl of the lamp to keep the oil at a low temperature, or which pre-

vents accident by allowing the vapor to escape, when it is generated by excessive heat, into the open air outside of the chimney of the lamp, where it does not reach or come in contact with the flame.

The lamp A has an ordinary metal burner, B, attached to it, and in the base *a* of the burner is made a hole, *c*, which communicates directly with the interior or bowl of the lamp containing the oil. The aperture or air-vent *c* is provided with a cover or valve, *d*, attached to a wire or rod, *e*, that enters the hole *c*, and keeps it in place by means of an enlargement, *g*, on the end.

It will be seen that, by means of this vent-hole *c*, when the valve *d* is removed the air required to supply the bowl of the lamp will enter the base outside of the chimney, and thus will introduce a current of cool air to prevent excessive evaporation of the kerosene-oil, while, if any vapor should escape, it cannot come in contact with the flame and produce an explosion.

The valve *d* is removed from the vent *c* when the lamp is burning, but is placed over the vent when it is not in use.

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

A vent-hole, *c*, in the base of a lamp-burner, combined with a valve, *d*, arranged and operating as and for the purpose described.

S. K. AYERS.

Witnesses:

P. FLICKNER,
L. HUNTINGTON.