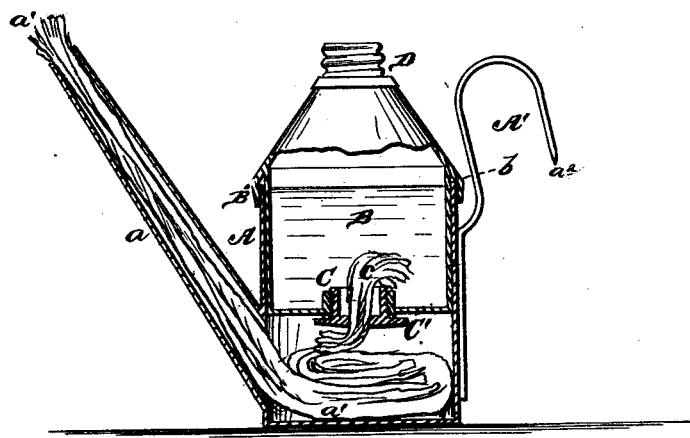


J. O. DAVIES, J. O. JONES & T. THOMAS.
Miners' Lamp.

No. 220,582.

Patented Oct. 14, 1879.



WITNESSES
Robert Court.
H. Clay Smith.

John O. Davies. INVENTORS.
John O. Jones.
Timothy Thomas.
By *Jellimore, Smith & Co.* ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN O. DAVIES, JOHN O. JONES, AND TIMOTHY THOMAS, OF PLYMOUTH, PENNSYLVANIA; SAID JONES ASSIGNOR TO SAID DAVIES; SAID THOMAS ASSIGNOR TO H. C. MAGEE, OF SAME PLACE.

IMPROVEMENT IN MINER'S LAMPS.

Specification forming part of Letters Patent No. **220,582**, dated October 14, 1879; application filed October 19, 1878.

To all whom it may concern:

Be it known that we, JOHN O. DAVIES, JOHN O. JONES, and TIMOTHY THOMAS, of Plymouth, in the county of Luzerne and State of Pennsylvania, have invented a new and valuable Improvement in Mining-Lamps; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

The drawing is a representation of a vertical central section of our mining-lamp.

Our invention relates to an illuminating-lamp for mining purposes; and the novelty consists in the construction and arrangement of parts, as will be more fully hereinafter set forth, and pointed out in the claims.

For mining purposes it is absolutely necessary that the lamp should be perfectly and completely safe from explosion, and that the body of oil in the reservoir should be thoroughly protected from ignition. To this end we provide two contracted orifices, each provided with a wick, or its equivalent, one allowing the oil to gravitate and the other to be attracted through the capillaceous substance.

In carrying out our invention we provide a cup with a projecting wick-tube to receive the wick, the body or unemployed portion of which rests in the bottom of the cup below the bottom of the oil-reservoir, which is provided with a wick-tube and wick. This reservoir is adapted to fit into the cup, leaving a proper distance between the bottoms of each, making a tight joint, and it has a screw-cap at the top.

The cup is provided with a handle of the form of a hook, having a sharpened point on the downward-projecting end, adapting it to be hung in any convenient place within the mine.

Referring to the drawing, A represents the cup, having the external wick-tube, *a*, carrying wick *a*¹, and a hook handle, A', with sharp point *a*².

B represents the reservoir, having a flange, B', between which and the body of the reservoir is a circumferential recess, *b*, which receives the upper edge of the cup and makes a tight joint.

Between the bottoms of the cup A and reservoir B is a space or chamber, in which the body of the wick *a*¹ is stored, and into which the illuminating-oil gravitates through tube C, having wick *c*. The tube C is a part of a metal disk, C', provided with screw-thread, by which it is secured to the bottom. A screw-cap, D, of ordinary construction, is placed at the top of the reservoir.

The oil gravitates from the reservoir through the tube C, and is attracted by the wick *a*¹.

Should the reservoir be displaced it serves as a lamp by reversing it, and the volume of oil is protected.

What we claim as new, and desire to secure by Letters Patent, is—

1. A miner's lamp consisting of an outer shell or cup, having a wick-tube and main wick combined with an oil-reservoir adapted to fit within said outer shell or cup, and having a perforated screw-cap in its bottom through which a supplemental feeding-wick passes, as and for the purposes set forth.

2. The reservoir B, having flange B' and recess *b*, and provided with disk C', carrying wick-tube C, constructed and adapted to serve with a separate illuminating-cup, A A' *a* *a*¹, as specified.

3. The combination of the reservoir B B' *b*, having disk C', with tube C, wick *c*, with the cup *a*, having wick-tube *a* *a*¹, and hook-handle A' *a*², as set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

JOHN O. DAVIES.
JOHN O. JONES.
TIMOTHY THOMAS.

Witnesses:

EDWARD I. EVANS,
JOHN S. DREW.