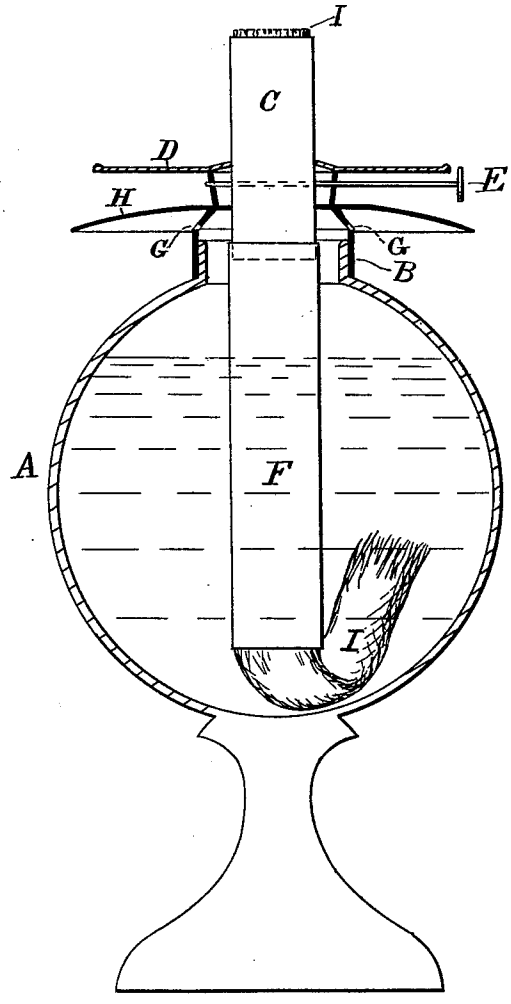
J. A. STEPHENS & J. LAMERAUX.

Lamp.

No. 206,904. Patented Aug. 13, 1878.



Witnesses:
John O'Domoghue.
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UNITED STATES PATENT OFFICE.

JOHN A. STEPHENS AND JULES LAMERAUX, OF KANOMIE, LOUISIANA.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **206,904**, dated August 13, 1878; application filed July 1, 1878.

To all whom it may concern:

Be it known that we, JOHN A. STEPHENS and JULES LAMERAUX, of Kanomie, in the parish of Rapides and State of Louisiana, have invented certain new and useful Improvements in Lamp-Burners; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters of reference marked thereon, which form a part of this specification.

The figure is a partial side elevation of a lamp-burner in place upon an ordinary lamp, the lamp, flange, chimney-plate, and cap being shown in section.

The object of this invention is to prevent the explosion of coal-oil lamps, in which the ordinary kerosene or coal-oil of commerce is used, by permitting the gas to escape as rapidly as it is formed in the oil-reservoir, in such a manner that it will be absolutely safe from ignition; and it consists in improvements in the construction of the burner, hereinafter fully described, and particularly pointed out in the claim.

In the accompanying drawing, similar letters of reference indicate corresponding parts.

The wick-tube C is extended by a similar tube, F, just large enough to slip over the lower end of the tube C, which extends below the plug. By the "plug" is meant the portion carrying the thread, and which is used to stop the hole in the lamp-cap.

The parts C and F of the tube are fastened together by soldering or otherwise to make the joint air-tight, and they may be made and soldered before insertion. The reason for making the part F the thickness of the metal larger than the part C is, that the wick I may be the more readily inserted.

The extension-tube F reaches nearly to the bottom of the bowl A, where it receives all its oil, as the whole tube and its connections with the plug are air-tight, so that neither air nor gas can reach the flame from the bowl A. As the oil is displaced by burning, its place must be supplied with air. In the ordinary lamp this takes place by suction down the wick-tube through the joints, and sometimes through a small hole made in the plug by the side of the wick-tube. This is a great cause of explosion, and to remedy the defect two holes, G G, are provided in the ordinary cap B, to supply air and to permit the gas to escape; and that there may be no possibility of the gas reaching the flame, a flange, H, is provided, which forms a part of the burner, surrounding it just above the thread on the plug, and is formed with it, and of the same metal.

In other respects the burner is of the ordinary construction, D being the plate upon which the lamp-chimney rests, and E is the ordinary ratchet for operating the wick.

The advantages claimed for these improvements are, that explosion is impossible, using ordinary oil; that a lamp may be agitated or even blown out by blowing down the chimney, as there is no way for the flame to reach the gas in or escaping from the bowl A, even were the gas as dangerous as that contained in lamps with the ordinary burners; but for greater safety the holes G G are made, and as the gas is lighter than the air, it is expelled from the bowl A, as fast as it is formed therein, through the holes G G, creating a current or double current, the air entering and the gas escaping.

The flange H prevents the gas from entering the chimney through the perforated chimney-plate D, and guides it away from the lamp.

This burner can be applied to any lamp now in use by punching the holes G G in the stationary cap on glass lamps.

We are aware that lamps have been constructed having air-holes in the cap, also having the wick-tube extending down to nearly the bottom of the oil-chamber. Therefore these we do not broadly claim.

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

The wick-tube F C, extending to nearly the bottom of the oil-chamber, and the cap B, provided with the air-vents G G, in combination with the flange H, the whole constructed and operating substantially as described.

In testimony that we claim the foregoing as our own we hereby affix our signatures in presence of two witnesses.

JOHN A. STEPHENS.
JULES LAMERAUX.

Witnesses:
GEORGE PERCHERONT,
REUBEN C. CLARK.