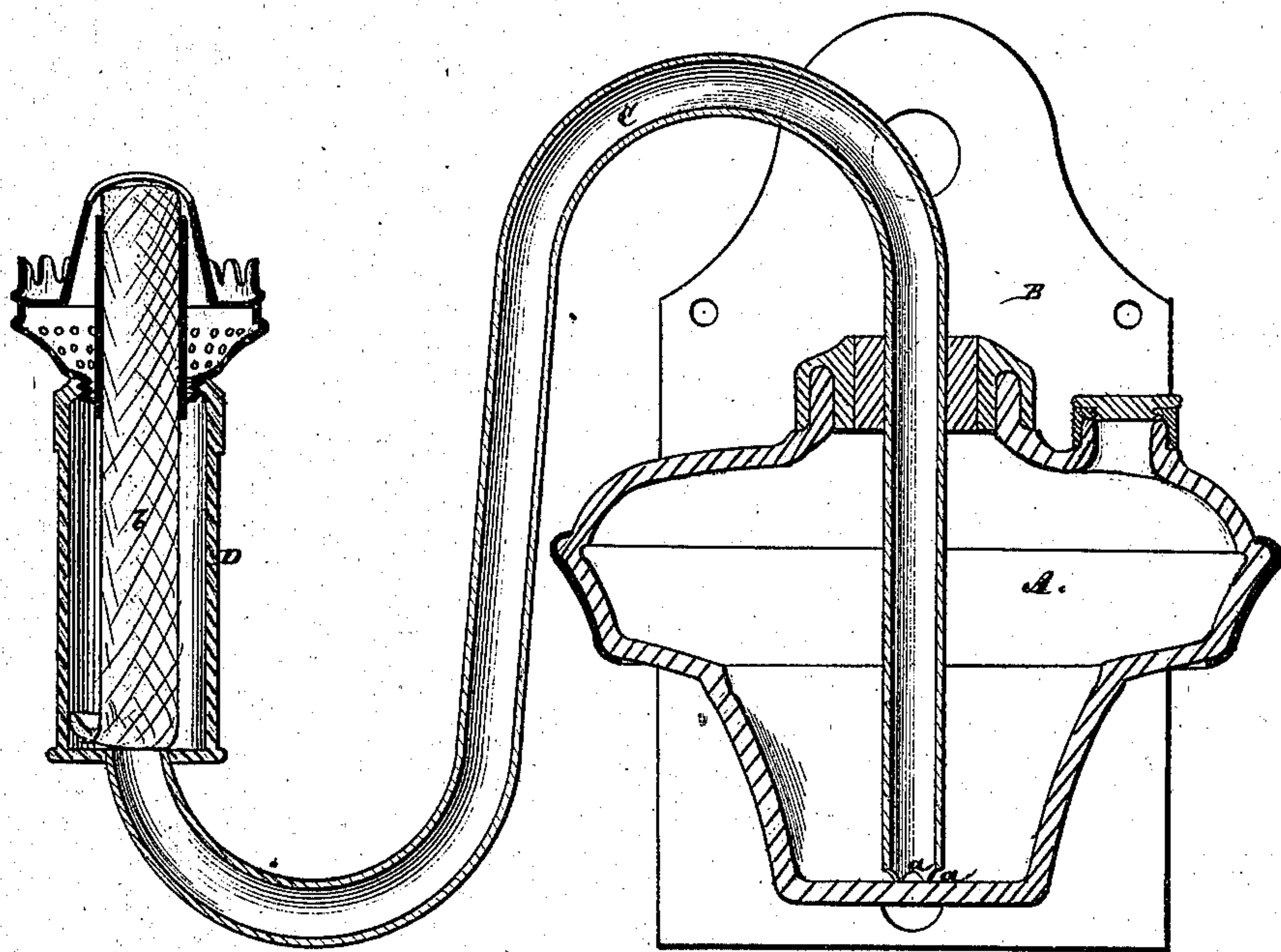


STERLING & WILSON.

Lamp.

No. 104,372.

Patented June 14, 1870.



Witnesses:

Fred. Haynes

R. E. Rabeau

L. Sterling.
J. W. Wilson
per Brown & Coombs
Attorneys

United States Patent Office.

LEONARD STERLING AND T. W. WILLSON, OF NEW YORK, N. Y.

Letters Patent No. 104,372, dated June 14, 1870.

IMPROVEMENT IN LAMPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, LEONARD STERLING and T. W. WILLSON, both of the city, county, and State of New York, have invented a new and useful Improvement in Lamps, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and which represents a sectional elevation of a lamp in bracket form constructed in accordance with our invention.

Our invention, while applicable to various kinds of lamps or illuminating contrivances, including table lamps, chandeliers employing any number of burners, and bracket lights of different kinds, will here be described as applied to a bracket designed to be used against a wall or other suitable support.

Although, like a certain kind of lamp, the flame is supplied with oil or fluid at one side of the reservoir by means of a siphon-shaped tube, it essentially differs therefrom in the extension of the one leg of said tube through the fluid in the reservoir, and to or near the bottom of the latter, and in a suitable arrangement of an independent wick-holder or chamber, whereby the oil or fluid is supplied to the latter exclusively by siphonic action, and not by capillary attraction, as where the tube only connects with the top of the reservoir, and is not projected through the fluid therein, and whereby the bent supply-pipe or tube is operative without the insertion of a wick therethrough, and other advantages are obtained.

Referring to the accompanying drawing—

A represents the oil or fluid-reservoir, carried by an upright back or frame-piece, B, to facilitate its being hung against the wall or other support.

C is a siphon-tube, the one leg of which is arranged to project through the cap or top of the reservoir, and down, through the oil or fluid, to or near the bottom of the reservoir, where, on its being suitably perforated or formed at its lower end, as at *a a*, to establish communication with the fluid, it may rest, to form a support for the siphon in turning it, should it be desirable to make the bracket a swinging one.

The other or outer end or leg of the siphon C is connected with a wick-holder or chamber, D, of suitable depth and size to hold a flat or other-shaped wick, *b*, and copious supply of oil or fluid thereto.

This chamber D carries a suitable burner, and is arranged so that its base extends to within a short distance of the bottom of the reservoir A.

By this construction and arrangement of the parts there is no troublesome insertion of the wick within

or through the siphon-tube, but it is or may be restricted exclusively to the independent holder D, that also forms an enlarged fluid-chamber, for the perfect saturation of the wick, while the tube C is clear to operate as a siphon, its projection beyond the top of the reservoir and through the fluid, down to or near the bottom of the reservoir, securing such action for it and insuring its retention of fluid at all times, as well as a perfect siphonic action, as contradistinguished from a capillary one, so long as the level of the fluid in the reservoir A is even with or above the bottom of the chamber D, which, being arranged as described, effects, purely on a siphonic principle of action, the supply of the whole or greater portion of the fluid in the reservoir to the outside wick *b*, that, as before observed, is altogether independent, so far as its situation or arrangement is concerned, alike of the reservoir A and siphon-tube C, and which may readily be inserted or removed, as in the case of an ordinary lamp, within or from its holder and secondary fluid-reservoir D, on taking off the top of the latter.

By means of the back or frame-piece B, the siphon-bracket or whole device, as thus constructed, may readily be hung against a wall, and its two reservoirs A and D retained in a vertical position.

In conclusion, it may be well to note, in connection with the operation of our improved lamp, whether in bracket-form or otherwise, that, when the wick *b* has absorbed all the oil or fluid in the chamber D, and the oil or fluid in the reservoir A has, by the action of the siphon C, reached a depth or level corresponding with the bottom of the chamber or wick-holder D, there will still remain in the siphon and reservoir a certain amount of fluid not accessible to the wick, since the bottom of the wick-holder D is always at a small distance above the bottom of the reservoir A. The further action of the siphon-tube is consequently undisturbed, and the refilling of it avoided when it is necessary to renew the supply of fluid to the reservoir A.

What is here claimed, and desired to be secured by Letters Patent, is—

The combination of the supplementary fluid-chamber D, containing the wick *b*, with the siphon C and reservoir A, all arranged for operation substantially as shown and described.

LEONARD STERLING.
T. W. WILLSON.

Witnesses:

FRED. HAYNES,
HENRY PALMER.