

Furlong and Lang,

Lamp Wick.

N^o 47,100.

Patented Apr. 4, 1865.

Fig: 1.

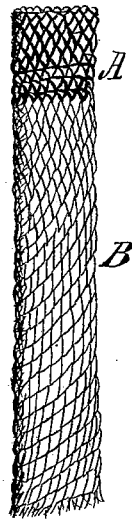


Fig: 2.



Witnesses:

L. Clifford Wade

Nancy J. Carter

Inventors:

C. P. Furlong

C. M. Lang

UNITED STATES PATENT OFFICE.

EDWARD P. FURLONG AND EDWARD M. LANG, OF WESTBROOK, MAINE.

IMPROVED MODE OF RENDERING WICKS INCOMBUSTIBLE.

Specification forming part of Letters Patent No. 47,100, dated April 4, 1865.

To all whom it may concern:

Be it known that we, EDWARD P. FURLONG and EDWARD M. LANG, of Westbrook, in the county of Cumberland and State of Maine, have invented a new and useful Method of Rendering Wicks Incombustible; and we do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents a flat wick with our invention applied to the end intended to be lighted; Fig. 2, another form of wick.

The object of our invention is to produce an incombustible wick for use in lamps which burn coal-oil or other liquids for heating or illuminating purposes, rendered thus incombustible by saturation or coating in certain mixtures, whose nature is hereinafter described, which protect and prevent the material of the wick from being consumed by the flame.

It consists of a wick of which such portion as may be desirable is dipped into a preparation of such a character as to penetrate and permeate the wick, coat its exterior, and, when afterward allowed to dry, to protect the material of the wick from being charred or burned by the heat of the flame which is fed by the liquid transmitted to it through the pores of the wick.

Application has already been made by us for Letters Patent of the United States for a method of shielding the wicks of lamps from burning by furnishing the wicks with a cap or covering which is separately constructed from the wick and only rests upon the end of it that protrudes from the lamp, and thus prevents the flame from coming at all in contact with the wick; but in the method herein referred to the wick itself is rendered incombustible by being saturated in a compound of ingredients that makes each one of its separate fibers indestructible by the flame, which is ignited immediately upon the wick.

It is a familiar fact that in all instances where a wick is used in lamps, &c., as the means of conducting to the flame the supply upon which it is fed, the wick itself is in process of use gradually consumed, so that the wick, as well as the burning liquid, becomes

an item of expense to the user of such a means of heat or illumination.

Our invention reduces the expense of the wicks and avoids the trouble of attention to clip and trim the same when in use.

It is also well known that incrustations form upon the top of the wick and reduce in quantity and brilliancy the flame and its capacity to emit light. By our invention this difficulty is wholly obviated, and much more light is produced by the same quantity of burning liquid than before. The process above described does not in any degree diminish the porosity of the wick, but leaves it as free to transmit the contents of the lamp to the flame as if unprotected by our invention.

To enable others skilled in the art to make and use our invention, we will describe its composition and application.

We employ a mixture of plumbago and alum, combined in such proportions as to impart the requisite degree of hardness when dry, the office of the alum for the most part being to set the other ingredient upon and within the wick. This mixture is made of the convenient consistency by the introduction of water. Into this we place the wick for a time sufficiently long to allow it to become thoroughly saturated. Thus prepared and suffered to dry, it is ready for use. The wick need only be of about half the ordinary length, since it does not grow shorter by use. It will also be found that the oil, &c., is more readily decomposed by the heat of the flame in our invention and burns with more freedom and clearness.

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

1. A wick, rendered incombustible, by saturation or coating, substantially as described.
2. Saturating or coating a wick to prevent its combustion, substantially as described.
3. Rendering a wick incombustible by saturation in plumbago or its equivalents, as described.

EDWARD P. FURLONG.
EDWARD M. LANG.

Witnesses:

WILLIAM H. CLIFFORD,
S. O. STRAUT.