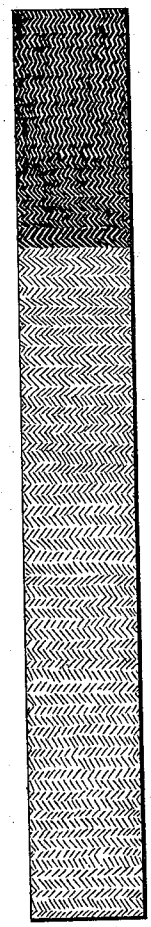
(No Model.)

# H. PIEPER, FILS.

## LAMP WICK.

No. 504,501. Patented Sept. 5, 1893.



Witnesses:
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# UNITED STATES PATENT OFFICE.

HENRI PIEPER, JR., OF LIEGE, BELGIUM.

## LAMP-WICK.

SPECIFICATION forming part of Letters Patent No. 504,501, dated September 5, 1893.

Application filed October 17, 1888. Serial No. 288,372. (No specimens.) Patented in Belgium February 8, 1888, No. 80,583; in Germany February 12, 1888, No. 44,124, and in France March 17, 1888, No. 189,436.

*To all whom it may concern:*

Be it known that I, HENRI PIEPER, Jr., a subject of the King of Belgium, residing at Liege, in the Kingdom of Belgium, have invented new and useful Improvements in Lamp-Wicks, (for which I have obtained patents in Germany, dated February 12, 1888, No. 44,124; in France, dated March 17, 1888, No. 189,436, and in Belgium, dated February 8, 1888, No. 80,583,) of which the following is a specification.

My invention relates to certain new and useful improvements in wicks for lamps, lanterns, and the like, which are fed by vegetable or animal oils, fats, petroleum, or other suitable hydro-carbons; and also to improvements in the method of making such wicks.

The accompanying drawing illustrates one form of wick embodying my invention.

The object of the invention is to produce an indestructible wick, which while serving as the medium for the ascent of the hydrocarbon from its reservoir, shall not itself be consumed. In carrying out the invention, I prepare the wick in the desired form directly from suitable material of a vegetable character having a continuous fibrous structure and the requisite capillarity or porosity, as paper, wood, vegetable fabric of any kind, (more especially vegetable textile material) cotton webbing, &c.; indeed the ordinary cotton wicking may be employed direct. The wick from whatever material of a vegetable character it may be composed, is carbonized either in a closed vessel or between iron plates heated to redness. The carbonizing operation is continued until the finished wick while still preserving its form and consistency, will serve merely as the vehicle for the oil and will not be itself consumed. Previous to the said carbonizing operation, in order to increase its consistency, the wick may be immersed for a time in concentrated acid,—preferably sulphuric acid.

The improved wicks are indestructible; that is, they are not consumed by the flame and therefore need not be made adjustable in the lamp. They may therefore be secured rigidly within the oil reservoirs; whereby the construction of the lamp itself may be extraordinarily simplified.

Having thus described my invention, what I claim is—

1. A wick composed of continuous vegetable fiber completely carbonized and having capillary properties; substantially as described.

2. A wick composed of vegetable fabric completely carbonized and having capillary properties; substantially as described.

3. The method of making wicks which consists in subjecting vegetable fiber to the action of an acid, and subsequently carbonizing said fiber; substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HENRI PIEPER, FILS.

Witnesses:
WM. S. PRESTON,
ERNEST MÜLLER.