H. HALVORSON.

Lamp-Wicks.

No. 157,685. Patented Dec. 15, 1874.

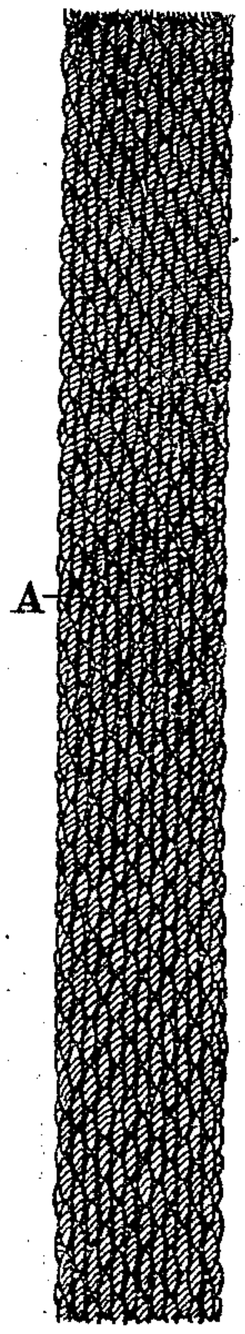

Fig. 1.

Witnesses;

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Inventor;

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UNITED STATES PATENT OFFICE.

HALVOR HALVORSON, OF CAMBRIDGE, ASSIGNOR TO CHARLES ALBERT SHAW, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LAMP-WICKS.

Specification forming part of Letters Patent No. **157,685**, dated December 15, 1874; application filed November 25, 1874.

To all whom it may concern:

Be it known that I, HALVOR HALVORSON, of Cambridge, in the county of Middlesex, State of Massachusetts, have invented a certain new and useful Improvement in Lamp-Wicks, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a side elevation, showing my improved wick, the letter A representing the body of the same.

My invention relates more especially to that class of wicks which are designed for use in lamps adapted for burning kerosene or the hydrocarbon oils; and consists in a wick composed of cotton or similar fibrous material, and partially carbonized, as hereinafter set forth and claimed, the object being to increase its capillary action, and render it more easily cut or trimmed.

It is well known by all conversant with such matters that it is difficult to cut the ordinary woven, knit, or braided wicks used in lamps for burning kerosene in such a manner as to trim the lamp evenly and properly, especially while the wick is in the tube, and after it becomes saturated with oil. It is also well known that when a wick of this character is woven, knit, or braided too closely, or when its strands contain too many short hirsute projections or loose fibers, it will "mat" or indurate, having its capillary action so much reduced as to insufficiently supply the flame with oil.

My invention is designed to obviate these difficulties and objections; and to that end I char or partially carbonize the wick, rendering it more brittle and easily cut or trimmed than an ordinary wick, and, by burning out or destroying the fine hirsute projections or loose fibers which clog up the ducts or pores, greatly increase its capillary properties, and prevent induration or hardening.

In carrying out my invention I take the ordinary knit, braided, or woven wicks of commerce, and submit them to a high degree of heat in any convenient manner, until they are well and evenly browned or partially carbonized, and the fine hairy projections destroyed or shriveled up. For this purpose a closed oven is preferable, in which the wicks are separated and evenly distributed, and in which the heat is maintained at about 500° Fahrenheit, or at a degree sufficient to produce partial carbonization without causing them to ignite.

I also sometimes char the wicks in the piece or web, and cut them into proper lengths afterward. This may be accomplished by passing the web or ribbon of wicking slowly through a furnace or flame by means of reels, or in any other convenient manner, subjecting all portions of it to the flame or heat sufficiently long to produce the desired effect.

It will be obvious that a great variety of means may be employed with the same general result in carrying out my improvement, and I therefore do not confine myself to the special methods described.

Having thus explained my invention, what I claim is—

As a new article of manufacture, a fibrous lamp-wick charred or partially carbonized, substantially as and for the purpose specified.

HALVOR HALVORSON.

Witnesses:

CHAS. LETTS,

H. E. METCALF.