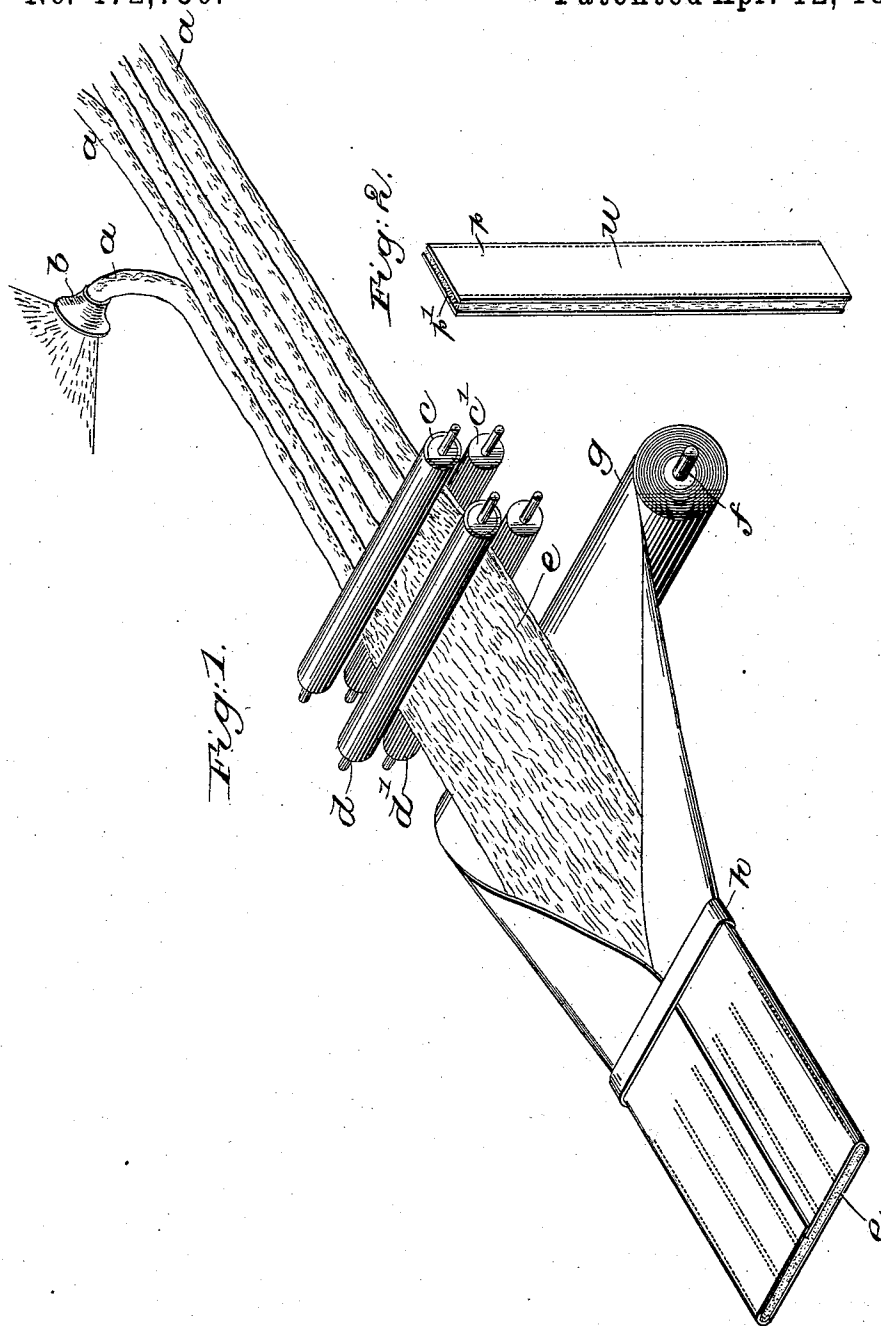


(No Model.)

W. F. DRAPER.
LAMP WICK.

No. 472,750.

Patented Apr. 12, 1892.



Witnesses.

Fred S. Grunleaf
Louie H. Lowell.

Inventor.

William F. Draper.
by Leroy Long
attys.

UNITED STATES PATENT OFFICE.

WILLIAM F. DRAPER, OF HOPEDALE, MASSACHUSETTS.

LAMP-WICK.

SPECIFICATION forming part of Letters Patent No. 472,750, dated April 12, 1892.

Application filed July 25, 1891. Serial No. 400,749. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. DRAPER, of Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Lamp-Wicks, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a novel and efficient lamp-wick.

Prior to the invention to be described lamp-wicks have been produced by weaving, and cotton has been put into sheet form by the employment of adhesive material and pressure.

It is the aim of this invention to produce a lamp-wick in which the individual fibers shall be arranged substantially parallel and lengthwise the direction it is desired that the oil or other material to be conducted through the wick shall take in arriving at the point of ignition. The more nearly parallel the fiber of the cotton entering into the composition of the wick the greater the freedom with which the oil will pass from one to the other end of the wick by capillary attraction.

In the production of my improved wick I prefer to take cotton sliver taken from a carding or other suitable machine, lay several strands of the same side by side, and pass the combined slivers between rollers, thus forming a sheet of convenient width. The bat so formed is enveloped or infolded by a wrapper or jacket, composed either of paper or of fibrous material, such as cloth.

This wick-web may be of the width of one or more wicks. If wider than one wick, the jacket and sheet will preferably be stitched through and through in the direction of the length of the web, after which the web may be slitted longitudinally, leaving two or more wicks; but the wicks so produced will not be covered at their side edges.

Figure 1 of the drawings in perspective shows how my improved wick may be made. Fig. 2 shows one of my improved wicks made by splitting the web.

Referring to the drawings, let it be supposed that each of the slivers *a*, of which in this present instance of my invention six are shown, is taken from a suitable guide *b*, adapted to receive and discharge the doffed film taken from the doffer of a cotton-carding

machine. A greater or less number of these slivers may be arranged side by side, according to the width of the wick or web it is desired to make. These slivers, lying side by side, will be passed between suitable rolls *c c'* and *d d'*. These rolls may be geared together and rotated as commonly done in any usual frame or head. Beyond the set of rolls, which may be drawing-rolls, if desired, I have designated the cotton in the form of a sheet and have marked the same *e*.

f represents a roll containing cloth *g*, and *h* is a folding guide, which may be of any usual shape or construction common to paper-bag and other machines in which a web of paper is folded longitudinally upon itself to make a tube preparatory to the making of a paper bag. The cloth—or it may be paper to form the jacket—after passing through the guide *h* is made to infold or inclose the sheet *e* and form a wick-web. This wick-web may be subsequently stitched through and through, the stitching being in the direction of the length of the web, and preferably in two rows, slightly distant from each other, so that the bat may be severed between the rows of stitching to leave individual wicks *w*. (Represented in Fig. 2)

The wick-web may be stitched together on any usual sewing-machine adapted for quilting, the direction of the stitching being substantially longitudinal with relation to the web.

The material of the jacket or wrapper, when the web is severed for the production of wicks, two or more, consists of strengthening-plies for the opposite sides of the wick, said strengthening-plies being designated in Fig. 2 as *p p'*, they being made from the cloth or paper *g*.

Having described my invention, what I desire to secure by Letters Patent is—

1. A lamp-wick composed of a film of cotton slivers, each sliver having its individual fibers substantially parallel, and the independent strengthening-plies *p p'*, stitched to the opposite sides of the cotton film entering into the wick, the lines of stitches being adjacent to the longitudinal edges of the wick, substantially as described.

2. The herein-described method of producing lamp-wicks, which consists in laying a

number of slivers of cotton together, infolding or wrapping the said cotton within a tubular jacket, stitching the said jacket and web together, and slitting the said web into strips
5 to form lamp-wicks, substantially as described.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

WILLIAM F. DRAPER.

Witnesses:

E. D. BANCROFT,

H. F. SEARLES.