

UNITED STATES PATENT OFFICE.

FREDERICK McKEE, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN LAMP-WICKS.

Specification forming part of Letters Patent No. **37,237**, dated December 23, 1862.

To all whom it may concern:

Be it known that I, FREDERICK McKEE, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in the Manufacture of Lamp-Wicks; and I do hereby declare the following to be a full, clear, and exact description of the same.

Heretofore lamp-wicks have been made out of yarns, slivers, or threads, either woven, twisted, or plaited, and when they are drawn up through the wick-tube by a ratchet or feed-wheel, or by a pin or point of any kind, they will draw unevenly, some of the strands projecting beyond the others and requiring the wick to be retrimmed every time it is raised or drawn up.

The object of my invention is to make a wick that will be a good conductor of oil, but that will also, when raised or drawn up, preserve its compactness and evenness and not draw out unevenly, as the wicks heretofore made all do, whether woven, plaited, or twisted, and more so when the threads or fibers are merely laid together without their being interlocked or twisted; and the nature of my invention consists in making lamp-wicks out of a pulp made of any vegetable matter that will felt and has capillary properties sufficient to convey or carry up the oil or other burning-fluid to the wick.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same.

I take paper, rags, cotton, flax, hay, straw, or any other vegetable material that can be pulped and felted—as, for instance, any known material out of which paper has been or can be made—and make it into pulp in any ordinary way, and afterward unite the pulp into a fabric close enough for strength and loose enough not to impair its conducting properties, and this fabric I use for wicks. Its fibrous properties being gone, it can be raised and lowered

by a feed-wheel or by a pin or point taking hold of it anywhere, and as regularly and uniformly as a piece of leather could, or any other textile substance. Such a wick will not require so much trimming, and is much more readily introduced into a lamp or wick tube than any other wick of which I have knowledge, while it is much cheaper than the wicks made of spun threads in any known way.

Flat wicks are very readily made after my plan, as the fabric may be made in sheets and the wicks cut out of any suitable dimensions. Tubular wicks may also be made by my process—viz., by gathering the pulp upon a hollow perforated former, from which the air is drawn, after the manner of making seamless paper cylinders or bags; and the pulpy matter may be inclosed in a case of other more dense pulpy matter as a protection. These wicks are stiff enough to be easily inserted in the wick tube or holder. When an outer protector is used with the wick, that alone may be felted or hardened to give the wick a proper degree of strength; but when no protector is used, then the body or outer portion of the wick should be felted or hardened sufficiently to hold the wick together. The wick may be made of a single thickness of pulp or of two or more thicknesses or layers of the material.

Having thus fully described my invention, what I claim as a new article of manufacture is—

A lamp-wick made out of pulp and felted or hardened together, instead of being woven, plaited, or twisted, as herein set forth, and this I claim whether the pulp be incased in an outer protection or not, as described.

FREDERICK McKEE.

Witnesses:

A. BURTT,
W. C. AUGHINBAUGH,
A. B. STEVENSON.