

No. 752,575.

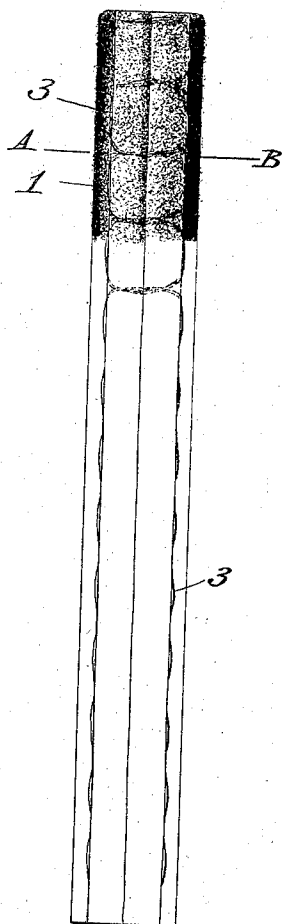
PATENTED FEB. 16, 1904.

J. A. MOSHER.  
LAMP WICK.

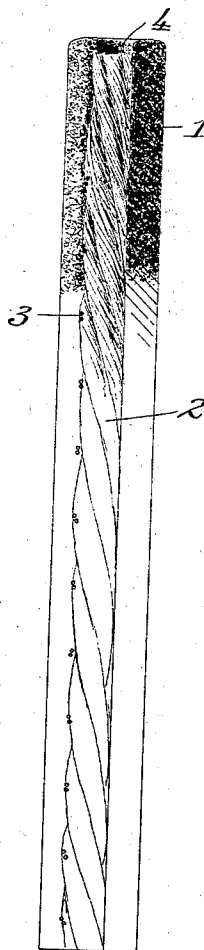
APPLICATION FILED NOV. 19, 1903.

NO MODEL.

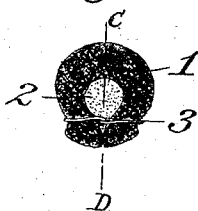
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses

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# UNITED STATES PATENT OFFICE.

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## LAMP-WICK.

SPECIFICATION forming part of Letters Patent No. 752,575, dated February 16, 1904.

Application filed November 19, 1903. Serial No. 181,880. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. MOSHER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Lamp-Wicks, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

This invention is designed for use more particularly with such switch, semaphore, and other signal-lamps employed in railroad-signaling as are intended to be supplied with oil only at long intervals—say from seven to eight days—and to remain without attention such as is ordinarily required in trimming the wick, cleaning the burner, &c., for an equal length of time. Under such circumstances it is important not only that the wick shall have free capillary action, so that the oil shall be properly supplied to the flame, but also that the top of the wick shall be prevented from charring, and I have engaged in much experimentation with the aim of devising a wick which shall fill the condition above pointed out. In the use of ordinary forms of wick it is customary to refill the oil-fonts and clean the wicks once in twenty-four hours, and in large railroad systems where a great number of men are required to keep the lamps in condition the cost of the lamp-service is excessive. Ordinary wicks, although used with approved burners, will not burn successfully more than three or four days, for by the charring a hard crust is formed on the top of the wick, preventing the free feeding of oil and causing the light to die down and finally become extinguished. Heretofore under such circumstances men have been required at short intervals to climb the semaphore-poles, trim the wicks, and relight the lamps, and unless such work is done properly and promptly it is obvious that serious disarrangement of the signaling system of the railroad on which the lamps are employed may ensue, resulting in grave danger to the traveling public.

My invention, while designed to be more especially employed with a particular form of long-time burner, may be used with other

types, or, in fact, generally employed with lamps for railroad, marine, domestic, or other purposes.

In the further description of my invention which follows reference is made to the accompanying drawings, forming a part hereof, in which similar numerals of reference indicate similar parts in the respective figures.

Figure 1 is an exterior longitudinal view of my improved lamp-wick considerably enlarged. Fig. 2 is a longitudinal section thereof on the line C D, Fig. 3; and Fig. 3, a transverse section on the line A B of Fig. 1.

1 is a body, preferably of woolen felt, formed into a tube or sheath, its edges being stitched together. Longitudinally and centrally of the tube or sheath 1 is placed a fibrous strand 2, preferably of wool, which is permanently inclosed within the tube and may or may not receive the stitches 3, or certain of the same, which unite the edges of said sheath. In practice I prefer to form the tube 1 from a flat blank of the material by stitching its sides, as stated, the central fiber being incorporated in the tube at the time of the stitching; but I do not confine myself to any mode of uniting the tube and the central strand, as the latter may be introduced to the former after the completion of the tube or the tube may be drawn over the strand.

My present invention does not contemplate the mode of manufacture, but relates only to the wick itself as a manufactured article.

The exterior diameter of my improved wick at present used for long-time burners is about three-sixteenths of an inch; but this size may be varied to suit different lamps.

While the best results have been obtained by the use of a felt tubular body with a central woolen strand, I do not limit myself to these materials, as similar, though it is believed inferior, results may be obtained by the use of a tube of textile or other fibrous fabric with a central strand of fibrous non-woolen material.

In the use of my improved lamp-wick a great saving of oil is accomplished, and under favorable conditions it has burned without atten-

tion for as long a time as nine or ten days, and even then the extinguishment of the flame was due to an insufficient quantity of oil.

It has been found that the central strand, particularly when constituted of wool, increases the capillary attraction, causing the oil to feed more freely, thus insuring the best combustion. Furthermore, the central woolen strand burns away a little more rapidly than the surrounding felt, a pocket being formed at the top in which the oil collects, thus preventing the clogging up or charring over of the top of the wick.

It is believed that the advantages attending the use of my invention are in great measure dependent upon the fact that the outer tube or sheath and the central strand while both of absorbent material and inducing capillary action are of different densities, the internal strand being of lesser density than the sur-

rounding tube or sheath, and it is my intention to claim, broadly, a lamp-wick having this characteristic.

Having thus described my invention, I claim—

1. A lamp-wick consisting of a felt tube or sheath and an internal central woolen strand, substantially as set forth.

2. A lamp-wick consisting of a felt tube or sheath combined with an internal central fibrous strand of density lesser than that of the surrounding tube or sheath, substantially as set forth.

In testimony whereof I hereunto set my hand.

JOHN A. MOSHER.

Witnesses:

J. T. HASKELL,  
H. E. ROGERS.