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PATENT SPECIFICATION

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COMPLETE SPECIFICATION

Improvements in or relating to Wicks for Cigarette Lighters, Oil Lamps and the like

I, RICHARD GRATZER (Czecho-Slovakian Nationality) of 2b, Gorsebank Road, Liverpool, 15, in the County of Lancaster, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to wicks for use in cigarette lighters, oil or spirit lamps, and the like.

Various suggestions have heretofore been made to produce wicks composed of glass fibres bound together but all such prior proposals, as far as I am aware, have been more or less unsatisfactory.

Glass fibres have no inherent hygroscopic capacity, only the air space between the various filaments being responsible for capillary action, and in practice it is difficult, if not impossible, by known methods to obtain the exact distance between the glass filaments in order to attain the best possible capillary effect. The filaments of glass wicks as hitherto made have either been too tight or too loose for satisfactory capillary effect.

To improve capillarity, it has been proposed to incorporate cotton fibres, or the like with glass fibres.

My invention seeks to produce a wick of maximum capillarity, and to this end I construct a wick of longitudinally assembled filaments of glass wherewith are mixed strands or threads of suitable hygroscopic material e.g. cotton, and said mixed non-hygroscopic filaments and hygroscopic threads being tightly bound together by a sheath or wrapping of hygroscopic material, such as braided cotton.

A continuous feed of ingitable liquid—as petrol—from a contacting source of supply to the top of the wick, for ignition by flint or otherwise, is thus ensured.

Said sheath or wrapping may extend below the adjacent ends of the filament-thread bundle and be stiffened.

I will further describe my invention with the aid of the accompanying sheet of explanatory drawings which show, by

way of example only, one mode of carrying the invention into effect.

Figs. 1, 2 and 3 are, respectively, enlarged longitudinal and cross sections, and perspective view of the wick.

For the purpose of illustration, spaces are shown between the filaments and threads, but it will, of course, be understood that in manufacture both filaments and threads will be mixed and tightly bound together.

a, *a* indicate filaments of glass, and *b*, *b* strands or threads of cotton yarn mixed with the glass filaments. Said bundle of hygroscopic threads *b* and non-hygroscopic filaments *a* is enclosed and tightly held in a sheath *c*, *c*¹ of braided cotton, or other suitable liquid absorbent material.

In order to facilitate threading of the wick into a mechanical lighter or lamp, the lower portion *c*¹—which is of tapering configuration—of said sheath extends beyond, i.e. below, the adjacent ends of the bundle of filaments *a* and threads *b*, and has been stiffened as, for instance, by being dipped in a cellulosic solution and dried.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A wick composed of longitudinally assembled filaments of glass wherewith are mixed strands or threads of suitable hygroscopic material, e.g. cotton, and said mixed non-hygroscopic filaments and hygroscopic threads being tightly bound together by a sheath or wrapping of hygroscopic material, such as braided cotton.

2. A wick as claimed in the preceding Claim, in which the lower portion of said sheath or wrapping beyond the adjacent ends of the bundle of filaments and threads is stiffened for the purpose specified.

3. A wick as claimed in the preceding Claim 2, in which the stiffening of said sheath or wrapping is effected by a cellulosic solution into which the lower portion of the sheath or wrapping has been dipped.

[Price 1/-]

4. A wick as claimed in either of the preceding Claims 2 or 3, in which the stiffened portion of said sheath or wrapping is of tapering configuration.
5. A wick for the purpose specified, substantially as hereinbefore described and illustrated in the accompanying drawing.

Dated this 2nd day of August, 1945.

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[This Drawing is a reproduction of the Original on a reduced scale.]

