

## PATENT SPECIFICATION

404,971

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## COMPLETE SPECIFICATION.



## Improvements in Smokers' Petrol Lighters.

We, FREDERICK CHARLES WISE, WILLEY GREENWOOD, and FREDERICK CHARLES GENDERS, all of 5 & 7, Johnson Street, Notting Hill Gate, London, W. 8, British subjects, 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:—

10 In petrol lighters intended for outdoor use and provided with a wind screen, it is necessary to maintain a large portion of the wick in a protruding position in order to obtain a large flame. Thus the wick burns away rather quickly and requires frequent readjustment for which purpose the lighter is usually provided with a known form of wick raiser in the form of a spur wheel which is operated by means of a spindle and a hand wheel. Since the elements are very small, a reliable engagement between the spur wheel and the wick can hardly be obtained unless the spur wheel occupies a considerable portion of the cross-sectional area of the wick tube, and this renders the introduction of the comparatively compact wick into the tube rather difficult. The object of the present invention is to facilitate the introduction of the wick, and the invention consists in the first-place in providing a mutilated spur wheel having a flat face which can be turned towards the centre of the wick tube in order to widen the passage and allow the end of the wick to be pushed far enough down the tube to be easily gripped by the wheel.

In addition, the cage arranged in known manner inside the casing of the lighter for keeping the cotton wool clear of the wick tube, comprises according to the invention a U-shaped metal strip provided, in alignment with the wick tube, with a large aperture through which the end of the wick can easily find its way into the cotton filled portion of the casing on the wick being introduced from the top of the latter.

Fig. 1 of the accompanying drawings represents a side view of the mutilated spur wheel, and

Fig. 2 is a view on a smaller scale, [Price 1/-]

partly in central longitudinal section, of the entire lighter.

The lighter comprises a casing *a* which is traversed by a vertical tube *b* containing the flint and the spring whereby the latter is controlled. The wick *c* is fed through a tube *d* mounted on top of the casing, and the feeding of the wick is effected by means of a spur wheel *e* which is operated through the medium of a hand wheel *h* and a spindle *g* whereby the wheel is supported in the tube. The wick tube is surrounded by a wind screen *i* which is slipped into engagement with a fastening screw *k* at one end and a retaining hook *l* at the other end. The abrasive wheel *m* and its operating wheel or wheels *n* are mounted on a shaft *o* secured to the wind screen. A plate *p*, which is pivoted to a pillar *q* and adapted to be maintained by a spring *r* either in an upright or in a horizontal position, bears, when in the horizontal position, against the top of the wind screen and covers the enclosed space together with the abrasive wheel. A cap *s* on the plate is adapted to engage the tube *d* and cover the wick. The wind screen and cover plate do not form part of the invention.

The wick *c* is inserted into the casing from the top of the tube *d*. In order to facilitate the insertion, the spur wheel *e*, is according to the invention mutilated, as best shown in Fig. 1, so as to form a flat face *t* which, by being turned towards the wick, widens the passage for the latter and enables the end of the wick to be pushed far enough into the tube for being readily engaged by the spur wheel.

To maintain the cotton wool contained in the casing clear of the wick tube, a cage is arranged in the latter in known manner so as to enclose the upper portion of the wick. This cage, according to the invention, comprises a U-shaped metal strip *u* which is provided with a large aperture *v* arranged substantially in alignment with the wick tube so that the end of the wick can easily find its way into the cotton-filled portion of the casing.

Having now particularly described and ascertained the nature of our said inven-

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tion and in what manner the same is to be performed, we declare that what we claim is:—

- 5 1. In a smokers' petrol lighter of the kind wherein the wick is adjustable by means of a rotatable spur wheel, the provision of a mutilated spur wheel having a flat face adapted, when turned towards the wick, to widen the passage for the  
10 latter and facilitate its introduction.
2. A petrol lighter having the feature claimed in claim 1 and provided, inside

the casing, with a cage for keeping the cotton wool filling clear of the wick, said cage comprising a U-shaped metal strip  
15 having a large aperture arranged in alignment with the wick tube so as to enable the end of the wick to find its way easily into the cotton-filled portion of the casing.

20 Dated the 21st day of May, 1932.  
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Fig. 1.

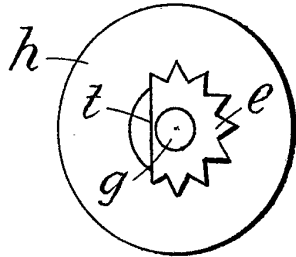
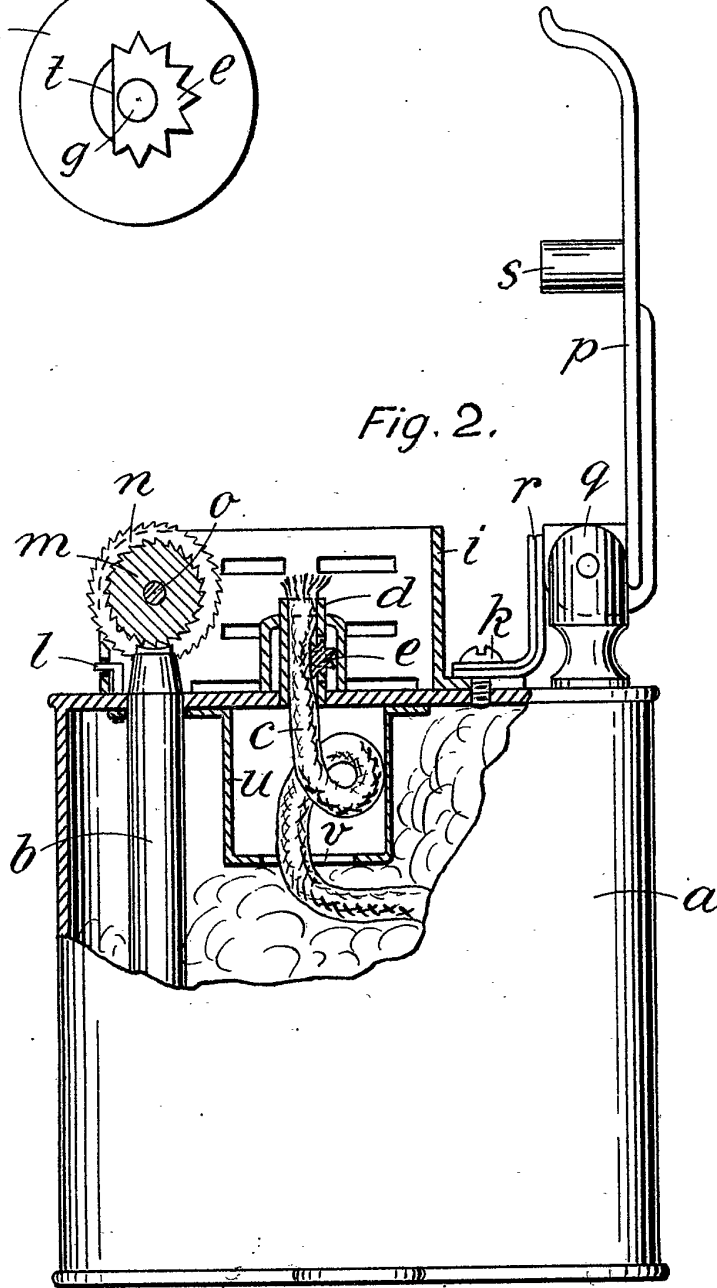


Fig. 2.



[This Drawing is a full-size reproduction of the Original.]