

PATENT SPECIFICATION



Application Date: March 30, 1927. No. 8756 / 27.

288,806

(Patent of Addition to No. 288,787; dated March 2, 1927.)

Complete Accepted: April 19, 1928.

COMPLETE SPECIFICATION.

Improvements in Smokers' Petrol Lighters.

We, FREDERICK CHARLES WISE and WILLEY GREENWOOD, both of 5 and 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:—

This invention relates to improvements in or modifications of the petrol lighter which is described and claimed in the Specification of Application No. 5872 of 1927 (Serial No. 288,787).

In that lighter a split wick tube is surrounded by a wind shield having louvred air apertures whereby the wind is led away from the wick towards the top of the shield.

The object of the present invention is to improve the ventilation of the shield and keep the petrol vapours which emanate from the wick tube, in proper circulation without exposing the source of the flame to strong draught, and the invention consists in arranging the louvres so that the wind, while being directed away from the source of the flame, is caused to sweep through the whole interior of the shield. The louvres may for this purpose either be directed towards the bottom of the shield or set substantially at a tangent to the wick tube.

Fig. 1 of the accompanying drawings represents a side view of a lighter to which the invention is applied,

Fig. 2, a front view of the same in open position,

Figs. 3 and 4 are sectional views at right angles to each other of the shield, Fig. 3 showing the closing cap in section and its cover plate in elevation,

Fig. 5 is an elevation of a shield showing modified louvres,

Fig. 6, another elevation of a shield showing a modified arrangement of the louvres, and

Fig. 7, a horizontal section on the line VII—VII of Fig. 6.

The lighter is provided with a wick tube *c* which is split longitudinally into a plurality of claws between which the wick

is exposed. Normally the wick tube is covered by a cap *d* which is connected to a pivoted arm *e* whereby it can be turned into and out of operative position. The wick tube, and also the cap *d*, when the latter is in closed position, are surrounded by a wind shield *a* provided with louvred air apertures *b*, the louvres being arranged so as to deflect the wind from the source of the flame and guard the latter against being blown out.

In order to circulate the petrol vapours emanating from the exposed portions of the wick along the tube *c* and divert them towards the flame, the louvres are, according to the invention, arranged so as to cause the draught to sweep the whole interior of the shield. For this purpose the louvres are preferably directed towards the bottom of the shield so that the air current will pass across the wick tube in a downward sweep, as shown by arrows in Fig. 4, and carry the vapours towards the flame at the lee side of the shield. A strong and steady flame is obtained in this manner.

A good circulation of the vapours can also be effected by arranging the louvres, as shown in Figs. 6 and 7, so that the draught will enter substantially at a tangent to the wick tube and sweep spirally around the latter, as indicated by the arrows.

The shape of the apertures may be varied. The elongated apertures shown in Fig. 1 may be replaced by a larger number of short apertures, as shown in Fig. 5.

The shield is normally covered by a plate *f* which is carried by the cap *d* and which has an extension *g* covering the abrasive wheel *h*.

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

1. An improvement in or modification of the smokers' petrol lighter according to the Specification of Application No. 5872 of 1927 (Serial No. 288,787), in which the louvres of the wind shield are arranged so that, while the end of the

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wick is protected from direct draught, the air currents are caused to sweep the whole interior of the shield, substantially as and for the purpose set forth.

5 2. A lighter according to Claim 1 wherein the louvres are arranged so as to direct the draught towards the bottom of the shield, substantially as set forth.

3. A lighter according to Claim 1

wherein the louvres are arranged so as to direct the draught substantially at a tangent to the wick tube, substantially as set forth. 10

Dated this 28th day of March, 1927.

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

