

PATENT SPECIFICATION

296.269

Application Date: Feb. 27, 1928. No. 6091 / 28.

Complete Accepted: Aug. 30, 1928.



COMPLETE SPECIFICATION.

Benzine-pocket-lighter.

I, ADOLF KINZINGER, of No. 39, Jahnstrasse, Pforzheim, Germany, of German nationality, 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 a benzine-pocket-lighter with friction-wheel, of the kind in which the friction wheel is not directly rotated with the thumb for producing the sparks but by means of a separate thumb-wheel mounted on the same shaft as said friction-wheel.

The object of the invention is to provide an improved pocket-lighter of this kind having a removable wind screen, and the invention consists essentially in removably fitting a wind screen sleeve on the top end of the reservoir by means of pins and slots and mounting the thumb wheel and ignition wheel on an ignition stone sleeve which can be pulled out of the body to facilitate removal of the wind screen sleeve.

An embodiment of the invention is illustrated in the accompanying drawings, in which:—

Fig. 1 shows the closed pocket-lighter in elevation.

Fig. 2 is a side elevation, showing the pocket-lighter in open position.

Fig. 3 is a section on line 3—3 of Fig. 2.

Fig. 4 is a top-plan-view of Fig. 3, with thumb wheel projecting from the box-shaped wind screen.

Fig. 5 is a similar view as Fig. 4, the thumb wheel being arranged on the outer side of the wind screen.

Over the top-end of the body *a* of the pocket-lighter a sleeve-shaped wind screen *b* is pushed so that it can be fixed by means of pins *c*, engaging with slots *b*³.

To remove the wind screen the sleeve *e* for the ignition-stone mounted in a tube *d* has first to be pulled out, as it forms at the same time the bearing for the shaft *f* which carries the friction-wheel *g* and the thumb wheel *h* which projects partly through a slot of the wind screen *b* (Fig. 4) or is arranged on the outer side of this wind screen (Fig. 5).

[Price 1/-]

A wick *i* projects from a sleeve into the wind screen *b* within which further a tubular support *l* for an oscillatable arm *n* is fixed which carries the wick-hood *m*, said arm serving further as lid for the wind screen *b* and having a cut-out portion *o* for the thumb wheel *h* when this thumb wheel is arranged inside the wind screen as shown in Fig. 4.

The wick-sleeve has an annular cavity *k* which is partly filled with an incombustible mass, for instance the material known by the registered trade mark "Vulcan Fibre", which is softer than metal and serves to ensure a good packing of the wick-hood *m*. This mass may take the form of a stamped disc.

The oscillatable arm or lid *n* has a nose *n*¹ on its outer end, by means of which said lid can be lifted, prior to the rotating of the thumb wheel *h*, by means of the thumb of that hand which holds the pocket-lighter. The pocket-lighter is therefore operated with one hand only.

The ignition-stone-sleeve *e* permits of turning, without a screw-driver, the screw *p* designed to press on the ignition-stone. The arrangement facilitates the cleaning of the top-plate of the body *a* of the pocket-lighter and of the wick *i*, the readjusting of this wick and the replacing of the packing mass in the cavity *k* of the wick-sleeve. The comparatively large size thumb wheel *h* facilitates the driving of the much smaller friction-wheel *g* with which the finger does not come into contact.

The wind screen sleeve *b* pushed over the body *a* does not transmit the heat onto the body *a* of the pocket-lighter in the same measure as a wind-screen made in one piece with said body.

The inner space in the wind screen sleeve *b* enclosing the top-plate of the pocket-lighter is as large as possible so that a quantity of fresh air is permanently in this space which is sufficient for the ignition of the wick, and that during the burning of the wick sufficient combustion-air can be sucked in which enters over the rim of the wind screen *b* into the upper opening and descends along the inner surface of the wind screen to flow

5 towards the burning wick along the upper
 surface of the top-plate of the body of the
 pocket-lighter. No air-holes, which im-
 pair the good appearance of a pocket-
 lighter, are required.* It is true that in
 10 this case the flame does not burn like the
 flame of a Bunsen-burner, but this does
 not matter and is even advantageous under
 certain conditions, specially when the
 pocket-lighter has to be used as a source
 of light.

15 The wick burns with an ordinary light-
 ing flame the heat of which is however
 sufficient to light a cigar or cigarette. A
 flame like that of a Bunsen-burner, as in
 the pocket-lighters with perforated wind-
 screen, is a non-luminous flame so that
 these pocket-lighters cannot be used for
 illuminating purposes.

20 The wick *i* is well covered as the hood *m*
 is resiliently pressed against the packing
 material in the wick-sleeve *k*. When the
 pocket-lighter is in the inoperative posi-
 tion, the wind screen sleeve *b* is, notwith-
 25 standing its large size, perfectly closed
 on the inner side at the top-end by means
 of the oscillatable arm *n*, serving as lid.

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

1. A benzine-pocket-lighter of the kind

referred to wherein a wind screen sleeve *b*
 is removably fitted on the top end of the
 body *a* by means of pins *c* engaging slots
*b*³, the removal of the screen being facili-
 tated by mounting the thumb wheel and
 friction-wheel on an ignition-stone-sleeve
e which can be pulled out of the body *a*.

2. Benzine-pocket-lighter as claimed in
 Claim 1, characterized in that the wind
 screen sleeve *b* has an upwardly extending
 slot through which the thumb wheel *h*
 (Fig. 4) or the shaft *f* of this thumb wheel
 (Fig. 5) projects.

3. Benzine-pocket-lighter as claimed in
 Claim 1 characterized in that an oscillat-
 able arm *n* carrying a wick-hood *m* and
 serving at the same time as lid for the
 wind screen *b* is pivotally mounted in a
 tubular support *l* upwardly projecting
 within said wind screen.

4. Benzine-pocket-lighter as claimed in
 Claim 3, characterized in that in an
 annular cavity *k* of the wick sleeve a seat
 for the wick-hood is arranged, covered
 with an incombustible packing mass.

5. A benzine-pocket-lighter according to
 Claim 4 wherein the said packing mass
 takes the form of a disc.

Dated this 27th day of February, 1928.

FRANCIS HERON ROGERS,
 Agent for Applicant,
 Bridge House, 181, Queen Victoria Street,
 London, E.C. 4.

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

