

PATENT SPECIFICATION



Convention Date (Austria): Nov. 12, 1934.

449,134

Application Date (in United Kingdom): Nov. 11, 1935. No. 31129/35.

Complete Specification Accepted: June 22, 1936.

COMPLETE SPECIFICATION

Pocket Lighter Actuated by Pressure

We, JOSEF EDENBURG, of No. 22, Wien, III, Austria, and

inconveniences of pocket lighters of this type.

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An embodiment of the invention is shown in the accompanying drawing

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SPECIFICATION No. 449,134.

Page 1, line 4, for "Wein" read
"Wien"

THE PATENT OFFICE,
July 23rd, 1936.

the pressure on the toothed wheel gear link or crank arrangements upon the cap which is thereby securely held in the closing position. In these constructions the closing spring requires a strong tension even when the pocket lighter is in closed condition in order to securely hold the cap in closed position. For actuating such pocket lighter the spring must be completely tensioned by compressing, this proceeding requiring considerable force. To hold such pocket lighter in opened condition for a certain time is very fatiguing for the hand. Another inconvenience is that the force of the spring and of the pressure element is transmitted to the effective catch element only through the intermediary of the closing cap. Herefrom result frictions and distortions of the element which often prevent perfect function. The catch elements of such pocket lighters consist of rather thin sheet metal plates or discs not sufficiently guided on the bolts about which they turn and which distort and jam under the loading to which they are exposed by the resistance of the friction wheel relative to the cerium stone. This invention has for its object to obviate the above mentioned

holes of the closing cap is positively connected with the catch 2 to rotate therewith. The coupling of catch and friction wheel is effected in known manner by a spring 5 fixed on the catch 2 and engaging in one or other of recesses 19 of the friction wheel 1. The catch 2 and its hubs 16 and 17 extend over the whole internal width of the closing cap 8 and, owing to the long guiding on the axle 9 of the friction wheel thereby produced an accurate bearing and therefore with an accurate rotating movement of catch 2 is obtained so that the catch cannot distort under any pressure and consequently not cause undesired frictions. By a pressure exerted upon the pressure element 10 the catch is rotated about its axle, the catch spring 5 engaging into the corresponding recess of the friction wheel 1. When the pressure element 10 is released, the spring 15 suspended on bolt 4 effects the backward rotation of the catch and thereby closing of the cap 8. The bolt 4 on which the spring 15 is hooked is arranged on catch 2 so that, when the pocket lighter is open, the

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Price 4s 6d

Price 25s

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Pocket Lighter Actuated by Pressure

We, JOSEF EDENBURG, of No. 22, Kärchergasse, Wien, III, Austria, and SIEGFRIED FUCHS, of No. 22, Neulinggasse, Wein, III, Austria, both of Austrian 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:—

10 Pocket lighters are known which open when a pressure is exerted upon the element provided therefor and which close automatically as soon as the pressure ceases. These pocket lighters comprise with this object in view a closing cap oscillatable about the axle of the friction wheel and connected with the catch of the friction wheel so as to be rotated by the same. The closing of the cap is effected by a spring, the arms of which bears the one against the pressure element and the other against the casing. The tension imparted in this manner by toothed wheel gear link or crank arrangements upon the cap which is thereby securely held in the closing position. In these constructions the closing spring requires a strong tension even when the pocket lighter is in closed condition in order to securely hold the cap in closed position. For actuating such pocket lighter the spring must be completely tensioned by compressing, this proceeding requiring considerable force. To hold such pocket lighter in opened condition for a certain time is very fatiguing for the hand. Another inconvenience is that the force of the spring and of the pressure element is transmitted to the effective catch element only through the intermediary of the closing cap. Herefrom result frictions and distortions of the element which often prevent perfect function. The catch elements of such pocket lighters consist of rather thin sheet metal plates or discs not sufficiently guided on the bolts about which they turn and which distort and jam under the loading to which they are exposed by the resistance of the friction wheel relative to the cerium stone. This invention has for its object to obviate the above mentioned

inconveniences of pocket lighters of this type.

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

Fig. 1 shows a pocket lighter in longitudinal section on line I—I of Fig. 2.

Fig. 2 is a cross section on line II—II of Fig. 1.

Figs. 3 and 4 show on larger scale two cross sections perpendicular the one to the other through the friction wheel and its catch.

On the catch 2 of the friction wheel which has a central bore and an elongated hub 16, 17 on either side two bolts 3, 4 are fixed. The link 6 is oscillatably mounted on the bolt 3 and connected at its other end with a pressure element 10 by a bolt 18. On the bolt 4 of catch 2 a pull spring 15 is suspended through a connecting element 7. This spring is hooked at its other end on the pivot axle 11 of the pressure element 10. The bolts 3 and 4 project through corresponding holes of the closing cap 8 so that this cap is positively connected with the catch 2 to rotate therewith. The coupling of catch and friction wheel is effected in known manner by a spring 5 fixed on the catch 2 and engaging in one or other of recesses 19 of the friction wheel 1. The catch 2 and its hubs 16 and 17 extend over the whole internal width of the closing cap 8 and, owing to the long guiding on the axle 9 of the friction wheel thereby produced an accurate bearing and therefore with an accurate rotating movement of catch 2 is obtained so that the catch cannot distort under any pressure and consequently not cause undesired frictions. By a pressure exerted upon the pressure element 10 the catch is rotated about its axle, the catch spring 5 engaging into the corresponding recess of the friction wheel and positively rotating this friction wheel 1. When the pressure element 10 is released, the spring 15 suspended on bolt 4 effects the backward rotation of the catch and thereby closing of the cap 8. The bolt 4 on which the spring 15 is hooked is arranged on catch 2 so that, when the pocket lighter is open, the

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spring 15 approaches the dead centre so that in this position a very little force is necessary to keep the pocket lighter in the open position. The fuel container 12 is removable through the bottom of the casing when the wick has been lighted, air being admitted to the flame through the apertures 13 in the wall of casing 14.

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:—

A pressure actuated pocket lighter with closing cap oscillatable around the axle of the friction wheel and positively connected with the catch of said friction wheel, characterized in that the friction

wheel catch (2) extending with its hubs (16, 17) over the entire internal width of cap (8) has two bolts (4, 3) of which the one (3) is connected by a link (6) with a pressure element (10) oscillatable around a pivot axle (11) in the casing (14), the other bolt (4) being connected by means of a pull spring (15) and a connecting piece (7) with the pivot axle (11) of the pressure element (10).

Dated this 7th day of November, 1935.

LESLIE N. COX,

Patent Agent,

408/9, Bank Chambers,

29, Southampton Buildings, London,

W.C.2,

Agent for the Applicants.

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

