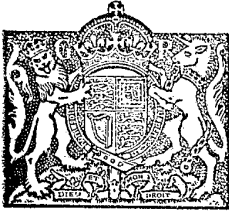


NOTE.—The application for a Patent has become void.

This print shows the Specification as it became open to public inspection under Section 91 (3) (a) of the Acts.

PATENT SPECIFICATION



Convention Date (France): Aug. 30, 1929.

368,682

Application Date (in United Kingdom): Aug. 30, 1930. No. 25,966/30.

Complete not Accepted.

COMPLETE SPECIFICATION.

Improvements in Pocket Lighters.

I, CÉSAR MOTTI, a citizen of the French Republic, of Maison Cordella, Avenue Beau Site, Nices (Alpes-Maritimes), France, 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:—

In the case of pocket lighters in which rotation of the friction wheel is caused by a spring, it often happens that, when the flint is too tightly pressed, the spring is not powerful enough to assure the working of the lighter.

The present invention provides a pocket lighter the friction wheel of which is manually actuated by the aid of a device which gives a high power with a weak effort, said device also effecting the opening and closing of the lighter in such a way that the entire operation can be performed with two fingers.

Said lighter includes a piston adapted to be moved, against the action of a recoil spring, by the pressure of the finger, the piston acting on a powerful ratchet lever which turns the friction wheel. The lid of the lighter is held and returned into the closed position by the piston, but opens under spring action on pressure being applied to the piston.

In this manner, a lighter is obtained, which is actuated in a practicable and suitable manner, is completely enclosed and is of highly satisfactory external appearance.

A typical embodiment of the invention is illustrated by the accompanying drawing whereon:—

Fig. 1 is an elevation of the lighter in the closed position;

Fig. 2 is a horizontal section thereof;

Fig. 3 is a vertical section along the line III—III of fig. 4;

Fig. 4 is a section along the line IV—IV of fig. 3;

Fig. 5 shows the ratchet lever;

Fig. 6 shows a modification; and

Fig. 7 is a section along the line VII—VII of fig. 6.

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The lighter comprises a casing 1, in which the box containing the entire mechanism fits with easy friction. Said box is closed by a lid 3, which turns on a hinge 4 and is brought into the open position by a spring 5. A piston 6, suitably guided in the box 2, is adapted to move vertically against the action of a recoil spring 7 supported by a pin 8. The lid 3 carries a heel 9, and the piston 6 has a nose 10 which bears against said heel, so that, on the piston being left to itself, it closes the lid by the action of the spring 7. On the other hand, when pressure is applied to the piston, said lid opens under the action of the spring 5.

The friction wheel 11 is integral with a wheel 12 provided with ratchet teeth. A lever 13, engaging in a recess in the piston 6, pivots on the shaft 14 of the friction wheel, and is integral with a gapped disc 15. One extremity 16 of said disc engages, for example, in a slot in the lever, whilst the other extremity 17, which is slightly turned up, is adapted to engage the teeth of the wheel 12.

It will be evident that a ratchet effect is thus obtained, and that each application of pressure on the piston 6 causes the friction wheel to turn always in the same direction. By reason of the length of the lever 13 the effort required is very slight, thus enabling the flint to be pressed very tightly and a very powerful spark to be produced. The spark is guided towards the wick, preferably by means of an inclined plane 18.

The lid 3 is provided with an extinguisher 19 for the flame, and holes 20 are pierced through the casing 1, on both sides, to assure good combustion.

In place of the disc 15, the lever 13 may be provided with any other equivalent ratchet mechanism, but said disc constitutes a simple and practical means for the purpose in view.

Figs. 6 and 7 show a modification in which the lid 3 is dispensed with and is replaced by a thin plate 21, which is attached to the piston 6 and slides in

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- guides carried by the sides of the casing 1. 2, characterised in that the lever is integral with a gapped disc, one up- 20
 Having now particularly described and turned edge of which co-acts with teeth
 ascertained the nature of my said inven- integral with the friction wheel.
 tion and in what manner the same is
 5 to be performed, I declare that what I
 claim is:—
 1. A pocket lighter, characterised in 25
 that the rotation of the friction wheel is
 obtained by means of a piston sliding
 10 against the action of a recoil spring, said
 piston being adapted, on being released,
 to hold and return into the closed position
 the lid which is normally held open by
 a spring.
 15 2. A pocket lighter according to claim
 1, characterised in that the piston acts on
 a lever provided with ratchet mechanism
 which actuates the friction wheel.
 3. A pocket lighter according to claim
 4. A pocket lighter according to any of
 the preceding claims, characterised in that
 the lid of the lighter is composed of a thin
 plate attached to the inner vertical face of
 the piston and sliding in guides carried
 by the sides of the casing.
 5. A pocket lighter substantially as
 described with reference to the accom- 30
 panying drawing.

Dated this 29th day of August, 1930.

H. D. FITZPATRICK & Co.,

Chartered Patent Agents,

49, Chancery Lane, London, W.C. 2, and
 94, Hope Street, Glasgow.

