

AMENDED SPECIFICATION.

Reprinted as amended in accordance with the decision of the Assistant Comptroller, acting for the Comptroller-General, dated the 6th day of September, 1929.

(The Amendment is shown in italic type.)

PATENT SPECIFICATION

Application Date: March 22, 1928. No. 8775/28. 310,159*

Complete Left: Dec. 20, 1928.

Complete Accepted: April 25, 1929.

PROVISIONAL SPECIFICATION.

Improved Frictional Pocket Lighter.



We, CHARLES HENRY COOK and JOHN REGINALD BARTLE, both of 81, Southfield Road, Bedford Park, London, W. 4, British subjects, do hereby declare the nature of this invention to be as follows:—

This invention relates to an improved frictional pocket lighter.

In the construction according to this invention the striking wheel is operated by an independent wheel or knob adjacent which is arranged and disposed a pivoted lever or the equivalent for actuating a cap and hood covering the wick and striking wheel whereby when the said wheel or knob is turned, with a downward stroke of the finger, for example, the cap and hood are simultaneously lifted due to the pivoted lever being depressed by the finger at the same time.

The invention may be carried into effect as follows:—

On the top of a flattened fuel container of customary type is secured a post carrying a horizontal sleeve within which is mounted a rotatable spindle. On one end of the spindle the striking wheel is secured and on the other end is secured a knob with a milled periphery. The flint pillar is secured in the fuel container underneath the striking wheel, and the wick tube projects from the container alongside the flint pillar. A lateral extension of the post referred to houses a spindle on one end of which is mounted

an arm carrying the cap and hood for the wick and striking wheel, and on the other end is an actuating lever provided with a rounded head, which lever normally i.e. when the wick and striking wheel are covered, projects upwardly with its head adjacent the knob.

The arm carrying the cap and hood is formed with a square boss under which in the top of the fuel container is mounted a spring detent serving to hold the arm in vertical and horizontal positions. In order that the pivoted actuating lever shall not have an amplitude of angular movement as great as a right angle, for in the normal position it should be well below the vertical whilst when depressed it should not go substantially below the horizontal being directly above the top of the fuel container, an angular lost motion is provided between the arm and the actuating lever.

With the above described construction the lighter can be held in the hand and operated by a downward stroke of a finger of the same hand whereby the flint is struck simultaneously with the lifting of the cap and hood.

Dated the 22nd day of March, 1928.
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COMPLETE SPECIFICATION (AMENDED).

Improved Frictional Pocket Lighter.

We, CHARLES HENRY COOK and JOHN REGINALD BARTLE, both of 81, Southfield Road, Bedford Park, London, W. 4, British subjects, do hereby declare the nature of this invention and in what

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manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to an improved frictional pocket lighter.

In the construction according to this invention the striking wheel is operated by an independent wheel or knob adjacent which is arranged and disposed a
 5 pivoted lever or the equivalent for actuating a cap and hood covering the wick and striking wheel whereby when the said wheel or knob is turned, with a downward stroke of the finger, for example, the cap
 10 and hood are simultaneously lifted due to the pivoted lever being depressed by the finger at the same time.

The invention is illustrated in the accompanying drawing in which figs. 1
 15 and 2 are elevations looking from opposite sides, fig. 3 a plan, and figs. 4 and 5 detail sections, figs. 1 and 2 showing the parts in different positions.

1 is a fuel container having a wick tube
 20 2 and a flint tube 3. Secured to the container is a post 4 carrying a horizontal tube 5 in which is rotatably mounted a spindle 6 carrying at one end a flint
 25 striking wheel 7 and at the other end a milled actuating knob 8.

9 is a second spindle which is rotatably mounted in the post 4 and which carries at one end an actuating arm 10, having
 30 a milled and rounded head 11, which normally (i.e. when the wick and striking wheel are covered) projects upwardly with its head adjacent the milled knob 8. The other end of the spindle is provided
 35 with a pin 12 extending into a sectional slot 13 found in an arm 14 freely mounted on the spindle 9, and the said arm 14 carries a hood 15 for covering the striking wheel 7 and a cap 16 for covering the wick. The arm 14 is also formed with a square
 40 boss 17 below which is located a detent 18 slidably mounted in a housing 19 extending into the container 1 and urged by a spring 20 with engagement with the boss.

45 The fuel container 1 may be provided with the usual perforated cylinder which surrounds the wick to prevent the extinction of the flame by the wind.

In operation the container is held in the
 50 hand and when a finger or the thumb of the same hand is moved with a downward stroke to rotate the milled knob 8 and hence to rotate the striking wheel 7 the rounded head 11 is also engaged and
 55 depressed by the finger or thumb until it comes into contact with the top of the container. The movement of the arm 10 is transmitted to the arm 14 by the engagement between the pin 12 with one side
 60 wall of the sectional slot 13 until when the corner of the square boss has passed its vertical "dead centre" the detent 18 (which has been depressed by the movement of the arm 14) reacts and causes the
 65 said arm to complete its movement. The

ensuing movement of the arm 14 is relative with respect to the arm 10 which is now stationary, this relative movement being permitted by the pin and sectional slot connection between said arms 10 and
 70 14. It will be seen that this arrangement enables the arm 14 to move through 90° and so completely to uncover the wick and striking wheel, and at the same time enables the arm 10 to move through an
 75 angle less than 90°, this latter being desirable since in its normal position (as seen in fig. 1) the rounded head 11 should be well below the vertical and when depressed should not go substantially below the horizontal.
 80

The parts can be restored to their original positions either by moving the arm 10 or the arm 14, the said arms being
 85 spring locked in said original position by the engagement between the spring-pressed detent 18 and the square boss 17 which engagement also facilitates the said reverse movement when the corner of the boss has passed its "dead centre"
 90 position.

It will be seen that with the construction according to this invention, the lighter can be held in one hand and operated by a downward stroke of a
 95 finger or of the thumb of the same hand to strike the flint simultaneously with the lifting of the cap 16 and hood 15.

We are aware of the specifications of prior letters patent No. 286,838 and we make no claim to the invention claimed or described therein.

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

1. In a frictional pocket lighter of the kind comprising a wick, a flint, a striking wheel therefor, and a hood and/or cap
 110 for covering the wick and wheel, the provision of a wheel or knob for rotating the striking wheel, and an arm or lever for raising the hood and/or cap so disposed adjacent said wheel or knob as to be
 115 operable simultaneously with the wheel or knob when the latter is actuated by a stroke of the finger or thumb for example substantially as described.

2. A pocket lighter as claimed in claim 120 1 comprising a spindle mounted on the container and carrying the striking wheel and the actuating wheel or knob and a second spindle mounted on the container at right angles to said first mentioned
 125 spindle, an arm being mounted at one end of said second spindle and a second arm carrying the hood and/or cap being mounted at the other end thereof.

3. A pocket lighter as claimed in claim 130

2 in which a lost motion device is provided between the arms.

4. A pocket lighter as claimed in claim 3 comprising a pin on the spindle to which the first mentioned arm is secured, a slot into which the pin extends formed in the second arm which is loosely mounted on said spindle and means such as a spring pressed plunger engaging a cam surface for moving said second arm relatively to said first mentioned arm.

5. A pocket lighter substantially as described with reference to the accompanying drawing.

Dated the 19th day of December, 1928.

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

