July 5, 1949.

D. FARMER

2,474,973

SMOKER'S LIGHTER

Filed April 10, 1947

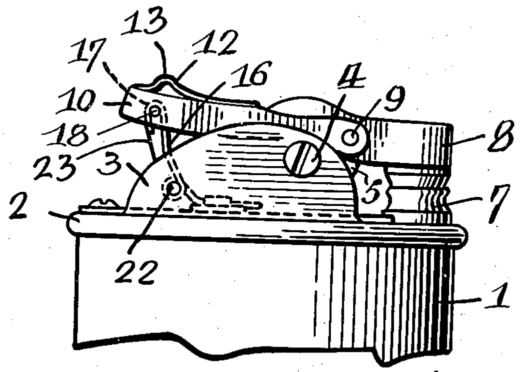

Fig. 1

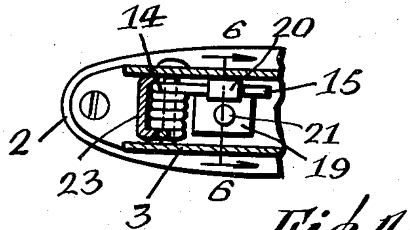

Fig. 4

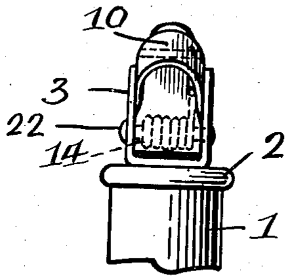

Fig. 5

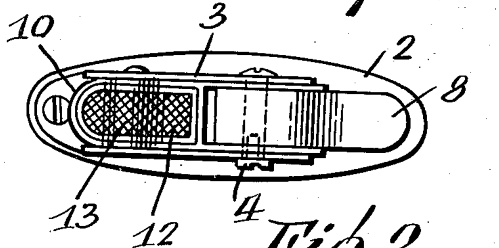

Fig. 2

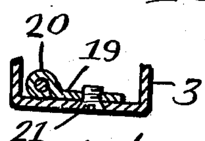

Fig. 6

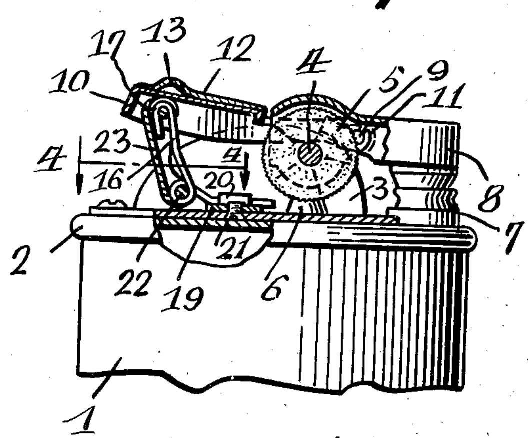

Fig. 3

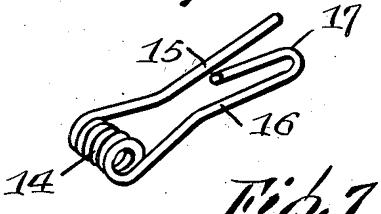

Fig. 7

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SMOKER'S LIGHTER

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Application April 10, 1947, Serial No. 740,525

2 Claims. (Cl. 67—7.1)

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The present invention pertains to a novel lighter for cigarettes, cigars and the like. The lighter is of the type wherein a spring-raised lever is depressed to uncover a wick and at the same time operate mechanism that throws a spark against the wick. The invention resides in the spring that holds the lever raised and the wick cover down.

The principal object of the invention is to provide a spring construction that is positive and firm in operation, durable, and at the same time relatively simple in construction. Conventional lighters require frequent replacement of the spring, and another object of this invention is to provide a spring so durable that replacement will not be necessary.

In the accomplishment of these objects, the spring is a coiled wire having two extended ends or legs engaging respectively the body of the lighter and the operating lever. One leg is hooked on a pin carried by the lever, while the other end is retained in a slidable condition on the body. For this purpose the body carries a boss in which the corresponding leg is slidably received. A guard encloses the spring to improve the appearance of the device, and also to attach the hooked leg to its pin so that the lever will follow the movement of the hooked end.

The invention is fully disclosed by way of example in the following description and in the accompanying drawings in which:

Figure 1 is a side elevation of the device;

Figure 2 is a plan view thereof;

Figure 3 is a side elevation, partly in section;

Figure 4 is a section on the line 4—4 of Figure 3;

Figure 5 is an end view;

Figure 6 is a section on the line 6—6 of Figure 4; and

Figure 7 is a perspective view of the spring.

Reference to these views will now be made by use of like characters which are employed to designate corresponding parts throughout.

In Figure 1 is shown a receptacle 1 of the type commonly employed in pocket lighters and fitted with a closed top 2. The top has a pair of upwardly extending spaced upright walls 3 between which is journalled a shaft 4 carrying an abrasive wheel 5, as shown in Figure 3. Beneath the wheel, a cone or boss 6 is mounted on the cover 2 for enclosing the flint rod engaged by the wheel 5 in a manner well known in the art and therefore not illustrated in detail herein. Also on the top 2, at one end thereof, is another boss 7 for containing the usual wick which is also well known and need not be shown.

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A cover 8 for the wick is mounted on the shaft 4 and is pivotally connected by a pin 9 to a channel-shaped operating lever 10 extending in the opposite direction. The connecting pin 9 also carries a pawl 11 which engages a ratchet provided on one side of the wheel 5 in the usual manner. The lever 10 may have a separate knurled top plate 12 formed with an upward bead 13 adapted for better engagement with the thumb in depressing the lever.

When the lever 10 is depressed, rocking on the shaft 4, it is evident that the cover 8 will expose the wick, while the pawl 11 turns the wheel 5 against the flint to throw an igniting spark against the wick. A spring is provided for holding the lever 10 raised and the cover 8 lowered, and this constitutes the essential feature of the present invention.

The spring, as shown in Figure 7, consists of a wire coil 14 with extended legs or ends 15 and 16, the latter being hooked at 17. The lever 10 carries a cross pin 18 over which the end 17 is hooked. On the cover 2 is attached a plate 19 having a boss 20 extending longitudinally of the body 1. The plate 19 is fastened in any suitable manner as by means of a screw 21. The leg 15 is passed slidably through the boss 20, and a transverse pin 22 mounted across the ears 3 passes through the leg 15.

A U-shaped guard 23 encloses the spring at the outer side thereof and is traversed by the pins 18 and 22. The guard also retains the hook 17 on the pin 18 so that the lever 10 will move with the hook. In the position shown in Figure 3, the spring is under tension and can contract no further because of the engagement of the cover 8 with the boss 7. As the lever 10 is depressed, the body of the spring will swing outward and hence expand or stress the spring still further. The leg 15, having a tendency to rise and being restrained by the boss 20, will merely slide in the boss. When pressure on the lever is released, the spring will return the parts to the position shown in Figure 3.

Although a specific embodiment of the invention has been illustrated and described, it will be understood that various alterations in the details of construction may be made without departing from the scope of the invention as indicated by the appended claims.

What I claim as my invention is:

1. In a lighter, a body, an actuator over said body, a wick cover connected to said actuator and adapted to rise on depression of said actuator, a transverse pin carried by said body, a spring

coiled on said pin and tensioned so as to have its legs extend from its ends in opposite directions, one of said legs being hooked on said actuator to one side of said pin, a boss mounted on said body on the other side of said pin and slidably receiving the other leg of said spring, and a guard enclosing said spring and pivotally attached to said body and actuator.

2. In a lighter, a body, an actuator over said body, a wick cover connected to said actuator and adapted to rise on depression of said actuator, a transverse pin carried by said body, a spring coiled on said pin and tensioned so as to have its legs extend from its ends in opposite directions, one of said legs being hooked on a transverse pin carried by said actuator to one side of said first mentioned pin, a boss mounted on said body on the other side of said first pin and slidably receiving the other leg of said spring, and a guard enclosing said spring and pivotally attached to said transverse pins.

DORIS FARMER.

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