

PATENT SPECIFICATION

289,736

Application Date: Dec. 16, 1927. No. 34,099/27.

Complete Accepted: May 3, 1928.



COMPLETE SPECIFICATION.

Improved Construction of Pyrophoric Pocket Lighter.

I, LEON REES, British subject, Director of the firm L. S. Mayer (London) Limited, of 12, New Union Street, Moorfields, London, E.C. 2, 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:—

The present invention relates to that class of pyrophoric pocket lighter in which, the ignition is effected, not by a friction wheel, but by a small, perfectly straight longitudinally moving file which is actuated by releasing the device which covers the ignition cover and the wick, whereupon the said cover springs out of the way at the same time as the friction member is moved to cause the pyrophoric flint to emit the sparks effecting the ignition. My invention relates to an improved construction of such a device and will be understood from the following description aided by the accompanying drawing, in which:—

Figure 1 is an elevation; Figure 2 a part vertical section in the working position; Figure 3 a plan of the lighter in the closed position and Figure 4 a longitudinal section in the closed position.

The casing *a*, with the base *b*, and top *c* is divided into two completely separated compartments I and II by a partition *d*. The compartment I has a hole in its base which is closed, in the usual manner, by a screw *e*, through which hole the compartment is filled with the fuel. The compartment II substantially contains the ignition mechanism, consisting of the friction member *f*, which is mounted in an angularly bent holder *g* and is actuated in such a way that it rises for the purpose of producing ignition, but retreats during the action of closing the lighter. This holder is reliably guided by means of a long stem or pin *h*, or the like, which moves in a tube *i* extending right through the compartment I, in such a way that it cannot tilt. Furthermore, the ignition mechanism *f, g, h* is also provided with sufficient guidance in the top compartment of the casing, and the upright portion of

the holder *g* passes through a holder in the top *c*.

The ignition mechanism is actuated, on the one hand by a spring *k*, and on the other by a cam lever *l, m*, which is preferably in duplicate, and is pivotally mounted in the small bearing brackets *n*. The cam *l* of said lever is so disposed that it bears against the horizontal portion of the holder *g*, and acts thereon as soon as the lever *m* is turned down, the holder *g* being thereby caused to descend and the spring *k* compressed, see Figure 4. In this position, the burners *r* are covered by tubular pieces *t* in a small cap *o* mounted on the free front end of the dual lever *m*, and in this position the cam *l* is positioned beyond the vertical line of its pivot and the pressure of the spring *k* will hold the cap and lever in that position.

When however, pressure is applied, in the direction of the arrow in Figure 4, upon the rear end *s* of the lever *m* which passes through slots *u*, the lever swings in the upward direction, with the result that the ignition mechanism *f, g, h* springs upward under the pressure of the spring *k*, thus striking sparks from the flint *p*, which is housed in the small tube *q* in the usual manner. The light is provided by means of the two burners *r*, which extend downwards into the compartment I and are disposed on each side of the friction surface of the friction member *f*. This arrangement ensures a light being obtained without fail. Of course, there may be only a single burner instead of two. When the lever *l, m* is turned over again the cap *o* covers the ignition mechanism at once, and at the same time, said mechanism is returned into its original position by the action on the cam *l*. The hollow guide *i* in this embodiment can also serve, in its lower portion, to hold a stock of spare flints.

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

1. A pyrophoric pocket lighter of the class described characterised in that the

[Price 1/-]

longitudinally moving striking or friction member *f* is carried by an angular member *g* suitably guided in the casing *a* of the lighter and subjected on the one hand to the action of a spring *k* for striking the flint and on the other to a cam *l* on a lever device *m*, pivoted to the casing *a* and carrying a cover *o* for retaining the member *f* against the action of the spring *k* and holding the lever *m* in the closed position, substantially as set forth.

2. The construction of pyrophoric pocket lighter substantially as described and as illustrated on the annexed drawings. 15

Dated this 16th day of December, 1927.

H. GARDNER & SON,
Chartered Patent Agents,
173-4-5, Fleet Street, London,
E.C. 4,
Agents for the said Applicant.

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

Fig. 1.

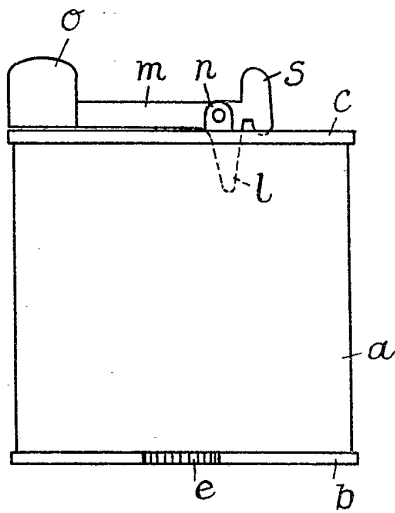


Fig. 2.

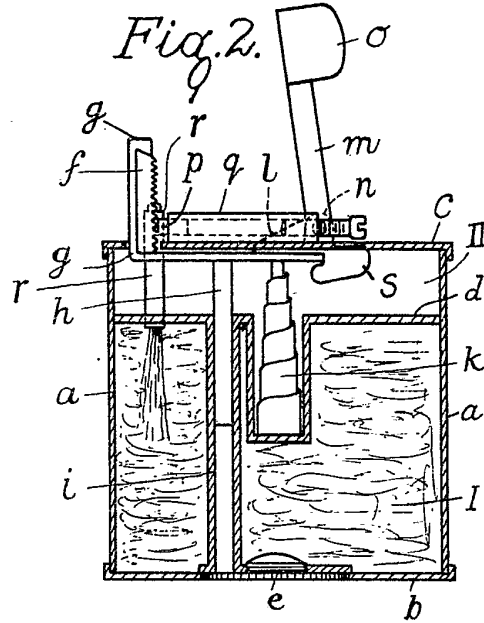


Fig. 3.

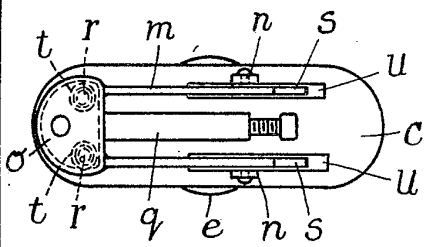


Fig. 4.

