

SUPERSEDED BY
AMENDED SPECIFICATION.

118,570

PATENT



SPECIFICATION

Application Date, Apr. 5, 1918. No. 5829/18.

Complete Accepted, Sept. 5, 1918.

COMPLETE SPECIFICATION.

Improvements in Pocket Lighters for Lighting Cigars, Cigarettes
and the like, or other purposes.

I, HARRY ALLDAY, of 195, Warstone Lane, Birmingham, Manufacturer, 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:—

3 This invention relates to pocket lighters for lighting cigars, cigarettes, pipes and the like, or for other purposes, of that type in which a wick or tinder is ignited by the sparks produced by the frictional contact of a steel or other metallic striker with a piece of pyrophoric or spark-producing substance (such as cerium), usually carried by a detachable cap or cover adapted to fit over
10 the wick or tinder holder, the latter carrying the striker and consisting of a case or reservoir containing an absorbent material adapted to be saturated with an inflammable spirit.

The objects of the present invention are to provide a compact and self-contained form of pocket lighter, to admit of the pyrophoric or like material
15 being easily replaced when worn, to improve the form of the striker, and to facilitate the raising of the wick or tinder when required.

Heretofore the holder or container which holds the wick or absorbent material and which carries the striker has not been completely enclosed in an outer case, being only provided with a detachable cap or cover that fits over
20 the outer end, and in some cases having fitted within its lower end a detachable fuel receptacle with an aperture for the emission of the combustible vapour.

According to the invention, however, the said holder or container is completely enclosed within a two-part tubular case of which one part carries the pyrophoric material or the like, so that by removing this part the wick
25 can be ignited by rubbing the striker (carried by the container) over the said pyrophoric material. The latter is mounted in a shoe or holder which is detachably secured to the case to allow of the material being readily renewed when worn; and the striker is in the form of a steel sleeve or tubular part of uniform length throughout its circumference and secured to the end of the
30 container, preferably between the inner walls of the latter and a closure piece which supports the wick. To facilitate adjustment the wick is passed through an axially-disposed tube carried by the said closure piece. The wick may pass around a cross-bar carried by the end of the carrier.

I am aware that in pocket lighters of the type referred to, steel tubular strikers having their ends shaped obliquely to a point so as to be of greater
35 depth at one side than at the other, have been carried by the wick holder or container, and I make no claim to such strikers.

Figure 1 of the accompanying drawings represents a perspective external view of the lighter.

[Price 6d.]

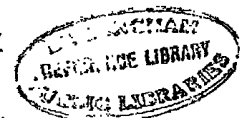


Figure 2 shows the lighter in use.

Figure 3 represents a longitudinal section through the lighter, and Figure 4 shows the parts separated.

Figure 5 illustrates an oval form of lighter.

Figure 6 shows a modification.

The lighter comprises a cylindrical body part or container *a* open at one end but closed at the opposite end by a flanged disc *b* carrying a central perforated tube *c* containing the wick *d*. Between the inside walls of the container *a* and the disc *b* a steel ring *e* is secured by soldering or the like. This ring *e*, which extends beyond the end of the container, constitutes the striker, its outer end being ground to a knife-edge. Through the open end of the container *a* cotton-wool or other absorbent material *f* is introduced and packed around the wick-tube *c*, said material being adapted to be saturated with petrol or other inflammable spirit.

The container *a* is enclosed within a tubular case comprising a lower part *g* stepped or shouldered at *g*¹ and adapted to fit closely over the open end of the container, and an upper or cap portion *h* which fits over the stepped part *g*¹ so as to lie flush with the surface of the lower portion *g*.

The cap *h* carries the pyrophoric or spark-producing material *j* which consists of a flat bar mounted in a shoe or holder *k* having a screw-shank *k*¹ adapted to be detachably screwed into an internally screw-threaded socket *h*¹ in the end of the cap. The material *j* can thus be readily replaced when worn.

In use the cap *h* is detached and the striker *e* is rubbed rapidly across the material *j*, as in Figure 2, thereby producing a series of sparks which impinge upon the wick and ignite it. By employing a striker of ring form any part of its edge may be used, and the pyrophoric material wears uniformly.

Owing to the wick being enclosed within the tube *c* it can be readily drawn through as it burns away.

If desired, the lighter may be of oval form, as shown in Figure 5.

In the form shown in Figure 6, the inner end of the wick *d* passes over or around a cross-bar *m* carried by the end of the container *a* so as to cross the interior of the latter diametrically and act as a guide to the wick, so that the latter can be drawn easily through the tube *c* as it burns away. The end of the container *a* is cut away at opposite sides as at *a*¹, in order to prevent the wick being nipped between the container and the bottom of the part *g* of the case when the latter is fitted over the said container.

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 pocket lighter of the type referred to comprising a tubular holder or container for the wick and absorbent material, a striker carried by the container, and a two-part tubular case completely enclosing the container and of which one part carries the pyrophoric material or the like, substantially as described.

2. A pocket lighter according to Claim 1, in which an open end of the container is closed by the lower part of the tubular case, the upper removable part of which carries the pyrophoric material or the like and fits over the said lower part, substantially as described.

3. In a pocket lighter of the type referred to; carrying the pyrophoric material or the like by means of a holder which is detachably secured to the cap or case of the lighter.

4. A pocket lighter according to Claim 3, in which the holder of the pyrophoric material or the like is provided with a screw-shank adapted to be screwed into the cap or case of the lighter.

5. In a pocket lighter of the type referred to; the employment of a striker

consisting of a steel sleeve or tubular part of uniform length throughout its circumference, said striker being carried by the container, substantially as described.

5 6. In a pocket lighter according to Claim 5; the employment of a striker sleeve secured between the inside walls of the container and a disc or closure piece at the end of the latter, substantially as described.

7. In a pocket lighter according to Claim 6; enclosing the wick within a perforated tube carried by the disc or closure at the end of the container, substantially as described.

10 8. In a pocket lighter according to the preceding claims; the employment at the inner end of the container, of a cross-bar over or around which the inner end of the wick is passed, substantially as described.

15 9. In a pocket lighter according to the preceding claims; the employment of a container having its inner end gapped or cut away at opposite sides, substantially as described.

10. The improved pocket lighter substantially as herein described and set forth in Figures 1 to 5 or in Figure 6.

Dated this 4th day of April, 1918.

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H. N. SKERRETT,
Chartered Patent Agent,
24, Temple Row, Birmingham,
Agent for Applicant.

Fig. 1.

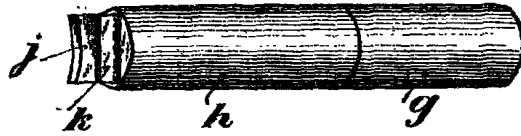


Fig. 2.

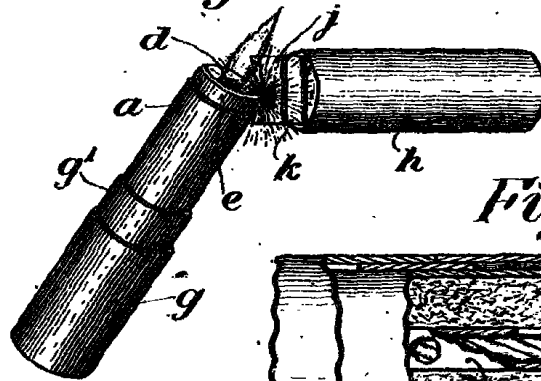


Fig. 6.

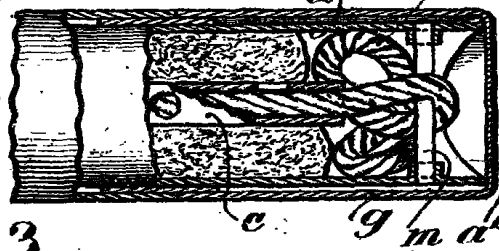


Fig. 3.

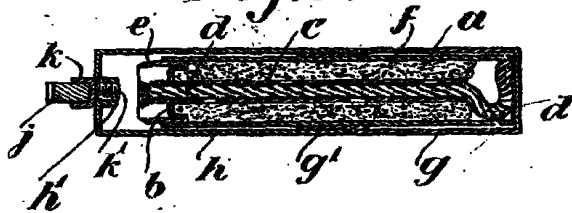


Fig. 4.

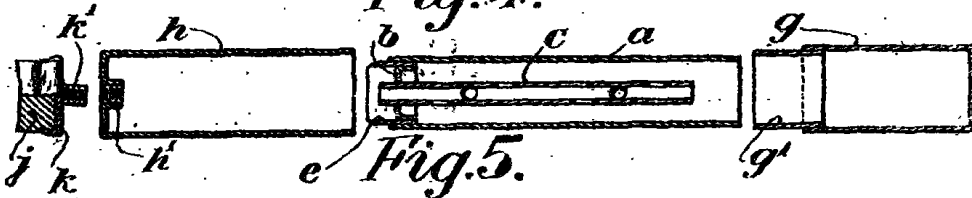
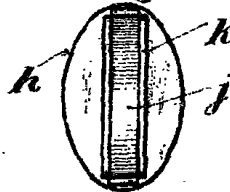
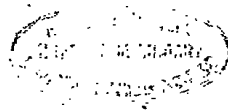


Fig. 5.



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



AMENDED SPECIFICATION.

Reprinted as amended in accordance with the decision of the Chief Examiner,
dated the 6th day of January, 1919.

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I, HARRY ALLDAY, of 195, Warstone Lane, Birmingham, Manufacturer, 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:—

5 This invention relates to pocket lighters for lighting cigars, cigarettes, pipes and the like, or for other purposes, of that type in which a wick or tinder is ignited by the sparks produced by the frictional contact of a steel or other
10 metallic striker with a piece of pyrophoric or spark-producing substance (such as cerium), usually carried by a detachable cap or cover adapted to fit over the wick or tinder holder, the latter carrying the striker and consisting of a case or reservoir containing an absorbent material adapted to be saturated with an inflammable spirit. A previously proposed form of this type of lighter com-
15 prised a tubular holder or container for the wick and absorbent material, a striker carried by the container, and a two-part tubular case completely enclosing the container and of which one part carries the pyrophoric material, or the like, and the other part removably carries the tubular holder or container.

The objects of the present invention are, to admit of the pyrophoric or like material being easily replaced when worn, to improve the method of securing the striker, and to facilitate the raising of the wick or tinder when required.

20 According to the invention, the pyrophoric material is mounted in a shoe or holder which is detachably secured to the case to allow of the material being readily renewed when worn; and the striker is in the form of a steel sleeve or tubular part of uniform length throughout its circumference and secured to the end of the container between the inner walls of the latter and a closure piece
25 which supports the wick. To facilitate adjustment the wick is passed through an axially-disposed tube carried by the said closure piece. The wick may pass around a cross-bar carried by the end of the carrier.

Figure 1 of the accompanying drawings represents a perspective external view of the lighter

30 Figure 2 shows the lighter in use.

[Price 6d.]

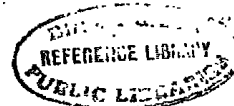


Figure 3 represents a longitudinal section through the lighter, and Figure 4 shows the parts separated.

Figure 5 illustrates an oval form of lighter.

Figure 6 shows a modification.

The lighter comprises a cylindrical body part or container *a* open at one end 5 but closed at the opposite end by a flanged disc *b* carrying a central perforated tube *c* containing the wick *d*. Between the inside walls of the container *a* and the disc *b* a steel ring *e* is secured by soldering or the like. This ring *e*, which extends beyond the end of the container, constitutes the striker, its outer end 10 being ground to a knife-edge. Through the open end of the container *a* cotton-wool or other absorbent material *f* is introduced and packed around the wick-tube *c*, said material being adapted to be saturated with petrol or other inflammable spirit.

The container *a* is enclosed within a tubular case comprising a lower part *g* 15 stepped or shouldered at *g*¹ and adapted to fit closely over the open end of the container, and an upper or cap portion *h* which fits over the stepped part *g*¹ so as to lie flush with the surface of the lower portion *g*.

The cap *h* carries the pyrophoric or spark-producing material *j* which consists of a flat bar mounted in a shoe or holder *k* having a screw-shank *k*¹ adapted to be detachably screwed into an internally screw-threaded socket *h*¹ in the end 20 of the cap. The material *j* can thus be readily replaced when worn.

In use the cap *h* is detached and the striker *e* is rubbed rapidly across the material *j*, as in Figure 2, thereby producing a series of sparks which impinge upon the wick and ignite it. By employing a striker of ring form any part of its edge may be used, and the pyrophoric material wears uniformly. 25

Owing to the wick being enclosed within the tube *c* it can be readily drawn through as it burns away.

If desired, the lighter may be of oval form, as shown in Figure 5.

In the form shown in Figure 6, the inner end of the wick *d* passes over or 30 around a cross-bar *m* carried by the end of the container *a* so as to cross the interior of the latter diametrically and act as a guide to the wick, so that the latter can be drawn easily through the tube *c* as it burns away. The end of the container *a* is cut away at opposite sides as at *a*¹, in order to prevent the wick being nipped between the container and the bottom of the part *g* of the 35 case when the latter is fitted over the said container.

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. In a pocket lighter of the type referred to; carrying the pyrophoric material or the like by means of a holder which is detachably secured to the cap 40 or case of the lighter.
2. A pocket lighter according to Claim 1, in which the holder of the pyrophoric material or the like is provided with a screw-shank adapted to be screwed into the cap or case of the lighter.
3. In a pocket lighter of the type referred to; the employment of a striker 45 consisting of a steel sleeve or tubular part of uniform length throughout its circumference and secured between the inside walls of the container and a disc or closure piece at the end of the latter, substantially as described.
4. In a pocket lighter according to Claim 3; enclosing the wick within a per- 50 forated tube carried by the disc or closure at the end of the container, substantially as described.
5. In a pocket lighter of the type referred to and comprising a tubular holder or container for the wick and absorbent material, a striker carried by the con- 55 tainer, and a two-part tubular case completely enclosing the container and of which one part carries the pyrophoric material or the like; the employment at the inner end of the container, of a cross-bar over or around which the inner end of the wick is passed, substantially as described.

6. In a pocket lighter of the type referred to and comprising a tubular holder or container for the wick and absorbent material, a striker carried by the container, and a two-part tubular case completely enclosing the container and of which one part carries the pyrophoric material or the like; the employment
5 of a container having its inner end gapped or cut away at opposite sides, substantially as described.

Dated this 4th day of April, 1918.

10

H. N. SKERRETT,
Chartered Patent Agent,
24, Temple Row, Birmingham,
Agent for Applicant.

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

Fig. 1.



Fig. 2.

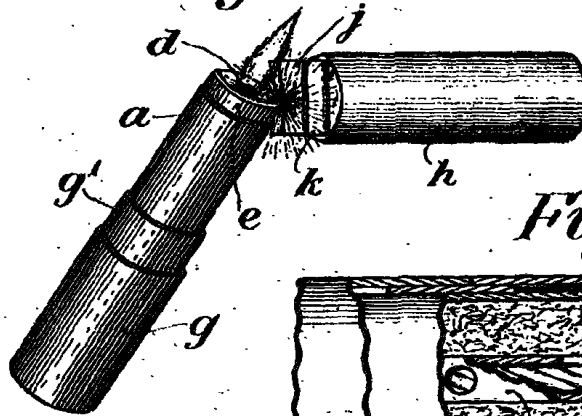


Fig. 6.

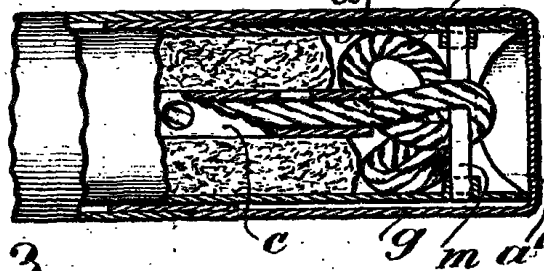


Fig. 3.

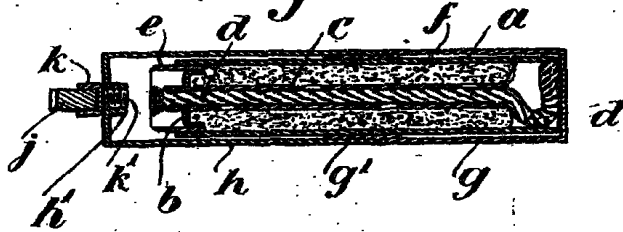


Fig. 4.

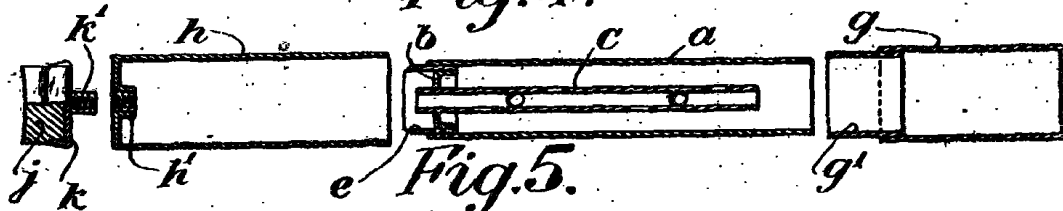


Fig. 5.

