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PATENT



SPECIFICATION

*Application Date, June 5, 1918. No. 9252/18.*

*Complete Left, Dec. 5, 1918.*

*Complete Accepted, Mar. 27, 1919.*

PROVISIONAL SPECIFICATION.

**Improvements in Pocket Lighters.**

We, WILLIAM HENRY MOORE, Managing Director of a Limited Company, of 23 & 24, Warstone Lane, Birmingham, and WILLIAM ALLEN TAYLOR, Foreman, of 1, Sandown Grove, Lozells Road, Birmingham, do hereby declare the nature of this invention to be as follows:—

5 The invention relates to a pocket lighter of the kind using a striker in bar or strip form as distinctive from one having a revoluble disc or wheel, and provides the hereinafter described improvements enabling said bar or strip to be very easily and conveniently renewed.

10 An attachment piece, conveniently in the form of a shallow cup, has through it, or through its closed end, a slot of the approximate shape and size of the compound bar or strip. Through this slot said bar or strip is adapted to project, being applied from the inside of the piece to project upon the outside of said piece up to an abutment seating which prevents said bar or strip being pushed right through the slot from the inside. The piece or cup is adapted,  
15 after the bar or strip has been applied to it, for detachable attachment to a lighter body, or cap, which attachment simultaneously rigidly secures the bar or strip in position projecting through the slot, or the sides of the cup may have bayonet or similar slots in them to be engaged by projections on the lighter body or cap; the features of construction, aforesaid, being that the piece or  
20 cup is detachable from the lighter body, the bar or strip is a push-in piece to project through the slot, and the attachment of the piece or cup to the lighter effective in securing said bar or strip in position.

In any form of the invention, particularly when the bayonet slots are used, a slightly elastic washer or part is applied to the piece or cup at the back of  
25 the bar or strip to effectively secure the piece or cup to the lighter body and resiliently press the bar or strip into the slot, and it is a feature of one form of the invention to market said elastic washer and striker bar or strip as a one-piece part which may be easily slipped into the attachment piece or cup from the inside.

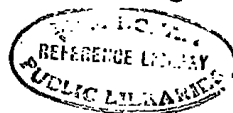
30 The invention is equally applicable to petrol lighters or glow wick lighters, the striker bar or strip being either obliquely disposed in respect of the lighter or at right angles thereto, and usually applied to the end of the removable cap of the lighter.

Dated this 4th day of June, 1918.

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GEORGE T. FUERY,  
Patent Agent,  
8, Newhall Street, Birmingham.

[Price 6d.]



## COMPLETE SPECIFICATION.

## Improvements in Pocket Lighters.

We, WILLIAM HENRY MOORE, Managing Director of a Limited Company, of 23 & 24, Warstone Lane, Birmingham, and WILLIAM ALLEN TAYLOR, Foreman, of 1, Sandown Grove, Lozells Road, Birmingham, 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:—

Pocket lighters are usually used for lighting cigarettes, cigars and pipes.

The invention relates to a pocket lighter of the kind using a striker in bar or strip form, as distinctive from a lighter having a revoluble disc or wheel.

In a lighter of the disc or wheel type a rod of striker compound is operated upon at its end by the periphery of the revoluble disc or wheel, said rod being applied to a tube disposed on the side of the lighter body in an easily renewable manner.

In the type of lighter referred to using a bar or strip of striker compound, and not having a revoluble wheel or disc, said bar or strip is carried upon an enclosing cap which fits over the burner piece, or the tinder holder, of the lighter, said bar or strip being adapted for striking against the edge of a stationary steel piece applied to the wick or tinder container adjacent to the burner end to create sufficient sparking for igniting the wick or tinder, as, for instance, in our prior Application for Patent No. 5268 of 1918. This bar or strip of striker compound is usually applied to a shoe or carrier soldered to the upper end of the cap, but it has previously been proposed to provide for said bar's easier renewal when worn by attaching the shoe to the end of the cap by a screw shank on the shoe engaging a screw socket in the cap end.

The invention relates to this latter type of lighter and provides the hereinafter described and claimed improvements therein enabling said bar or strip of striker compound to be very easily and conveniently renewed, and to be more efficiently held in position. Hereinafter said bar or strip of striker compound will be referred to as a "ceric" bar.

An attachment piece, conveniently in the form of a shallow cup, has through its closed end a slot of the approximate shape and size of the "ceric" bar. Through this slot said bar is applied from the inside of the cup to an abutment to project on the outside of the cup, the abutment preventing said bar being pushed right through the slot. The cup is adapted for detachable attachment to the cap of the lighter in such manner that the "ceric" bar is held within its slot by the attachment and is maintained in a projecting position so long as the cup is attached to the cap, the head part of which cap the said cup may itself form. Between the "ceric" bar, or a plate carrying it, and the abutment of the cap are slightly elastic distance pieces conveniently permitting of the cup being attached to the cap by a bayonet slot arrangement, and pressing said bar through the slot up to its abutment in a slightly resilient manner so that when striking the bar against the steel piece for sparking there is a certain amount of yield of the "ceric" bar preventing digging or notching of said bar during striking.

A desirable adaptation of the invention is represented by the accompanying drawings.

Fig. 1 shows a petrol lighter with the invention applied as part of the enclosing cap.

Fig. 2 is an elevation of the cap only, Fig. 1, at right angles.

Fig. 3 is a plan of Fig. 2.

Fig. 4 is a section of the various parts building up the cap Fig. 2.

Figs. 5, 6 and 7 are plans of the various parts Fig. 4.

With particular reference to Fig. 1, *a* is the tubular burner piece of the lighter, *c* the steel striker ferrule surrounding same and carried thereby, *d* is the exterior body into which the burner piece fits and forming a petrol con-

tainer, and *e* is the cap fitting over said body, burner piece, and ferrule to enclose these parts.

The invention is applied to this cap *e* in the following manner:—

A shallow cup, *f*, has through its otherwise closed end, *f*<sup>2</sup>, a slot *f*<sup>3</sup>, of the approximate shape and size of the "ceric" bar, *g*, which is rectangular in plan shape, has inclined ends *g*<sup>2</sup> *g*<sup>2</sup>, and is applied a tight push-in fit to a hole, *h*<sup>2</sup>, in a carrier-plate or washer, *h*, having pierced from it end ears, *h*<sup>3</sup>, *h*<sup>3</sup>, to said hole providing inclined abutment parts for the opposing inclining ends of the "ceric" bar, particularly so that said bar cannot push through the hole in said carrier-plate from the underside of said plate, but may well project from the top-side of said plate. The carrier-plate *h* fits the interior of the cup *f*, and the ears *h*<sup>3</sup> *h*<sup>3</sup> project into the ends of the slot *f*<sup>3</sup> when the "ceric" bar *g* projects through the slot *f*<sup>3</sup> of the cup, and thereby said ceric bar is most efficiently positioned to, in greater part, project from the interior of the cup to the exterior without any possible chance of pulling through or being displaced by the use of the "ceric" bar for spark creating. The cup *f* forms the actual head of finishing end to the cap *e*, and detachably engages same by bayonet-slot devices provided between the depending sides *f*<sup>4</sup> of the cup and projections *e*<sup>2</sup> of the cap. Between the underside of the carrier plate *h* and "ceric" bar and the top of the cap *e* (which top is provided by a plate *e*<sup>3</sup> carrying the projections *e*<sup>2</sup>) distance pieces such as *i* and *j* are provided of a slightly elastic character permitting of the bayonet slot connection, aforesaid, being effected, always pressing the carrier-plate *h* and the "ceric" bar upwardly into the cup, and the "ceric" bar through the slot *f*<sup>3</sup> by a slightly elastic action which prevents any digging or notching of the bar in use. The cap *e* is made of a tubular piece with opposite gaps in the upper edge for the projections *e*<sup>2</sup> of the plate *e*<sup>3</sup> to lie in, the upper edge of this tube being spun over the plate to hold it in position partially closing the top of the tube.

As a renewal the "ceric" bar *g* and the plate *h* are sold as a one-piece unit, the bar *g* holding itself in the slot and between the ears of said plate by tightly fitting same.

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

1. In a lighter of the kind referred to, renewably applying a "ceric" bar to the cap of the lighter by a piece or cup detachably connecting with the cap and provided with a slot through which said bar securely projects from the interior of the cup to the exterior when said cup is attached to the cap.
2. A renewable application of "ceric" bar in accordance with the preceding claim, and in which said bar is resiliently pressed through the slot of the cup to project, substantially as described.
3. A lighter having a renewable application of "ceric" bar in accordance with the first claim, and in which said bar and the carrier-plate or washer are adapted for renewal as a one-piece unit, substantially as described.
4. A renewable application of "ceric" bar in accordance with the first or second claim, and in which the cup is attached to the cap by bayonet slot connections combined with resilient distance pieces between the "ceric" bar, carrier-plate, and the upper end of the cap, substantially as described.
5. In a lighter of the kind referred to, and provided with a renewable application of "ceric" bar in accordance with any one or more of the preceding claims, an arrangement in which the cup formed with the slot for the projection of the "ceric" bar provides the actual top or upper end of the cap of the lighter, substantially as described.

Dated this 4th day of December, 1918.

GEORGE T. FUERY,

Patent Agent,

8, Newhall Street, Birmingham.

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

Fig. 1.

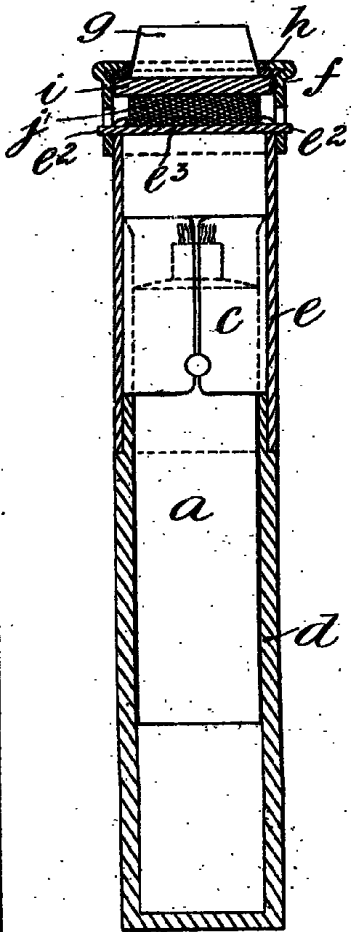


Fig. 2.

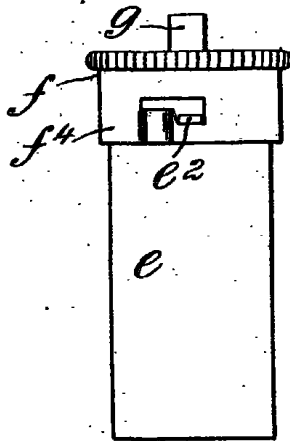


Fig. 4.

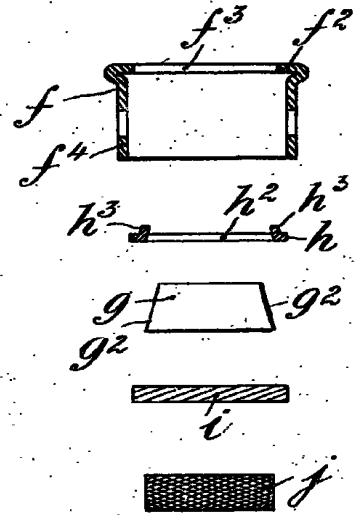


Fig. 3.

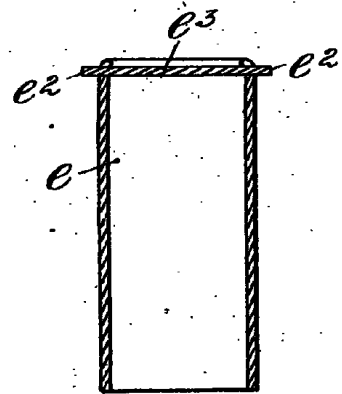
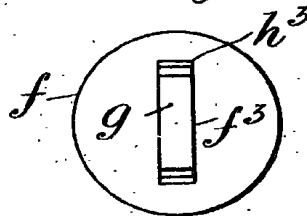


Fig. 5.

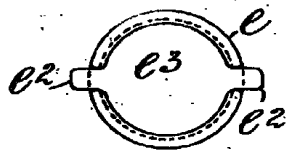


Fig. 6.

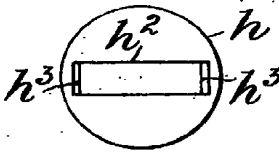


Fig. 7.

