

123,496

PATENT



SPECIFICATION

Application Date, Oct. 2, 1918. No. 15,992/18.

Complete Left, Oct. 14, 1918.

Complete Accepted, Feb. 27, 1919.

PROVISIONAL SPECIFICATION.

Improvements in Combined Tinder and Petrol or Spirit Lighters.

I, WILLIAM BLAKE RIGNALL, Inventor, 380, York Road, London, N. 1, do hereby declare the nature of this invention to be as follows:—

My invention relates to pyrophoric lighters and its object is to provide a combined tinder lighter and petrol or spirit lighter made in such a form that the tinder wick can be made to revolve round or about a reservoir containing spirit or the like and which may be used separately either as a petrol or spirit lighter, or tinder lighter.

In carrying out my invention I provide a reservoir for petrol or spirit made in a round, oval or other suitable shape. Round this reservoir I provide a tubular ring or any other suitable contrivance to carry a tinder wick. In this ring or other suitably shaped covering, a slot may be cut to enable the tinder wick to be pushed round and through a suitable opening where it comes in contact with a sparking arrangement. This sparking arrangement is provided either in the form of the ordinary friction wheel & flint as is used in such lighters, or a piece of flint or other sparking composition may be used in which case the said flint, composition, or other sparking device is placed in such a position that on drawing a piece of hardened steel or the like over or along it, a spark is produced which ignites the wick of tinder lighter or if desired by reversing the action the petrol or spirit lighter may be lit from a wick which runs down into a reservoir containing cotton wool or other suitable material saturated with petrol or other spirit.

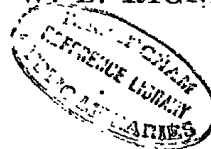
I do not confine myself to sparking arrangement herein described as other suitable contrivances may be used.

What I aim at producing is a combined tinder or petrol lighter made in such a form that a tinder wick may be encased in a covering and made to revolve round a petrol lighter, or if desired the outer covering may be used for spirit and the inner case for tinder wick, suitable means for causing the tinder wick to protrude & to be withdrawn, being provided. If required a tinder lighter may be made separately on the same principle & forming a compact article doing away with the risk of setting fire to the pocket as is the case in the ones in use.

Dated this 1st day of October, 1918.

W. B. RIGNALL.

[Price 6d.]



COMPLETE SPECIFICATION.

Improvements in Combined Tinder and Petrol or Spirit Lighters.

I, WILLIAM BLAKE RIGNALL, of 380, York Road, London, N. 1, Inventor, 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:—

My invention relates to pyrophoric lighters and the like, its object being to provide a combined lighter for tinder wicks as well as a spirit lighter, wherein the tinder is made to coil round or about a container for the spirit or the like and which can be used at will either as a petrol or spirit lighter or as a tinder-wick lighter. 5

At the same time it will be seen that the tinder-wick is completely encased or covered in and that the device is therefore neat in appearance since the tinder-wick is not left loose to dangle about, which is known to have led to holes being burnt in the user's pocket. 10

In order that my invention may be clearly understood and readily carried into effect, I will now describe the same fully with reference to the accompanying drawings which show several forms of execution of the invention by way of example. In these drawings:— 15

Fig. 1 is a front elevation of one form of construction wherein the tinder wick is disposed within an outer ring-shaped casing, the interior of such ring-member being closed and serving as a receptacle for containing cotton or like absorbent material saturated with petrol or other spirit into or against which a wick depends. Ignition is obtained by striking a steel pin over a flint or flint or cerium composition. 20

Fig. 2 is a sectional view with the wadding container taken out.

Fig. 3 shows the same arrangement with a wheel and flint ignition. 25

Fig. 4 shows a side view corresponding to Fig. 3.

Fig. 5 shows a form of construction wherein the tinder-wick is wound on a central drum, the outer ring serving as a container for the spirit.

In carrying my invention into effect, I provide according to one form of construction, a reservoir *a* or the like of any suitable form to contain the spirit and I further provide a suitable contrivance for carrying and encasing a tinder-wick in such a manner that the same may be readily ignited by the same igniting means as the spirit lighter. In Fig. 1, for example, the tinder wick *b* is placed within a tubular ring-shaped member or casing *c* surrounding the petrol or spirit container *a*, and can be made to protrude at one end *d* when required to be ignited, the other end *e* of said ring being closed or formed with a closed recess to receive the steel point *f* of the cap *g* for the wick *h*. The steel is rubbed along the flint or like composition *i*, say to the left to ignite the wick *h* or to the right to ignite the tinder-wick *b*, as will be readily perceived. 30 35 40

When no longer wanted the tinder wick *b* may be withdrawn into the tube *c* in any suitable manner so as to be properly snuffed or extinguished and avoid any chance of burning one's pocket. If desired, though in practice it is found quite unnecessary, a ball and chain or like means may be fitted at the end of the tinder-wick *b* in known manner to close the mouth *d* of the tube when the wick *b* is withdrawn. 45

Instead of the flint and steel I may adopt the ordinary wheel and flint as shown by *k* in Fig. 3.

To withdraw the tinder wick *b* or to make it protrude from the mouth *d* of the tubular member *c*, I may adopt any suitable means. In Fig. 4 I have 50

for instance shown a slot *l* and a knob *m* which is connected to the tinder wick *b* and by sliding one way or the other in the slot *l* causes the wick *b* to protrude or be withdrawn as required. Obviously I may use other known means of operating the tinder wick *b*, say by the ball and chain arrangement
5 at one end.

In the modification shown at Fig. 5, the tubular ring-member or the like *n* is formed as a reservoir for the spirit, a gap *o* being left for the passage of the tinder wick *b* which is coiled up within the ring-member and may here again be caused to protrude or be withdrawn in a similar manner to that hereinbefore
10 explained; or another simple means of obtaining this object would be to make the cover or casing *r* rotatable in known manner so that by turning it in one direction or the other the tinder wick *b* is forced out or drawn in as the case may be.

In each case, the petrol or spirit wick and the tinder wick are arranged on
15 either side of the igniting means so that either may be used as desired.

On the other hand the two wicks might be arranged side by side but this would not be economical since the spirit wick would continue to burn while the tinder wick was in use.

Further I do not limit myself to the sparking arrangements herein described;
20 any other suitable means may be used and the general shape of the article is not confined to the forms shown in the drawings. These may vary without departing from the nature of the invention.

The reservoir *a* may be simply a kind of lid as in Fig. 2, hinged or otherwise made to fit tightly into the member *c* and containing absorbent material.

25 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 combined spirit and tinder-wick lighter wherein the tinder wick is completely encased and made to coil within or around a spirit container so that
30 either or both the spirit wick and the tinder wick may be ignited as desired.

2. A combined pyrophoric lighter as claimed in Claim 1, comprising an inner spirit reservoir, a surrounding tinder-wick container and steel and flint igniting means as described and as shown in Figs. 1 and 2.

3. A combined pyrophoric lighter as claimed in Claim 1, in which an outer
35 reservoir containing spirit surrounds a coiled tinder wick and means for igniting the wicks, substantially as described.

4. In a combined pyrophoric lighter as claimed in Claims 1 to 3, means for withdrawing or causing the tinder wick to protrude, as described.

5. A combined pyrophoric lighter as claimed in the previous claims, con-
40 structed, combined and arranged to operate substantially as described with reference to and as shown in Figs. 1 & 2, or 3 and 4 or in Fig. 5 of the accompanying drawings.

Dated this 14th day of October, 1918.

45

CHATWIN, HERSCHELL & Co.,
253, Gray's Inn Road, London, W.C. 1,
Patent Agents for the Applicant.

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

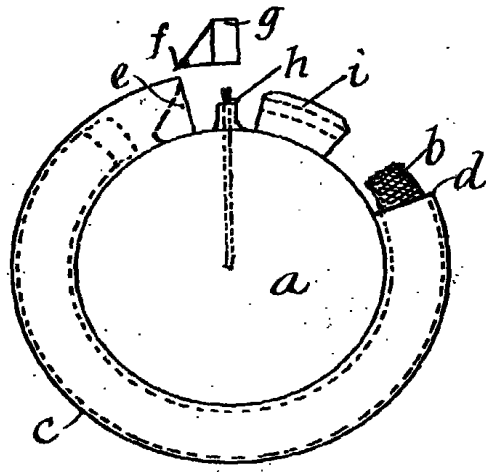


Fig. 1.

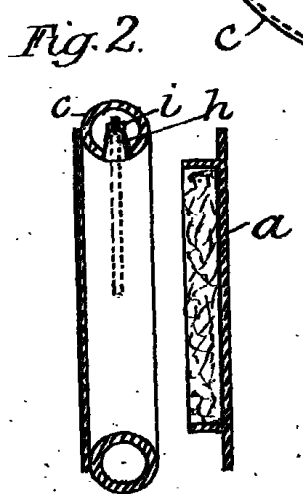


Fig. 2.

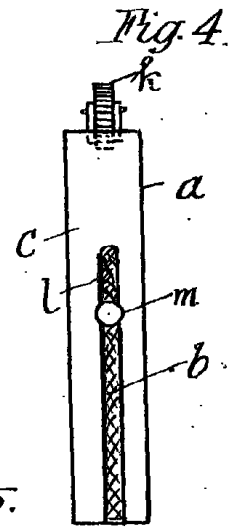


Fig. 4.

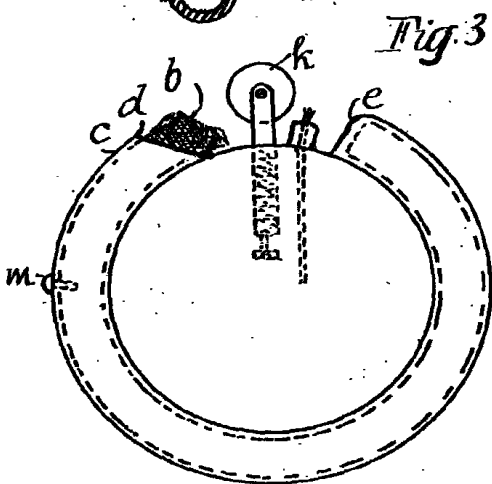


Fig. 3.

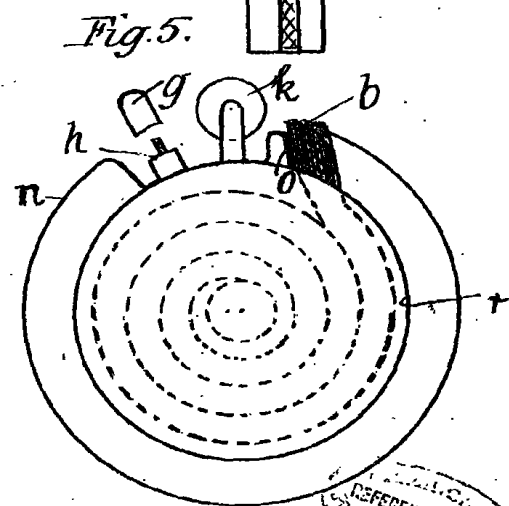


Fig. 5.

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