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## PATENT SPECIFICATION

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### PROVISIONAL SPECIFICATION

#### A Screwless Flint Lighter

I, THOMAS CHARLES CAMBRIDGE, 83, Peartree Lane, Welwyn Garden City, Herts, of British Nationality, do hereby declare the nature of this invention to be  
5 as follows:—

My invention consists of an improved flint lighter which could be made in various designs either of metal or plastic material and in which the use of screws  
10 is avoided. In the preferred form my lighter comprises a fuel reservoir containing a wick and absorbent material such as cotton wool, one side of the reservoir being formed with a rectangular recess  
15 extending from the top to near the bottom of the reservoir. In this recess I place a

block or casing carrying the flint wheel, flint, and spring. The block is provided with external projections or pins engaging preferably triangular slots in the sides  
20 of the recess in the reservoir and when in position the spring abuts at its lower end the base of the recess. The sides of the reservoir may be extended above the top  
25 of the fuel space and be perforated to form a wind guard for the flame. The fuel reservoir and flint carrying block are normally held in an outer casing having a removable sliding lid.

Dated the 2nd February, 1942.

THOS. CAMBRIDGE.

### COMPLETE SPECIFICATION

#### A Screwless Flint Lighter

I, THOMAS CHARLES CAMBRIDGE, a British subject, of 83, Peartree Lane, Welwyn Garden City, in the County of Hertford, do hereby declare the nature of this invention and in what manner the  
30 same is to be performed, to be particularly described and ascertained in and by the following statement:—

The subject of this invention is a screwless flint lighter, that is, a pyrophoric  
40 lighter of the kind comprising a flint, a striker, a wick, and a fuel reservoir, characterised according to the invention by the elimination of the screw caps which are usually employed either to close the  
45 fuel reservoir or to support the flint in striking position.

According to the invention the fuel reservoir is open at the bottom to an outer casing, and is constructed with a recess at  
50 one side within which is fitted a separate inner structure or casing containing the flint and a spring supporting the flint, at the top of which casing a striker is mounted. Means are provided to retain  
55 the said inner casing at the proper height relatively to the fuel reservoir, so that the spring will abut against the bottom of the recess therein and the flint will be appropriately placed relatively to the  
60 wick, such means preferably consisting of

projections on each side of the casing engaging triangular or other shaped notches in the walls of the recessed part of the fuel reservoir. Three of the walls of the fuel reservoir may be extended upward  
65 above the top of the fuel space to form a wind guard for the flame, and may be perforated. The outer casing normally holding the fuel reservoir and flint carrying casing has a removable sliding lid. 70

In order that the said invention may be clearly understood and readily carried into effect, the same will now be further described with reference to the accompanying drawings illustrating an  
75 exemplification of the device according to the invention.

Figure 1 represents in side elevation the complete device with the lid removed, and Figure 2 is a front elevation. 80

Figure 3 is a side elevation, Figure 4 a front elevation and Figure 5 a plan of the fuel reservoir detached.

Figure 6 is a side elevation of the flint casing and Figure 7 a view of the under-  
85 side thereof.

A indicates the outer casing, B the lid, C the fuel reservoir, D the flint casing at the top of which is rotatably mounted the striking wheel E. The part of the reser-  
90 voir C which contains cottonwool or other

absorbent material to hold the fuel is somewhat L-shaped, and is open at the bottom, where it may rest on a pad of similar absorbent material contained in the bottom of the outer casing A. The fuel can be replenished by pouring it on this pad when the reservoir is lifted out. The side and rear walls of the fuel reservoir project above the flat top of the said reservoir through which the wick W passes, and the said walls are perforated at C<sup>1</sup>. The flint casing D may be stamped and pressed out of one piece of metal, a portion of which is turned in to form a tube F (see Figure 7) in which the flint and its spring G (see Figure 6) are housed. The bearings H for the striking wheel are made to project slightly over the top of the fuel reservoir to assist in maintaining the flint casing in its correct position with its spring abutting against the part C<sup>2</sup> of the fuel reservoir.

A pin J (Figure 7) is secured across the flint casing and at each end takes into notches K in the side walls of the fuel reservoir.

The device can be constructed of either metal or plastic material, and can be of any of various designs externally.

30 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 lighter of the kind set forth 35 wherein the fuel reservoir is open at the bottom to an outer casing and is constructed with a recess at one side, within which is fitted a separate inner structure or casing containing the flint and a 40 spring supporting the flint, at the top of which inner casing a striker is mounted, the usual screw caps being eliminated.

2. A lighter as in claim 1 wherein means are provided to retain the inner 45 casing at the proper height relatively to the fuel reservoir, so that the spring will abut against the bottom of the recess in the fuel reservoir and the flint will be appropriately placed relatively to the 50 wick.

3. A lighter as in claim 1, wherein three of the walls of the fuel reservoir are extended upward above the top of the fuel space to form a wind guard. 55

4. A lighter having its parts constructed and arranged substantially as hereinbefore described with reference to the accompanying drawings.

Dated this 1st day of February, 1943.

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

