

PATENT SPECIFICATION

408,149

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COMPLETE SPECIFICATION.

Pyrophoric Torch-type Pocket Lighter.



I, ROBERT PETER MARKSTEIN, of 53, Lainzerstrasse, Vienna, XIII, Austria, an Austrian Citizen, do hereby declare the nature of this invention and in what
5 manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to pyrophoric torch-type pocket lighters of the type
10 comprising a flat box forming the fuel container and provided with a removable wick torch of rectangular section adapted to be ignited by rubbing against a pyrophoric surface attached to the outside of
15 the box and is characterised in that the torch is provided at the wick outlet end with several steel striking pins located one beside the other in parallel relationship with the axis of the torch, the
20 thickness of the torch being equal to that of an average wooden match, and the thickness of the box being not greater than that of the torch plus about twice the thickness of the box wall.

By this invention the construction of a torch-type pocket lighter is rendered possible which compares advantageously with pocket lighters, hitherto employed, as it occupies in the pocket the smallest
30 possible space being particularly thin and extraordinarily flat thus neither bulging out nor exercising a pressure against the body, which would be disagreeably felt.

In order to prevent the advantages
35 residing in the flat shape and the smooth surface of the box being destroyed by the base of the wick torch protruding, this base is preferably designed in such a manner that when the wick torch is
40 inserted it forms a part of the box, the base being distinguished from the box solely by the line of separation visible along the edges of contact. In case the
45 box is to be made square-shaped or polygonal, it is recommendable to use one of the corners as the base of the wick torch, because a corner can readily be taken hold of so that the wick torch may then
50 be drawn out of the box without any difficulty.

The hollow base of the wick torch is advantageously used as a container for holding cotton wool, which is fed with

[Price 1/-]

petrol out of the petrol tank of the box by way of the wick placed in the wick
55 torch. The quantity of petrol thus contained in the torch renders possible a relatively long burning duration of the torch flame or ignitions taking place at short intervals.

The steel pins are individually inserted into the torch, so as to make them touch the rubbing surface at the same time in rubbing, whereby the efficiency of ignition is increased.

The accompanying drawing shows one embodiment of the invention by way of an example, Figure 1 being a plan view of the lighter from above without the torch, Figure 4 with the torch inserted and partly in section, Figure 3 a lateral view, whilst Figure 2 is a part section of the torch.

The pocket lighter box 1 which forms the fuel container and for example may be square shaped, round or polygonal and has sliding lid portions 2 for inserting the cotton wool, is internally fitted with a guide 8 for the wick torch 3, which is not thicker than an ordinary wooden match, but is so wide that on its free end several steel pins 5 tightly placed one beside the other, may be inserted into the torch casing, these pins being used for rubbing against the pyrophoric rubbing surface (not shown) attached to the outside of the box 1. The sleeve-shaped part 3 of the torch holds the wick 6, whilst the base 4, which is preferably formed into a part completing the box 1, is filled with cotton wool, so that, a relatively great quantity of petrol can be sucked out of the tank and be held ready for ignition. Not far from its end, at a short distance from the steel pins 5 the torch sleeve is preferably provided on both sides with small openings 7, through which the air may stream to the wick 6, so that with a rapid movement of the torch 3 in rubbing, some petrol is
100 vaporized, thus facilitating the ignition by the spark and rendering the flame soot free.

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 torch-type pocket lighter comprising a flat box forming the fuel container and provided with a removable wick torch of rectangular section adapted to be ignited by rubbing against a pyrophoric surface attached to the outside of the box characterised in that the torch (3) is provided at the wick outlet end with several steel striking pins located one beside the other in parallel relationship with the axis of the torch, the thickness of the torch being equal to that of an average wooden match, and the thickness of the box being not greater than that of the torch plus about twice the thickness of the box wall.

(2) Pocket lighter according to Claim

1 characterised in that the steel pins are individually inserted into the torch casing. 20

(3) Pocket lighter according to Claims 1 or 2, characterised in that the torch base (4) is filled with cotton wool, which is fed with petrol from the box by way of the wick (6) of the torch (3). 25

(4) Pocket lighter according to Claims 1, 2 or 3, characterised in that the torch (3) is provided with openings (7) in the neighbourhood of the wick outlet, permitting air to pass through and thus rendering the flame soot-free and safe against extinction by wind and storm. 30

Dated this 19th day of September, 1933.
 RICHARD C. ROGERS,
 Agent for the Applicant.

FIG. 1

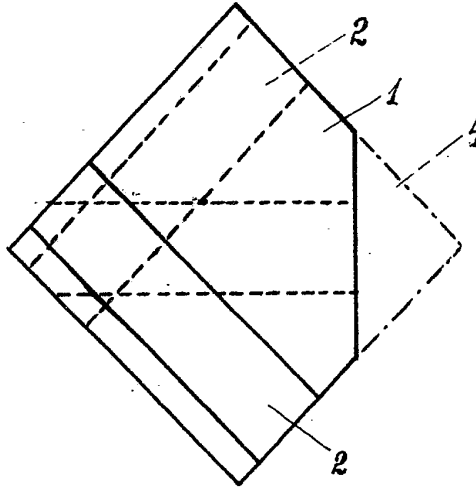


FIG. 2

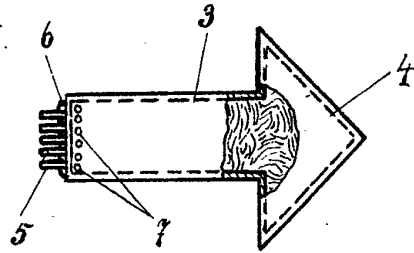


FIG. 3

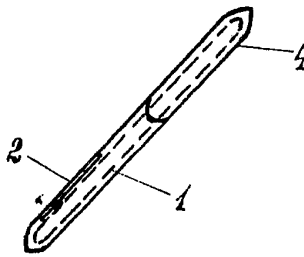
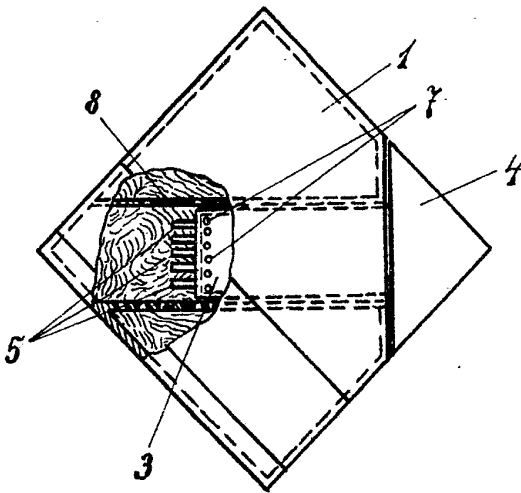


FIG. 4



[This Drawing is a full-size reproduction of the Original.]