NOTE.—*The application for a Patent has become void.*

This print shows the Specification as it became open to public inspection under Section 91 (3) (a) of the Acts.

PATENT SPECIFICATION

Convention Date (Germany): March 14, 1930. **384,300**

Application Date (in United Kingdom): Feb. 27, 1931. No. 6173/31.

Complete not Accepted.

COMPLETE SPECIFICATION.

Petrol Lighter.

I, BÖHME, German Nationality, Trading as Firm G. G. H. BÖHME, of 10, Offenbacherstrasse, Rumpenheim a/M, near Offenbach a/M, Germany, 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:—

The object of the present invention relates to a petrol lighter of the type wherein the ignition of the petrol fumes issuing from the wick is effected by means of the spark which is produced by the friction of the friction wheel on the flint.

The types of such devices hitherto known required to produce the ignition of the wick however two movements of the fingers, the first manipulation being required to remove the protective cap or wick snuffer, or to cause it to be removed by the action of a spring, the second manipulation producing the spark by rotating the sparking wheel against the flint.

This last mentioned movement was also deleterious as it was the cause of dirtying, and in case of using the lighter frequently per day of injuring the skin of the fingers, in most cases the thumb by having to rotate the wheel, and by means of the soot collected on it.

These serious defects are eliminated according to the present invention by the fact that both the lifting off of the protective wick cap and the rotation of the sparking wheel is effected by means of one single operation, this being the essential and basic idea of the present invention.

On the accompanying drawing:

Fig. 1 shows a lateral view of the new lighter showing the wick cap removed.

Fig. 2 is a top view thereof and

Fig. 3 shows a plan of a lever.

On the lid or cover 1 of the petrol lighter 2 of the usual shape a pillar 3 is mounted, to which the small tube or sheath 4 containing the flint is fixed. 5 is the customarily used adjusting screw for adjusting the tension of the spring pressing against the flint.

The projecting part 6 of the small tube serves as a support for the spindle 7 on which the toothed friction wheel 8 is loosely mounted, said wheel is rigidly connected with the peculiarly curved lever i.e., a swan neck lever 9, lying below it in some suitable manner, such as for instance by means of a tube or sheath. This lever has, as may be specially seen from Fig. 3, the shape of a horse shoe (or rather swan neck) its cross section being angular, the upright angle of the leg being provided with an aperture 10, the purpose of which will be explained hereinafter. Around the spindle or sheath or tube connecting this toothed wheel and the lever, a spiral spring 11 is fitted, the lower extremity 12 of which abuts against the obtuse extremity 13 of the angle 9, the upper extremity 14 being bent off over the projection 6, by reason of this the spring is rigidly supported, and is tensioned when the lever 9 is displaced in the direction of the arrow *a*, it only being necessary to achieve this purpose to press on the front end of the lever 9 in the direction of the arrow *b* (Fig. 1). The tube 15 containing the wick, the wick end emerging therefrom is arranged directly beside the spindle 7. A further small pillar 16 is mounted on the rear part of the lid, around the axis 17 of which a spring loaded lever 18 is free to swing, the front extremity of said lever being designed to act as a wick cap or snuffer 19. The special feature of this protective wick cap consists therein, that it is provided at its rear part with a hook like projection 20 (Fig. 1) which engages in the rest position, that is to say in the horizontal position of the lever 18, into the aperture 10 of the lever 9, or snaps into this aperture, because the bevelled off lower surface 21 presses the lever 9 by a slight pushing on

[*Price* 1/-]

its edge angle, somewhat back, i.e. against the pressure of the spring 11.

This actually takes place when the protective wick cap lever is pressed down in the direction of the arrow shown in dash and dot lines in Fig. 1, thus causing the cap to fit onto the wick tube.

This is the position in which all the organs of the lighter actually are when it is not in use.

If it is desired to use it with one hand, i.e. the right hand, then it is gripped between the middle finger, thumb and index finger, by gripping the lighter between the middle finger and the palm of the hand, and touching the regulating screw 5 with the index finger and pushing the end of the thumb against the free end of the swan neck lever 9. Now, as already mentioned a certain pressure is exerted on this oscillating lever in the direction of the arrow *b*, thus moving the lever in the direction of the arrow *a*. By thus displacing the lever the lever 18 with the wick cap 19 is instantly released and jerks up. This release was effected by releasing the projection 20 out of the aperture 10. By reason of this sufficiently continued oscillating movement the spring 7 is properly tensioned and at the same time the friction wheel is for the moment put, whilst rotating in the same direction, out of action.

Now the lever 9 is released by allowing the thumb to pass along the slightly inwardly curved front surface 22. Now the oscillating lever 9 executes an accelerated movement in a direction opposed to the arrows *a* and *b* by reason of the action of the spring 11. The lever engages the toothed friction wheel and rotates it rapidly causing it to produce a spark as it rubs against the flint, the spark being shot in the direction of the wick saturated with petrol, and thus igniting it. A simple depression of the lever 18 suffices to close the lighter.

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. Automatic petrol lighter, characterised by the fact that both the release of the protective wick cap or snuffer and the rotation of the spark producing toothed wheel is effected by one single hand operated organ.

2. Petrol lighter according to claim 1, characterised by the fact, that both the release of the wick protecting cap or snuffer as also the spark producing rotation of the toothed ignition wheel is effected by a simple oscillating lever (9) spring loaded at one end and connected with said toothed ignition wheel.

3. Petrol lighter according to claims 1 and 2 characterised by the fact, that the wick protecting cap is at its rest position coupled by means of a projection mounted thereon to the lever operating the ignition wheel.

4. Petrol lighter according to claims 1 to 3 characterised by the fact, that the swan neck shaped oscillating lever is of an angular profile, the vertical leg of which is provided with an aperture (10) for the accommodation of the wick cap projection (20).

5. Petrol lighter according to claims 1 to 4, characterised by the fact, that the oscillating lever is rigidly connected with the ignition or toothed wheel by means of a tube, the spiral spring rolled up on the tube being supported on one side on the oscillating lever and abutting on the other side against a rigid point of support on the lighter.

6. Petrol lighter according to claims 1 to 5 characterised by the fact, that the lower surface (21) of the locking projection on the wick cap is slightly bevelled off.

7. Petrol fire lighter according to claims 1 to 6 characterised by the fact, that the free extremity of the oscillating lever assumes on its external side surface (22) the shape of an arcuate, curved hook nose, which merges into a flat surface in the rearward portion of the lever.

Dated this 27th day of February, 1931.

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Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1932.

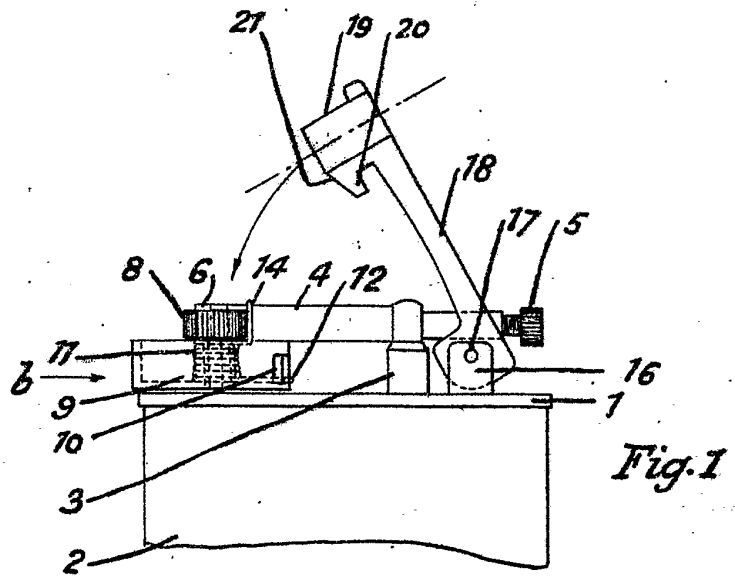

Fig. 1

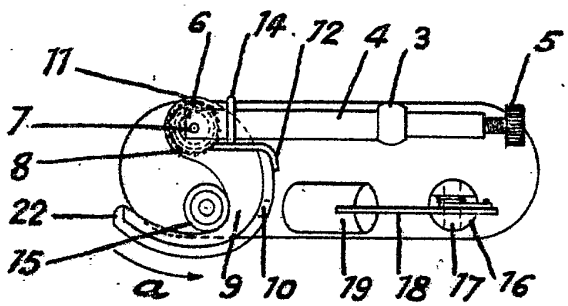

Fig. 2

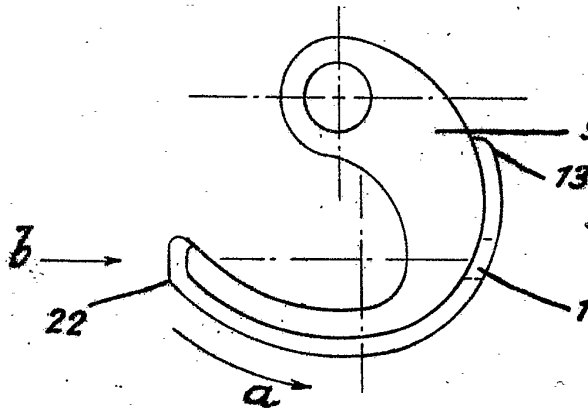

Fig. 3

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