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PATENT SPECIFICATION

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COMPLETE SPECIFICATION.



Improvements in Petrol and like Lighters.

I, ISAAC JOSEPH ARONOWITZ, of 42, Lyndewode Road, Cambridge, a British subject, 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:—

This invention relates to petrol and like lighters of the kind comprising a petrol or like container and a wheel co-acting with a flint and adapted to be operated by the thumb of the hand holding the lighter to ignite a wick.

In lighters of this type it has heretofore been proposed to house the operating mechanism in a longitudinal recess or well extending along the top of the petrol or like container.

The object of the present invention is to provide an improved form of lighter in which the operating parts are not liable to be readily damaged and which is extremely convenient to operate and use.

According to the present invention, there is provided a lighter wherein an operating wheel, its associated flint and a wick holder are mounted within a recess formed transversely in the top of the container. The recess is preferably V-shaped and is positioned so that a line bisecting the apex angle, which angle is preferably 45° , is parallel with a side of the container. The operating wheel, which term designates a flint-engaging wheel or a separate thumb wheel associated therewith, is preferably mounted with its plane of rotation inclined to the horizontal and parallel with one face of the V recess, whereby it may be operated by a substantially arcuate movement of the thumb, with the base of the thumb as the centre of the arc.

The lighter is preferably provided with a curved flint housing tube, having its lower end located in the base of the container, the upper portion of the tube being arranged so that a flint carried therein will have its upper end in a plane parallel to the axis of rotation of the wheel with which it engages.

A petrol or like lighter embodying the invention is illustrated, by way of example, in the accompanying drawings

wherein:—

Figs. 1 and 2 are front and back elevations of the lighter respectively;

Fig. 3 is a plan thereof, and

Fig. 4 is a detail hereinafter referred to.

Referring to the drawings, a container 1 of substantially rectangular section is formed with a transverse recess 2 in the top thereof, the recess, as shown, being V-shaped, with an apex angle of 45° , the recess being positioned so that a line bisecting this angle is parallel with the side 2' of the container. Mounted within this recess is a knurled operating wheel 3, having its plane of rotation inclined to the horizontal and parallel with the face 7 of the V recess. The operating wheel 3 is secured to a flint-engaging or abrasive wheel 4, the said wheels being mounted on a common inclined pivot 6, which may be in the form of a rod, and which is conveniently secured in position by mounting one end in one side 7 of the recess 2 and the other end in a lug 8, carried by a flint housing tube 9. The tube 9 has its lower end opening into the base 10 of the container, said end being closed by a screw plug 11. The upper portion of the tube which extends through the side 12 of the recess 2, is curved so that the end of the flint will be in a plane parallel to the axis of rotation of the wheel 4, against the periphery of which it is pressed by a spring 13 carried within the tube 9. A wick holder 14, of any suitable form, is provided on the side 12 of the recess 2, in suitable relation to the flint-engaging wheel 4.

The operating wheel 3, which is larger in diameter than the wheel 4, is arranged with a portion of its periphery protruding beyond the side of the container, and is preferably arranged with its under-surface in close relation to the side 12 of the recess 2.

A hood 15 may be provided which is adapted to fit over the wick and flint-engaging wheel 4. The hood is carried on an arm 16, the end of which is pivotally mounted in a slotted support 17 secured to the container. The said end of the arm 16 is formed with three faces

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- 18, one of which is normally engaged by a spring-pressed plunger slidable within the slot of the support 17. The faces 18 are so positioned that the spring plunger coacts with the said faces and tends to retain the arm 16 in one of three positions, i.e., closed, vertical or horizontally extended on the side of the support 17, remote from the wick.
- 10 Mounting the operating parts of the lighter in a recess, according to this invention, will tend to protect these parts from damage. Furthermore these parts being practically flush with the surrounding surfaces of the container, the lighter will be more convenient to use, particularly in lighting a tobacco pipe. In this particular connection, the usual superstructure or projecting elements on the known forms of lighters are apt to cause considerable inconvenience.
- 20 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 petrol or the like lighter of the kind set forth, in which an operating wheel with its associated flint and a wick holder are mounted in a recess formed transversely in the top of the container, for the purpose specified.
- 30 2. A petrol or like lighter, as claimed in Claim 1, in which the operating wheel is mounted with its plane of rotation inclined in relation to a side of the container, for the purpose specified.
3. A petrol or the like lighter, as claimed in Claim 1, in which the recess is substantially in the form of a V.
- 40 4. A petrol or the like lighter, as claimed in Claim 3, in which the recess in the form of a V is positioned so that a line bisecting the apex angle of the V is substantially parallel to a side of the container.
- 45 5. A petrol or like lighter, as claimed in Claim 3 or 4, wherein the V recess is formed with an apex angle of 45°.
6. A petrol or like lighter, as claimed in Claims 3, 4, or 5, in which the operating wheel is so mounted that its plane of rotation is parallel with one side of the V recess, for the purpose specified.
- 50 7. A petrol or like lighter, as claimed in any of the preceding claims, in which the operating wheel is associated with a separate flint engaging wheel, both of said wheels being mounted on a common axis.
- 55 8. A petrol or the like lighter, as claimed in Claims 2, 3, 4, 5, 6 or 7, which is provided with a curved flint housing tube, having its lower open end located in the base of the container, the upper portion of the tube being arranged so that a flint carried therein will have its upper end in a plane parallel to the axis of rotation of the wheel with which it engages.
- 60 9. A petrol or the like lighter, substantially as described with reference to the accompanying drawings.
- 65 70

Dated this 9th day of May, 1931.
 REGINALD W. BARKER & Co.,
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[This Drawing is a reproduction of the Original on a reduced scale.]

