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## PATENT SPECIFICATION



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### COMPLETE SPECIFICATION

#### Friction Wheel Lighter

I, KARL SCHIEDER, a German citizen, of 9, Markgrafenstrasse, Nuremberg, 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:—

This invention is concerned with improvements in or relating to friction wheel or pyrophoric lighters of the kind having a wick-cap holder which is pivoted directly by hand.

It is an object of the present invention to provide an improved lighter of the aforesaid kind which is more economical to manufacture whilst at the same time is neat in appearance, handy to operate and in operating leaves the flame readily accessible from several angles.

With this and other objects in view there is provided in accordance with the present invention, a friction wheel lighter of the kind specified wherein the wick-cap holder comprises a hollow substantially quadrantal member pivoted at or adjacent the centre of the circle of which the member forms a quadrant and wherein an outer casing surrounds the lighter body which casing is shaped in a manner such that when the member comprising the cap holder is in its closed position the curved periphery thereof is substantially entirely uncovered and further in a manner such that at least part of the lateral sides are also uncovered.

By "the lighter body" is meant that portion of the lighter which holds the wick, the wadding and the charge of liquid fuel.

In order that the nature of the invention may be particularly ascertained, the manner in which the same may be performed will be described with reference to the accompanying drawings wherein:—

Fig. 1 shows a side elevation of the lighter,

Fig. 2 shows a side elevation of the lighter with the outer casing removed to show the lighter body and the wick cap holder,

Fig. 3 shows an end elevation of the lighter with the outer casing in position.

Referring to the drawings wherein like reference characters relate to like parts, the wick-cap holder B comprises a hollow

chanelled member formed of one or more sheets of metal or other suitable material and shaped in the form of the quadrant of a circle. The wick cap, shown by dotted lines in Fig. 2, is desirably arcuate and is supported as by soldering or in any other convenient manner within the holder.

The holder B is pivotally mounted at or adjacent the centre of the circle of which the holder member forms a quadrant by means of an internally threaded sleeve shaped member J passing through a lug projecting from the lighter body A.

The wick cap holder B is provided with a toothed segment H engaging a pinion I rigidly mounted on the same shaft carrying the usual friction wheel (ceric stone). A small projection G is provided on the outer part of the holder member B whereby the member may be pivoted about sleeve J. The position to which the holder member B may swing is indicated by chain and dot lines in Fig. 2.

Desirably the wick holder is shaped similarly to the cap holder member B so that when the cap is closed the upper periphery of the lighter presents a substantially semi-circular appearance as clearly shown in Fig. 1.

The body of the lighter is enclosed within a casing C of sheet metal or any other suitable material which casing is shaped in a manner such that when the wick holder is in its closed position substantially the whole of the curved periphery thereof is exposed and at least part of the lateral sides of the holder member are also exposed as clearly shown in the drawings.

The casing C is held in position by means of screws E engaging the internal threads of sleeve J and is provided with cut away parts D registering with similar cut away parts K in the lighter body A in order to provide easy withdrawal of the liquid fuel tank F from the lighter body A.

In operation the lighter complete with casing is held in one hand with the projection G near the thumb. The holder member B is flicked open by pressing down smartly on the projection with the thumb. The rapid pivotal movement of the holder member B about J, causes the

[Price 1/-]

ceric stone wheel to be rotated with sufficient force to cause a spark to be struck, which spark ignites the wick. The holder swivels until the projection G strikes the upper edge of the casing C. After use the member B is pivoted back into the closed position.

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 friction wheel lighter of the kind specified wherein the wick cap holder comprises a hollow substantially quadrantal member pivoted at or adjacent the centre of the circle of which the member forms a quadrant and wherein an outer casing surrounds the lighter body which casing is shaped in a manner such that when the member comprising the cap holder is in its closed position, the curved periphery thereof is substantially entirely uncovered and further in a manner such

that at least part of the lateral sides are also uncovered.

2. A friction wheel lighter according to claim 1 wherein the casing is also shaped to leave also uncovered the upper part of the lighter body opposite the wick cap holder when closed.

3. A friction wheel lighter according to claims 1 or 2 wherein the outer casing is secured to the lighter body by means comprising an internally threaded sleeve-shaped member which also serves as the axis for the wick-cap holder.

4. A friction wheel lighter of the kind specified, having its parts constructed, arranged and adapted to operate substantially as described with reference to the accompanying drawings.

Dated this 13th day of August, 1936.

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Fig. 1

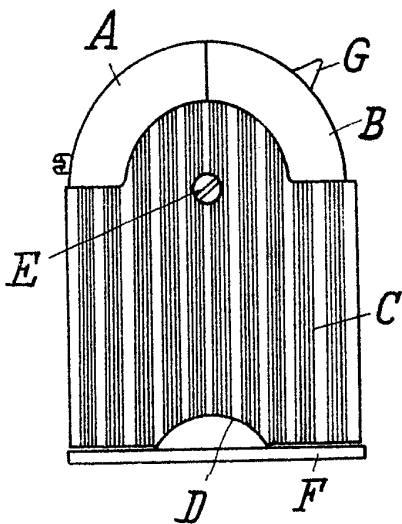


Fig. 2

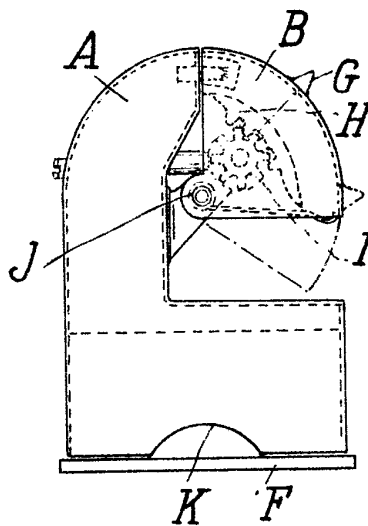
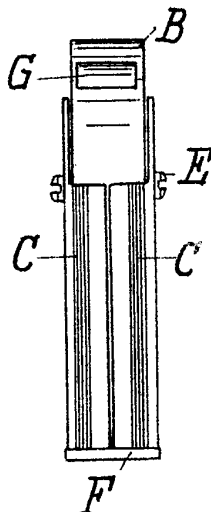


Fig. 3



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