

PATENT SPECIFICATION



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PROVISIONAL SPECIFICATION

Improvements in or relating to Frictional Lighters

I, JULIUS FREELAND, a British Subject, of 20, South St. Andrew Street, Edinburgh, Scotland, do hereby declare the nature of this invention to be as follows:—

This invention relates to frictional lighters, particularly pocket lighters, of the kind in which the wick is ignited by means of a wheel adapted to be rotated by the thumb against a piece of ferrocium or the like and the wick is protected by means of a cap. In this type of lighter the protective cap is in nearly all constructions hingedly mounted on the casing and is operated against the action of a spring and this spring is generally the source of trouble because it often breaks.

The object of this invention is to provide an improved construction of friction lighter of the type set forth wherein no spring is required for the protective cap.

According to this invention a friction lighter of the type set forth is constructed with the wick arranged horizontally on the top of the casing and the cap which also carries the usual friction wheel is arranged to slide horizontally on the top of the casing in such a manner that when the wick is uncovered the friction wheel is brought into operative position against the wick.

The said cap may be slidably mounted

on the top of the casing in any suitable manner, for example, it may be fashioned with a shank of rectangular section adapted to make a sliding fit in a rectangular housing formed or provided on the casing.

The friction wheel may be suitably mounted in the side of the cap so as to rotate about a vertical axis.

If desired, the horizontal wick may be so mounted that it can be moved angularly when desired, for example, when it has been ignited for the purpose of lighting a pipe.

To ignite the wick the lighter is held in the hand with the thumb on the friction wheel. Pressure on the said wheel will slide the cap away from the wick and at the same time rotate the wheel against the ferrocium or the like to cause a spark and ignition of the wick. To extinguish the flame the cap is slidden back by the thumb on to the wick.

A lighter constructed as above described may be composed of any suitable material and may be of any desired shape.

Dated this 6th day of March, 1944.

H. D. FITZPATRICK & CO.,
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COMPLETE SPECIFICATION

Improvements in or relating to Frictional Lighters

I, JULIUS FREELAND, a British Subject, of 20, South St. Andrew Street, Edinburgh, Scotland, 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 frictional lighters, particularly pocket lighters, of the kind in which the wick is ignited by means of a wheel adapted to be rotated by the thumb against a piece of ferrocium or the like and the wick is protected by means of a cap. In this type of lighter the protective cap is in nearly all constructions hingedly mounted on the casing

and is operated against the action of a spring and this spring is generally the source of trouble because it often breaks.

The object of this invention is to provide an improved construction of frictional lighter of the type set forth wherein no spring is required for the protective cap.

According to this invention a frictional lighter of the type set forth is constructed with the wick arranged horizontally on the top of the casing and the cap which also carries the usual friction wheel is arranged to slide horizontally on the top of the casing in such a manner that when the wick is uncovered the friction wheel

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is brought into operative position against the wick.

Referring to the accompanying drawings, Fig. 1 is a perspective view of one form of frictional lighter constructed in accordance with this invention, Fig. 2 is a similar view showing the position of the parts when operated to ignite the wick, Fig. 3 is a side elevation of the lighter as seen in Fig. 1, and Figs. 4, 5 and 6 are sectional views taken on the lines 4—4, 5—5 and 6—6 of Fig. 3. Fig. 7 is a sectional detail view of a modification.

The lighter comprises a body portion A fashioned into a tank B filled with cotton-wool or the like for the reception of a suitable spirit through the orifice N. On the top of the body A is slidably mounted a member C. This member is formed with a shank D of square section and is adapted to make a sliding fit in a rectangular housing E formed on the body A. The member C carries a friction wheel F rotatable about a vertical axis and is also shaped, as at G, to serve as a cap for the horizontally arranged wick H threaded in the angularly movable housing J. This housing J is made to form a sliding fit in an aperture in the top of the body A (see Fig. 4) for the purpose of removing same for threading the wick therethrough. The purpose of this angular movement is to aid in the lighting of a pipe. The shank D is bored to receive the usual piece of "flint" K and sprint L. In order to facilitate the sliding movement of the member C ball bearings M, M are provided on the top of the body A.

To ignite the wick H the lighter is held in the hand with the thumb on the friction wheel F. Pressure on the said wheel will slide the cap C away from the wick and at the same time rotate the wheel against the ferrocium or the like K to cause a spark and ignition of the wick. To extinguish the flame the cap is slidden back by the thumb on to the wick.

Instead of making the housing J with a

sliding fit it may be secured to the body A by means of a screw passing there-through, see Fig. 7. Also instead of making the shank D of rectangular section it may be circular in cross section.

A lighter constructed as above described may be composed of any suitable material and may be of any desired shape.

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 frictional lighter of the type set forth, characterised in that the wick is arranged horizontally on the top of the casing and the cap which also carries the usual friction wheel is arranged to slide horizontally on the top of the casing in such manner that when the wick is uncovered the friction wheel is brought into operative position against the wick.

2. A frictional lighter as claimed in claim 1, characterised in that the cap is formed with a shank adapted to make a sliding fit in a housing formed or provided on the casing.

3. A frictional lighter as claimed in either of the preceding claims, characterised in that a ball bearing is provided between the said cap and top of the casing for the purpose set forth.

4. A frictional lighter as claimed in claim 1, further characterised in that the housing for the wick is so mounted that it can be moved angularly when desired.

5. A frictional lighter as claimed in claim 4, characterised in that the said wick housing is frictionally held in the top of said casing.

6. A frictional lighter constructed and arranged substantially as described with reference to the accompanying drawings.

Dated this 1st day of February, 1945.

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

