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COMPLETE SPECIFICATION

Improvements in or relating to Cigarette and the like Lighters

We, JOHN HENRY COLLINS, of The Old House, Nazeing, Essex, a British Subject, HOWARD WALL LIMITED, of 25-37, Hackney Road, London, E.2, a British Company, and B. PEARLMAN AND COMPANY LIMITED, of 9, Redchurch Street, London, E.2, a British Company, 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 improvements in pyrophoric lighters for cigars, cigarettes and the like, and is more particularly concerned with such lighters in which a snuffer cap or cover member is provided to enclose or cover the wick and if desired also the striking wheel, such cap or cover being carried by an arm pivotally mounted on the lighter casing.

In such lighter constructions, the said arm has been provided with a spring whereby it is held in position with the snuffer cap over the wick, or in a position at right angles to the first mentioned position such as to allow the striking wheel to be rotated and the vapour from the wick ignited. Such springs have commonly consisted of a leaf spring secured to the lighter casing at one end by means of a screw passing therethrough into an internally threaded hole provided in the casing, the free end of the spring engaging the end of the arm to urge the same upon its pivot to press the snuffer cap over the wick or to hold the arm in a position at right angles to its first mentioned position.

According to the present invention, the arm spring is held in position upon the lighter casing by means of the engagement of shaped parts thereof with a post or posts serving as the supports either for the pivoted arm or for a flint and spring-tube, thus dispensing with the usual screw and with the screw-threaded hole in the lighter casing, with the consequent advantages of added simplicity and reduction of cost of manufacture, together with ease of assembly and dismantling.

The spring advantageously consists of a strip of suitable resilient material such as spring steel, bent so that a part thereof lies against the top of the lighter casing and a part thereof extends above the

lighter casing in contact with the lower surface of the snuffer arm. The part of the spring lying against the casing may be provided with an aperture therein through which passes one of two posts, a single post, or both of two posts upon which the snuffer arm is pivoted, or may be provided with a part of lesser width which extends between two posts. It will be appreciated that the said spring may readily be positioned accurately and be firmly held in such position upon the lighter casing in a number of ways, some of which are illustrated by way of example in the accompanying drawing, in which

Figure 1 is a side elevation of a lighter provided with a spring constructed and mounted thereon according to the invention.

Figure 2 is a plan view of the lighter shown in Figure 1, and

Figures 3 to 10 are detail views hereinafter referred to showing different forms of spring members.

As shown in the drawing, Figures 1 and 2, a lighter 1 is provided with posts 2 mounted on the upper surface of the lighter casing, an arm 3 carrying a snuffer cap 4 being mounted between and upon such posts by means of a pivot or pivots 5. As shown in the drawing, the arm 3 is urged to a position where the cap 4 is positively held over the wick and striker wheel by the engagement with the lower surface of such arm of a leaf spring 6.

The spring 6 may be formed from a blank 16 as shown in Figure 3, in which a part 8 of lesser width is formed with shoulders 9, the part 8 extending between the posts 2 of the lighter and the shoulders 9 lying against the front and back edges or faces of the posts to hold the spring firm in position upon the lighter.

Alternatively, the spring may be formed from a blank 26 as shown in Figure 4, such blank having an aperture 7 provided therein of such dimensions as to fit snugly around the posts or posts 2 on which the arm 3 is pivoted. Figures 5 and 6 show in side elevation and in plan respectively a spring formed from the blank shown in Figure 4, bent to the desired shape.

In a further alternative form of the spring as shown in Figures 7, 8, 9 and 10 the spring may be formed from a blank

36 or a blank 46, the former being provided with a part 18 of reduced width and shoulders 19, and the latter being provided with an aperture 17. The ends of the blanks may be bent to lie substantially in the positions shown in Figure 9, both ends of the spring in this example of construction coming into contact with the lower surface of the arm 3 or the blanks may be bent to the shape shown in Figure 10.

A part 20 of the spring may be bent upwardly as shown in the drawing, towards the part thereof in contact with the snuffer arm to ensure a proper seating of the spring upon the lighter casing.

It will be understood that the spring may be positioned upon the lighter casing by engagement of shaped parts thereof with the member 21 (Figure 1) forming the support for the flint-tube and spring 22.

Similarly, the support of the snuffer arm upon the posts 2 may comprise the pivots 5 on the arm 3 engaging in inclined slots in the posts, as shown in the drawing, or the snuffer arm may be supported between the posts by means of a pivot pin passing through a hole in one of the posts, through a bore in the arm and into a screw threaded hole in the other post, in the known manner.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A cigarette or like lighter of the kind in which leaf spring is provided upon the lighter casing to engage an arm pivotally mounted on such casing, wherein such leaf spring is held in position upon

the casing by means of the engagement of shaped parts thereof with a post or posts on the lighter casing serving as the supports either for the pivoted arm or for a flint-and-spring-tube.

2. A lighter according to Claim 1, wherein the spring comprises a part lying substantially in the same plane as the lighter casing and a part inclined thereto, the inclined part of the spring engaging the pivoted arm.

3. A lighter according to Claim 2, wherein the part of the spring lying against the casing is provided with an aperture therein through which passes a fixed member of the lighter casing or mechanism.

4. A lighter according to claim 2, wherein the part of the spring lying against the casing is provided with a part of reduced width between shoulders formed on the spring, such part of reduced width passing between two fixed members serving as supports for the pivoted arm or for a flint-and-spring tube, and the shoulders on the spring engaging the edges or faces of the fixed members.

5. A lighter according to Claim 2, wherein a part of that part of the spring which lies against the lighter casing is bent upwardly so as to be spaced apart from the casing.

6. A cigarette or like lighter constructed as hereinbefore described with reference to the drawing.

Dated this 30th day of December, 1942.

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Agents for the Applicants.

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

FIG. 1.

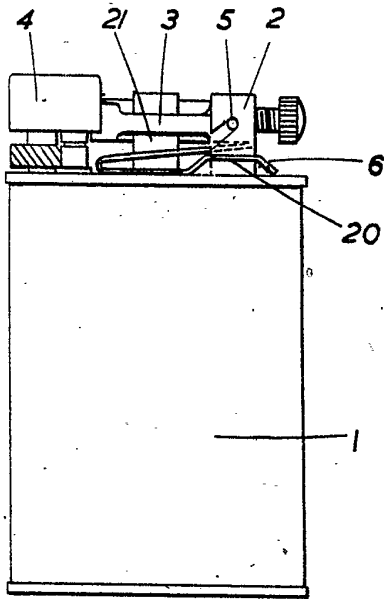


FIG. 3.

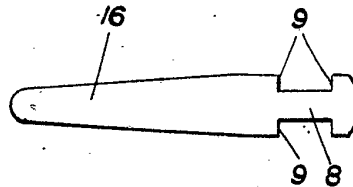


FIG. 7.

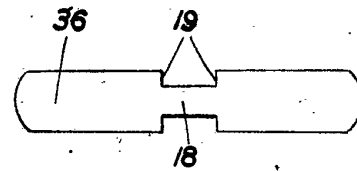


FIG. 2.

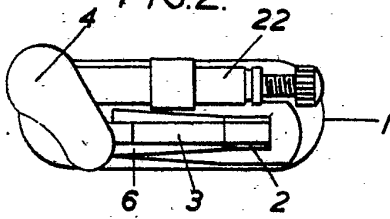


FIG. 8.

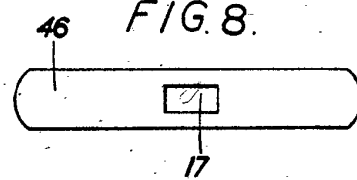


FIG. 4.

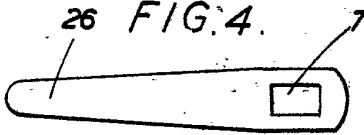


FIG. 9.

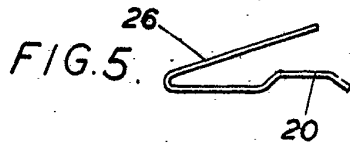
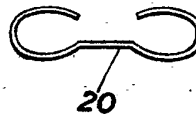


FIG. 10.

