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A. J. LEWIS

2,748,246

CIGARETTE LIGHTER

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Fig. 1.

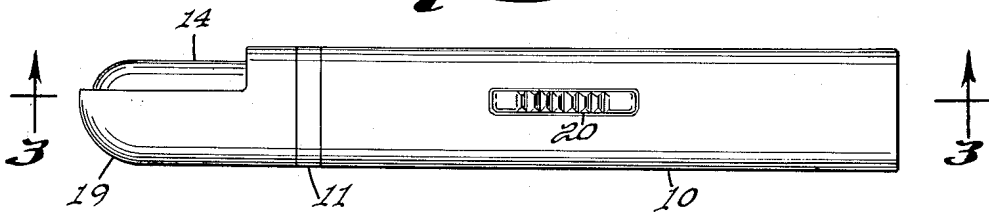


Fig. 2.

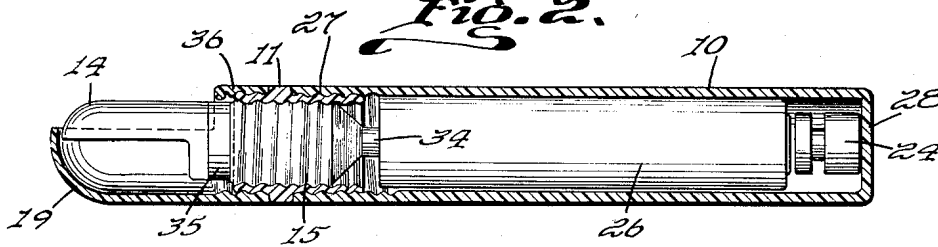


Fig. 3.

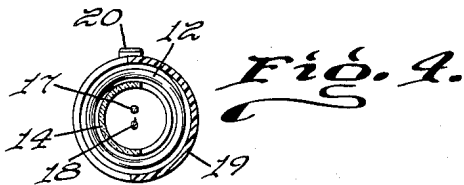
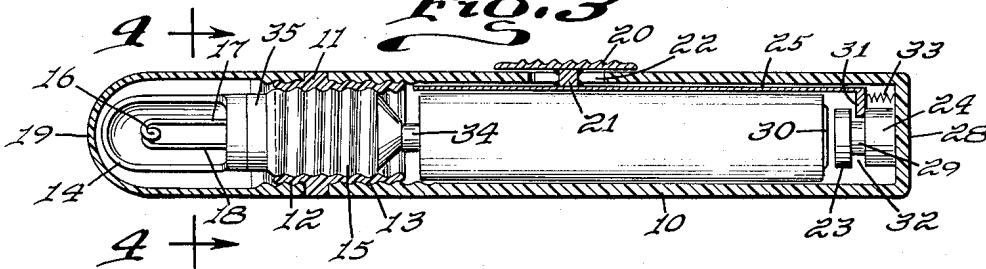


Fig. 4.

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1

2

2,748,246

CIGARETTE LIGHTER

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2 Claims. (Cl. 219—32)

This invention relates to cigarette lighters of the fountain pen, pocket, or flashlight type, and in particular, a cigarette lighter in the form of a small cylindrical flashlight in which the light bulb is replaced with an open socket member having a heating element whereby upon closing the circuit through the battery the element is heated sufficiently to light a cigarette.

The purpose of this invention is to provide a cigarette lighter that is adapted to be carried in a pocket, similar to a fountain pen, pencil or the like.

Various types of both fluid and electric cigarette lighters have been provided, however, lighters that require liquid fuel are not satisfactory for pocket use because it is difficult to seal the fuel within the lighter housing and where the element is heated by electricity the conventional batteries required therefor are relatively large and heavy. With this thought in mind, this invention contemplates a cigarette lighter having a housing in the form of a relatively small elongated cylindrical casing adapted to provide a housing for a battery, a coupling threaded in the end of the housing and having threads for a cover or cap on the opposite end, a base threaded in the coupling and having a tray with a heating element positioned therein extended from one end and a contact adapted to engage the end of a battery positioned in the housing on the other, a button slidably mounted in the extended end of the housing and adapted to actuate a contact disc in the housing to engage or disengage the contact at one end of the battery and a closure cap adapted to be positioned over the heating element.

The object of this invention is, therefore, to provide a cigarette lighter in which an ignition element, which is in the form of a heating element is supplied with current from a conventional flashlight battery with the battery positioned in a tubular handle and with the element positioned in a tray extended from one end of the handle.

Another object of the invention is to provide a cigarette lighter of the fountain pen type in which means is provided for enclosing an ignition element of the lighter and also in which means is provided for replacing the battery of the lighter.

A further object of the invention is to provide a cigarette lighter of the fountain pen type in which the lighter is of a simple and economical construction.

Other features and advantages of the invention will appear from the following description taken in connection with the drawing, wherein:

Fig. 1 is an elevational view of a cigarette lighter embodying the invention;

Fig. 2 is a longitudinal sectional view through one transverse axis of the cigarette lighter;

Fig. 3 is a longitudinal sectional view through another transverse axis of the cigarette lighter preferably on the line 3—3 of Fig. 1; and

Fig. 4 is a vertical sectional view on the line 4—4 of Fig. 3.

Referring now to the drawing, wherein like reference

characters denote corresponding parts, the improved cigarette lighter of this invention includes a cylindrical housing 10, a coupling having an intermediate annular flange 11 with externally and internally threaded sleeves 12 and 13 extended from the ends thereof, a tray 14 extended from a threaded base 15 and having a heating element 16 carried by wires 17 and 18 extended from the base, a closure cap 19 threaded on the end 12 of the coupling and a button 20 having a stem 21 extended through a slot 22 in the casing 10 and adapted to actuate a contact disc 23 slidably mounted in a boss 24 in the housing through a bar 25.

The housing 10 in which battery 26 is positioned is provided with an open end with threads 27 on the interior, and a closed end having a wall 28 and, as illustrated in Figure 3, the boss 24 is mounted on the wall 28 with the contact disc 23 slidably mounted in the boss with a stem 29.

The contact disc 23 is actuated to engage a contact 30 on the end of the battery 26 by the bar 25, an end 31 of which extends into an annular groove 32 between the contact disc 23 and boss 24. The contact bar is urged to the open position with a spring 33, one end of which is secured to the end wall 28 and the other to the end or flange 31 of the bar 25.

The bar 25 is slidably mounted in the housing between the wall of the battery 26 and cylindrical wall of the housing and with the opposite end of the battery in continuous contact with a point 34 on the inner end of the base 15 and with the shell of the base 15 grounded to the housing a circuit is completed to the element 16 upon actuating the button 20 to bring the contact disc 23 into engagement with the contact 30 on the end of the battery.

The tray 14 is mounted on the base 15 with a collar 35 whereby the tray is adapted to be rotated around the element 16 so that when the device is not in use the tray 14 may be turned to the position shown in Figure 2 so that it provides a cover for the heating element with the closure cap 19 positioned below the element.

The closure cap 19 is provided with an internally threaded collar 36 by which the cap is secured on the outer end of the coupling.

With the parts assembled as shown and described, it is only necessary to rotate the closure cap 19 to the position shown in Figure 3 and actuate the button 20 to complete a circuit through the heating element 16 whereby the heating element is supplied with current sufficient to heat the element to such a degree that a cigarette held against the element will be ignited. By this means, a cigarette may readily be ignited and the heating element closed without the possibility of sparks, smoke or other fumes. After use the element may be readily enclosed by turning the closure cap 19 or tray 14.

It will be understood that modifications, within the scope of the appended claims, may be made in the design and arrangement of the parts without departing from the spirit of the invention.

What is claimed is:

1. A cigarette lighter comprising an elongated tubular housing, a coupling threaded in one end of the housing, a heating element extended from a base threaded in the coupling, said base having a contact on the end opposite to the end from which the heating element extends a closure cap having an opening in one side and threaded on the coupling, a tray also having an opening on one side rotatably mounted on the heating element, a battery mounted in the housing positioned with a terminal at one end in engagement with the contact on the base of the heating element and a button slidably mounted on the housing for completing a circuit from the battery to the heating element.

2. In a cigarette lighter, the combination which com-

3

prises an elongated tubular housing closed at one end and threaded internally at the other, a coupling having threaded ends and threaded internally and threaded in the end of the housing in which the threads are positioned, a cap having an opening in one side threaded on the coupling, a base having a heating element extended from one end and a contact extended from the opposite end threaded in the coupling, a tray rotatably mounted on said base, a contact disc slidably mounted in the closed end of the housing, and a button positioned on the outer surface of the housing with a stem extended through a slot in the housing and adapted to actuate the contact

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disc to engage the battery to complete a circuit to the heating element.

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