

Jan. 3, 1956

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2,729,736

PORTABLE ELECTRIC CIGARETTE LIGHTER

Filed Aug. 4, 1953

Fig. 4.

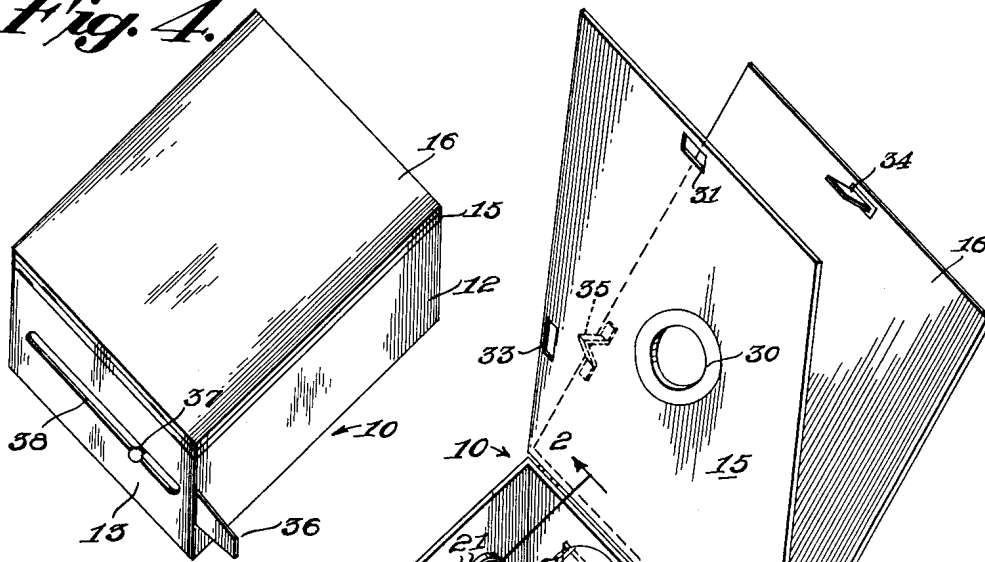


Fig. 1.

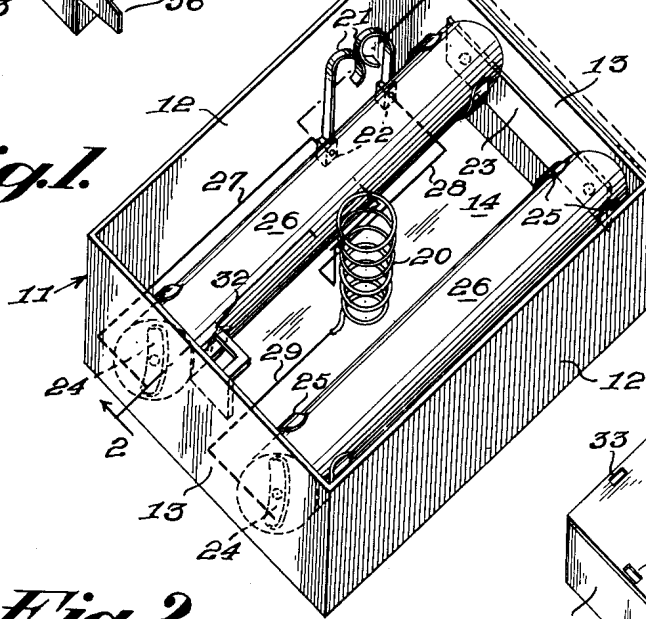


Fig. 3.

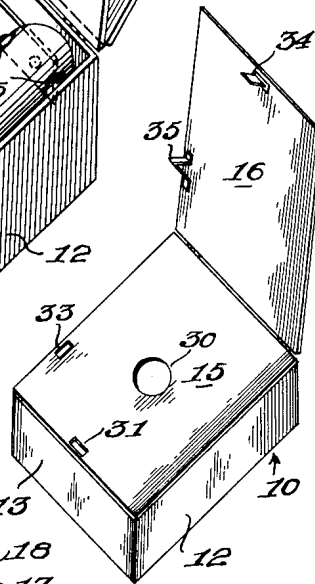
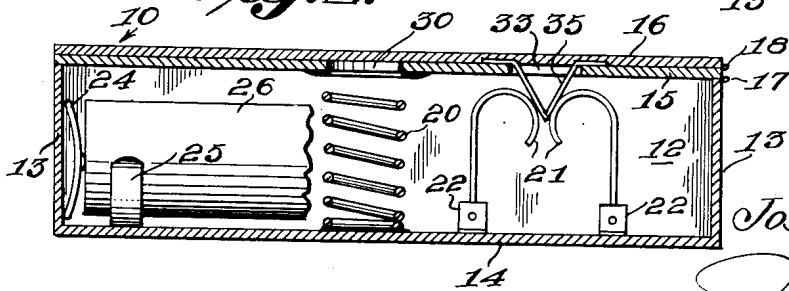


Fig. 2.



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PORTABLE ELECTRIC CIGARETTE LIGHTER

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Application August 4, 1954, Serial No. 447,715

4 Claims. (Cl. 219-32)

This invention relates to cigarette lighters, and more particularly to portable electric cigarette lighters.

The invention is more particularly concerned with a battery-operated lighter of the pocket-carrying type, and is particularly characterized in its convenient use and its maximum factor of safety.

A primary object of the invention is to provide a cigarette lighter comprising a casing in which are disposed a vertically disposed electrical resistance coil for receiving an end of a cigarette to be lighted, batteries, and a normally closed switch, together with electrical connections between the batteries, coil and switch, the said elements being normally concealed by an inner cover having a cigarette admission opening axially aligned with the coil, and an outer cover for closing said opening and having a switch opening member for breaking the circuit through the coil when the outer cover is closed.

A further object of the invention is to provide a cigarette lighter of the above-noted character wherein the casing is provided with an extensible and retractable cigarette package opener, together with means for effecting the extension and retraction for a desired extension of the opener externally of the casing.

The novel features that are considered characteristic of the invention are set forth with particularity in the appended claims. The invention itself, however, both as to its organization and its method of operation, together with additional objects and advantages thereof, will best be understood from the following description of a specific embodiment when read in connection with the accompanying drawings, wherein like reference characters indicate like parts throughout the several figures, and in which:

Figure 1 is an isometric view of the improved lighter in accordance with a preferred structural embodiment thereof, and wherein the inner and outer covers are shown in open position.

Figure 2 is a vertical sectional view as observed in the planes of the line 2-2 of Figure 1.

Figure 3 is an isometric view on a scale substantially smaller than that of Figure 1 and showing the inner cover in closed position.

Figure 4 is also an isometric view on a scale intermediate of that of Figures 1 and 3 and showing a cigarette package opener in the rear wall of the casing body.

Referring now in detail to the drawing, 10 designates a rectangular casing which may be constructed of any desired material, including the metals and plastic.

The casing 10 includes an open top body 11 having opposite side walls 12, opposite end walls 13 and a bottom wall 14.

The casing 10 further includes an inner cover 15 and an outer cover 16, the former of which is pivoted to an end wall 13 as at 17, and the latter of which is pivoted to the cover 15 as at 18 adjacent the said end wall 13.

Disposed within the casing body 11 and generally centrally thereof is an incandescent electrical resistance

element in the form of a vertically disposed coil 20. Also disposed within the casing body are a pair of spring switch contact members 21, which as indicated in Figure 1 are disposed adjacent one of the side walls 12, and which are provided with foot members 22 for the connection of electric circuit wires, and which are insulated from the bottom wall, as indicated in Figure 2.

Suitably supported by and insulated from one of the end walls 13 is a contact plate 23, and suitably secured to and insulated from the opposite end wall 13 are a pair of contacts 24.

Removably supported within the body 11, as by means of spring clips 25, are a pair of batteries 26, corresponding poles of which engage the contact plate 23 and the opposite and corresponding poles of which individually engage the contacts 24.

As is indicated in Figure 1, one of the switch contact members 21 is connected to one of the contacts 24 by a wire 27; the other switch contact member 21 is connected to the upper end of coil 20 by a wire 28, and the lower end of the coil is connected to the other contact 24 by a wire 29.

Since, as indicated in Figure 1, adjacent ends of the batteries 26 are connected by plate 23 and the switch contacts 21 are normally in contact, a circuit is established through the coil 20, whereby same is rendered incandescent for lighting a cigarette upon admittance of an end thereof into the upper end of the coil.

The inner cover 15 is normally closed, as is indicated in Figure 3, and need be opened only for the purpose of removing the batteries or for making adjustments or repairs to the structure supported within the casing body 11.

The said inner cover 15 is provided with an insulated opening 30 substantially centrally thereof and which in closed position of the cover is disposed immediately above and in coaxial relation to the coil 20, as is indicated in Figure 2, and which provides for admission of an end of the cigarette into the coil which will be heated when the outer cover 16 is raised, as indicated in Figures 1 and 3.

The inner cover 15 is further provided with a rectangular opening 31 adjacent its free end, which in the closed position of the cover registers with a latch opening 32 on the front end wall 13. The said inner cover is further provided with a second rectangular opening 33 adjacent a side edge thereof for a purpose later to appear.

When the lighter is not in use, the outer cover 16 is closed, as indicated in Figures 2 and 4, and such cover is provided with a latch element 34 enterable through openings 31 and 32, with the latter of which same co-acts to hold both covers in closed position.

With the outer cover 16 closed, the openings 30, 31 and 33 in the inner cover 15 are all closed, and the outer cover 16 is provided with an insulated circuit-breaking switch element 35 which extends through opening 33 and wedges the switch contact members 21 apart, whereby the circuit through the coil 20 is broken.

The end wall 13 adjacent the hinge connection of the inner and outer covers 15 and 16 may be provided with a channel slidably receiving an elongated cigarette packing opener 36 which may be longitudinally moved to vary the extent of projection from a side wall 12 by means of a headed pin 37 which is slidable in an elongated slot 38 in the said end wall.

Although a certain specific embodiment of the invention has been shown and described, it is obvious that many modifications thereof are possible. The invention, therefore, is not to be restricted except insofar as is necessitated by the prior art and by the spirit of the appended claims.

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Having set forth my invention in accordance with a preferred structure embodiment thereof, what I claim and desire to secure by U. S. Letters Patent is:

1. A cigarette lighter comprising a rectangular casing including a body having side, end and bottom walls, an inner cover hingedly connected to one end wall, and an outer cover hingedly connected to the same end wall and adapted to overlie the inner cover, a vertically disposed electrical resistance coil supported in said body, batteries removably supported in said body, a normally closed switch in said body and electrical connections between said batteries, switch and coil, said inner cover having a cigarette end admission opening axially aligned with said coil in the closed position of the inner cover, said outer cover having switch opening means rendered operative upon closing said outer cover which also conceals said opening in the inner cover.

2. A cigarette lighter according to claim 1, wherein the said body and said outer cover are provided with cooperating latch elements, and said inner cover being provided with an opening for receiving the latch element on the outer cover.

3. A cigarette lighter according to claim 1, wherein said switch comprises a pair of normally contacting spring members, said switch opening means comprising a wedge member of insulating material supported by said outer cover, and said inner cover having an opening through which said wedge member extends when both covers are in closed position.

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4. A cigarette lighter comprising a rectangular casing including a body having side, end and bottom walls, an inner cover removably mounted on said body, and an outer cover removably mounted on said body and adapted to overlie the inner cover, an electrical resistance coil supported in said body, batteries removably supported in said body, a normally closed switch in said body and electrical connections between said batteries, switch and coil, said inner cover having a cigarette end admission opening axially aligned with said coil in the closed position of the inner cover, said outer cover having switch opening means rendered operative upon closing said outer cover which also conceals said opening in the inner cover, said switch comprising a pair of normally contacting spring members, said switch opening means comprising a member of insulated material supported by said outer cover, and said inner cover having an opening through which said member extends when both covers are in closed position.

References Cited in the file of this patent

UNITED STATES PATENTS

1,549,397 Whitley ----- Aug. 11, 1925
1,845,432 McRae et al. ----- Feb. 16, 1932

FOREIGN PATENTS

626,494 Great Britain ----- July 15, 1949