

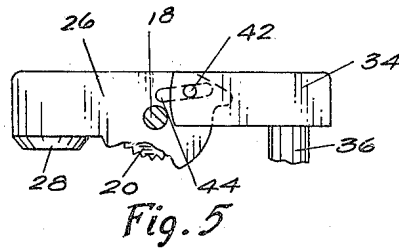
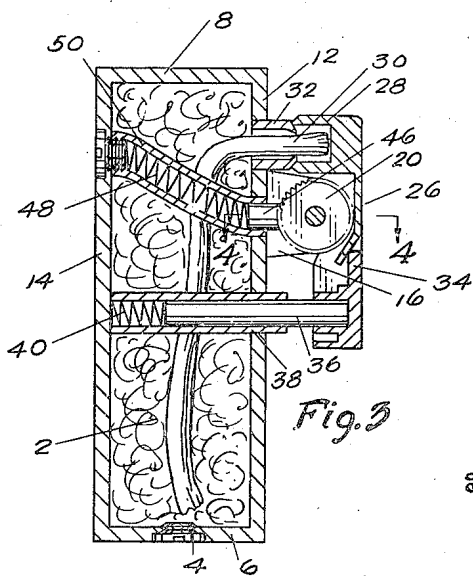
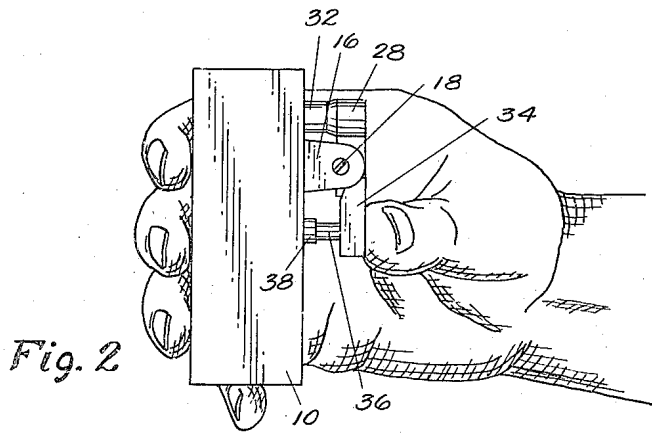
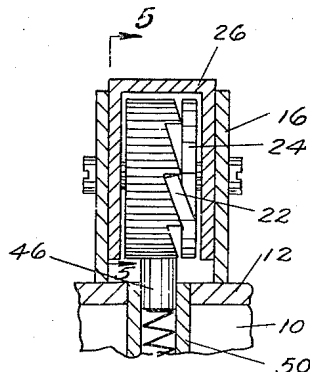
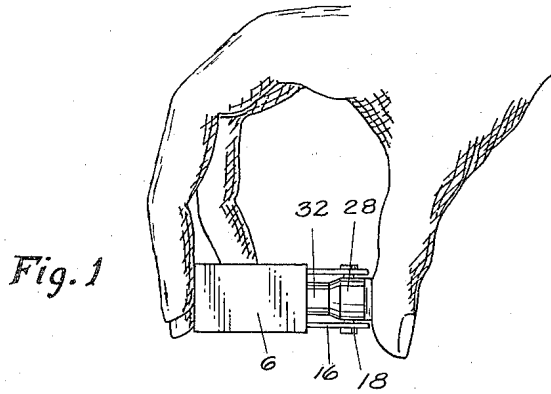
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I. FLORMAN

2,479,608

CIGARETTE LIGHTER

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UNITED STATES PATENT OFFICE

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CIGARETTE LIGHTER

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1 Claim. (Cl. 67—7.1)

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The invention relates to cigarette lighters, and more especially to lighters of the pyrophoric type.

The primary object of the invention is to provide a cigarette lighter which is more convenient to operate than those heretofore available.

Another object of the invention is to provide a lighter so shaped and arranged as to be readily and comfortably held in the hand, and to be operated without the contortions of the fingers which are necessary with other lighters.

Still another object of the invention is to provide a lighter which, when gripped naturally by the fingers, is effectively prevented from being dropped.

A further object of the invention is to provide a lighter which is operated by a natural squeezing movement of the fingers and thumb, in a position in which they can exert the greatest gripping force.

In general, the invention contemplates the provision of a lighter body which is vertically elongated and which has the lighting mechanism arranged on the upper half of a narrow front wall, with the thumb piece by which the lighter is operated located at about the mid-point of this wall. The length of the body is such that, when the thumb engages the thumb piece, the first three fingers fit naturally along the rear wall and the little finger instinctively assumes a position under the bottom wall, so as to prevent dropping of the lighter. At the same time, the thickness of the body from rear to front and the amount of projection of the thumb piece are such that the first three fingers are substantially parallel to the thumb, a position which is natural and comfortable and which permits the greatest squeezing force to be applied with the least expenditure of effort.

Further objects and advantages of the invention will appear more fully from the following description, especially when taken in conjunction with the accompanying drawings which form a part thereof.

In the drawings:

Fig. 1 is a top plan view of the lighter, showing how it is held for operation;

Fig. 2 is a side view of a similar nature;

Fig. 3 is a vertical cross-section through the lighter;

Fig. 4 is a cross-section on the line 4—4 of Fig. 3; and

Fig. 5 is a cross-section on the line 5—5 of Fig. 4.

As shown in the drawings, the lighter has a main body portion forming a fuel chamber and

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filled with an absorbent material such as cotton 2. This may be filled by a screw plug 4 in the bottom wall 6. The casing has a top wall 8, side walls 10, a front wall 12 and a rear wall 14. The front and rear walls are narrower than the side walls, to form a thin, elongated casing.

Projecting outwardly from the front wall at a point in its upper half are ears 16. In these ears is mounted a shaft 18, on which is mounted a flint wheel 20. This flint wheel has on one radial face ratchet teeth engageable by a bent-out tooth 22 of a disc 24 mounted on the shaft. Disc 24 is arranged to turn with a snuffer 26 also mounted on the shaft. This snuffer extends upwardly and carries adjacent the top of the lighter body, a snuffer cap 28 adapted to cover a wick 30 extending out of the lighter body through wick tube 32.

The snuffer is operated by a thumb piece 34 having a stem 36 slidable in tube 38 mounted in the lighter body and pressed outward by spring 40. This thumb piece is operatively connected to the snuffer by a pin 42 engaging in a slot 44 in the snuffer. As will be seen from the drawing, the thumb piece is located substantially at the middle of the length of the front wall. A flint 46 is held by spring 48 in flint tube 50 against flint wheel 20.

The parts of the device are so dimensioned that it can be readily and conveniently operated with the least possible effort, yet at the same time can be carried easily in a pocket or pocket-book. In its preferred form, the lighter body is 2½ inches high, 1½ inch wide and ½ inch thick. With these dimensions, as will be clear from the drawing, the fingers of an average hand grip the lighter quite naturally with the first three fingers against the back wall, the little finger under the bottom wall, and the thumb against the thumb piece. Also, the combined width of the lighter body and the projection of the thumb piece (that is, the horizontal dimension in Fig. 2) is such that, as shown in Fig. 1, the thumb and the first three fingers are substantially parallel when they grip the lighter to operate it. This gives the most effective squeezing pressure with the least effort.

To operate the lighter, it is held in an upright position, as shown in Figs. 1 and 2, and the thumb and fingers are squeezed together. This pushes the thumb piece towards the lighter body, and causes snuffer 26 to turn so as to uncover the wick and to turn the flint wheel to throw sparks on the wick, which is thus ignited. When the thumb piece is released, spring 40 returns the parts to their original position, extinguishing the wick and setting the lighter for another opera-

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tion. Of course other types of igniting mechanism, especially including other types of mounting for the thumb piece and snuffer, and other types of connection between the thumb piece, snuffer and flint wheel, might be used within the scope of the invention.

While I have described herein one embodiment of my invention, I wish it to be understood that I do not intend to limit myself thereby except within the scope of the claim hereto or hereinafter appended.

I claim:

A cigarette lighter comprising a thin elongated casing having a fuel chamber therein and having front and rear walls narrower than the side walls, ears projecting from the front wall adjacent the top thereof, a wick communicating with said fuel chamber and extending out of the front wall above said ears, a snuffer for said wick and a flint wheel both pivotally mounted in said ears about an axis located a substantial distance above the longitudinal center of the front wall, a thumb piece below said ears, a pin slidably mounted in the front wall of the body at substantially the longitudinal center thereof, the thumb piece being carried by said pin and thereby mounted for movement towards and from said front wall, means operatively connecting the

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snuffer and flint wheel to the thumb piece whereby to raise the snuffer and operate the wheel when the thumb piece is pushed towards the wall, said thumb piece terminating about half way between the top and bottom of the front wall, the rear wall being of a length to receive the first three fingers of the hand with the little finger engaging the bottom of the casing, whereby the thumb naturally engages the thumb piece at substantially the longitudinal center of the front wall and in line with said pin when the lighter is held between the first three fingers and the thumb, and the distance between the rear wall and the thumb piece being such that, when the fingers of the hand engage the rear wall and the thumb engages the thumb piece, the fingers and thumb are substantially parallel.

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The following references are of record in the file of this patent:

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