

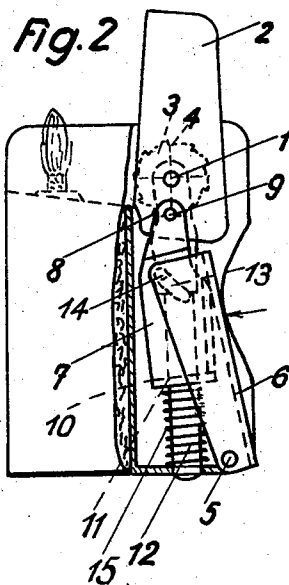
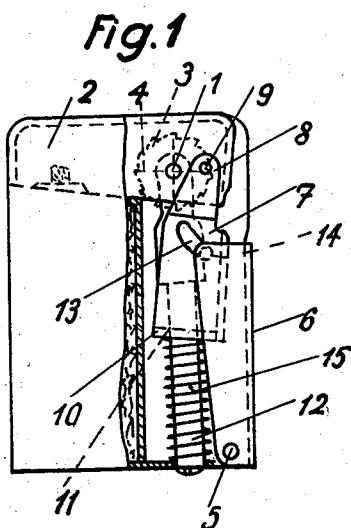
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POCKET LIGHTER

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POCKET LIGHTER

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1 Claim. (Cl. 67—7.1)

This invention relates to a friction-wheel lighter of the type in which a hingedly mounted cap in opening rotates the friction wheel, the cap being actuated by a depressible side wall through an intermediate member.

The invention relates to improvements in such pocket lighters consisting in that the intermediate member is constructed as a link which acts like an elbow lever, preferably moves in the longitudinal direction of the movable sidewall and in this direction is acted upon by a return spring. Such an arrangement enables the lighter to be of very thin construction without any disadvantages resulting therefrom. Another advantage of this manner of connection of the side wall of the case with the cap is that the link moves within the space which the side wall of the case requires for its movement and consequently does not itself require any additional space. The link can consequently be relatively large and strong even when the lighter has very small dimensions. Furthermore the link is accurately guided so that perfect function of the lighter is ensured. Furthermore, the return spring for the cap can be relatively large as it is also arranged in the space in which the case wall moves.

An embodiment of the invention is illustrated by way of example in the accompanying drawing, in which

Fig. 1 shows a friction-wheel pocket lighter in closed position, in side elevation with a portion of the case broken away,

Fig. 2 is a similar view showing the lighter in open position.

In a cap 2 oscillatable about a bolt 1 a friction wheel 3 is accommodated and loosely rotatable about the bolt 1 and connected with the cap 2 in known manner by a blade spring (not shown) engaging in lateral claws 4 so that, when the cap 2 opens, the friction wheel is rotated and produces sparks from a cerium stone. The cap 2 is opened by pressing inwards a side wall 6 of the lighter case which wall is oscillatable about a bolt 5.

The operative connection between the cap 2 and the side wall 6 is established according to the invention by a link 7. This link is formed by a plate bent in U-shape and whose side walls terminate in lugs 8 carrying a bolt 9 by means of which the link 7 engages in holes in the cap 2 arranged eccentric to the bolt 1 and thus hingedly connected with this cap. At the other end the link 7 has an end wall 10 with a central hole 11 by means of which it is longitudinally shiftable on a cerium stone tube 12. The link 7 has also a curved slot 13 in each side wall. Short bolts 14 engage in these curved slots 13 and are mounted in the upper arms of the side wall 6 of U-shaped cross-section.

If the side wall 6 is swung inwards from its normal position in Fig. 1 into that shown in Fig. 2 by pressure exerted with the thumb, the link 7 is shifted from the position shown in Fig. 1 into that shown in Fig. 2, the cap 2 being swung through an angle of about 90 degrees into its open position and the friction wheel rotated. During this movement for example a spiral spring 15 wound on the cerium stone tube 12 is compressed by the link 7 which spring, on being released, returns the side wall into its normal position.

I claim:

A pyrophoric lighter comprising a casing, a wick tube, a wheel file, a snuffing member coupled with said wheel file, a common axle for said wheel file and snuffing member, a depressible side wall of said casing, a cerium stone tube mounted parallel to said side wall in said casing, a U-shaped plate forming a link oscillatably connected at the upper end to said snuffing member eccentric to said axle guided longitudinally at the lower end on said cerium stone tube and having oblique slots, bolts on said side wall and engaging in the slots in said plate thus adapted to transmit the movement of said side wall to said snuffing member, and a return spring acting in a direction parallel to said side wall on said link.

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