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O. ADLER

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LIGHTER

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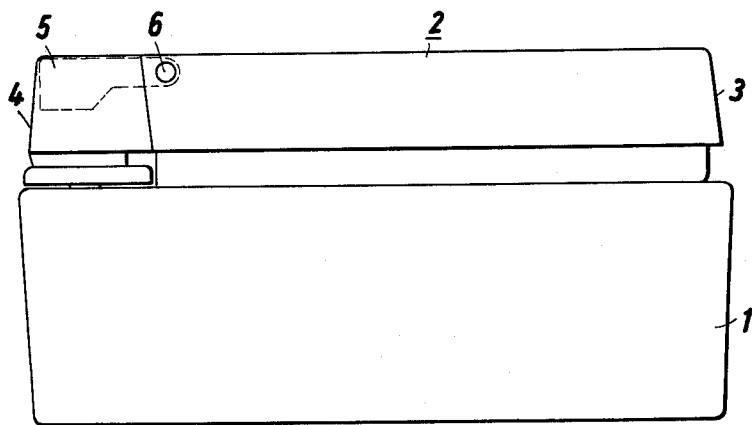


Fig. 1

Fig. 2

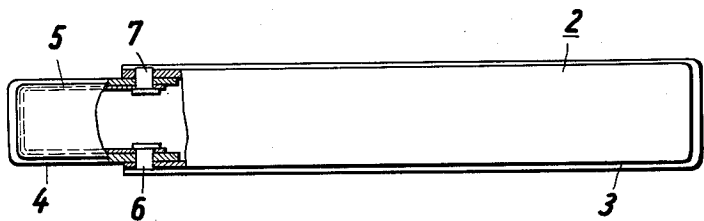
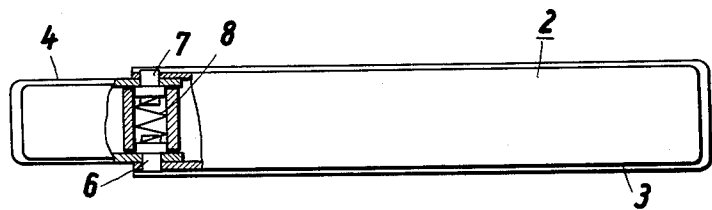


Fig. 3



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1

3,245,232
LIGHTER

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2 Claims. (Cl. 67—7.1)

The invention relates to a lighter having an actuating lever on which a flame extinguishing cap is linked. In such lighters, on operation of the actuating lever, the fuel outlet is opened and the fuel is thereafter ignited, and on release of the actuating lever the fuel is again closed.

The present invention is concerned with the connection between the actuating lever and the extinguishing cap.

Hitherto, for this purpose lenticular or cylindrically headed screws have been used, since rivetted connections have been shown to be unsuitable.

In the now usual screw connection, the screw heads project outwardly, which is troublesome or disadvantageous for a pocket lighter. A further disadvantage consists in that the screws very rapidly become loose with frequent use of the lighter, since as a result of the limited space, screw securing devices cannot be provided.

It is an object of the invention to provide a connection between the actuating lever and the extinguishing cap in a lighter, which is simple to fit and which does not become loose or released even over a long period of service.

The invention consists in a lighter comprising an actuating lever to which a flame extinguishing cap is linked, the actuating lever and the extinguishing cap being connected by two studs standing under spring pressure.

In a preferred embodiment, the studs are rivetted to a preferably U-shaped leaf spring arranged in the interior of the extinguishing cap. In this case, the leaf spring for the studs may simultaneously be formed as a blocking pawl for a detent device on the friction wheel of the lighter.

In a second embodiment, the studs are guided in a bush which surrounds a compression spring which is arranged between the studs.

If the extinguishing cap lies within the actuating lever, then the studs standing under spring pressure completely penetrate the extinguishing cap and at least partly penetrate the actuating lever. If the limbs of the extinguishing cap embrace the actuating lever, then the arrangement is reversed.

In order to make the invention clearly understood, reference will now be made to the accompanying drawings which are given by way of example and in which:

FIG. 1 is a side view of a lighter;

FIG. 2 is a horizontal partial section through the extinguishing cap and actuating lever for one embodiment of the lighter; and

FIG. 3 is a sectional view similar to FIG. 2 for a second embodiment.

2

The lighter comprises a fuel tank 1 and an actuating mechanism generally indicated by reference numeral 2, which comprises an actuating lever 3 and an extinguishing cap 4, the actuating lever being acted on in known manner by a return spring (not shown). In the embodiment of FIG. 2, the lever 3 and the cap 4 are connected by two studs 6 and 7 rivetted to a leaf spring 5. In the embodiment of FIG. 3, a compression spring 8 is arranged between the two studs 6 and 7 and is surrounded by a bush 9.

When a friction wheel is provided, the leaf spring 5 can simultaneously be formed as a blocking pawl for a detent device arranged on the friction wheel. For this purpose it is simply necessary to extend the right hand end of the leaf spring 5 in FIG. 1 beyond the centre point of the studs, and to bend it so that it engages in the detent device and blocks the friction wheel in one direction of rotation. In this case, only one limb of the U-shaped leaf spring needs to be so extended.

Butane or petrol may be used as fuel, and any known ignition devices may be used. Of course, the invention may be applied to table lighters as well as to pocket lighters.

Having now particularly described my invention what I desire to secure by Letters Patent of the U.S. and what I claim is:

1. In a lighter of the type described, a channeled actuating lever, a flame-extinguishing cap, side wall portions of said channeled lever and of said cap overlapping each other, and hinge means hingedly connecting said overlapping side wall portions, said hinge means including a pair of hinge pins each slidably extending through one of the overlapping side wall portions and into the adjacent one to effect a hinge connection between each two overlapping side wall portions, and a leaf spring fitted into said cap substantially parallel with side wall portions thereof, each end of said leaf spring being in pressure engagement with said pins to urge the same toward said overlapping side wall portions.

2. The lighter according to claim 1 wherein said cap has a substantially U-shaped inner peripheral outline, said leaf spring having a substantially U-shaped configuration matching said peripheral outline of the cap, the base of the spring being parallel and closely adjacent to the base wall of said U-shaped outline, whereby the interior of the cap is substantially clear of said spring.

References Cited by the Examiner

UNITED STATES PATENTS

2,231,909	2/1941	Hempel	16—176 X
2,254,755	9/1941	Sand.	
2,308,284	1/1943	Ibach	16—176 X
2,671,329	3/1954	Zahn	67—7.1

EDWARD J. MICHAEL, Primary Examiner.