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FRICTION WHEEL LIGHTER
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2,234,768

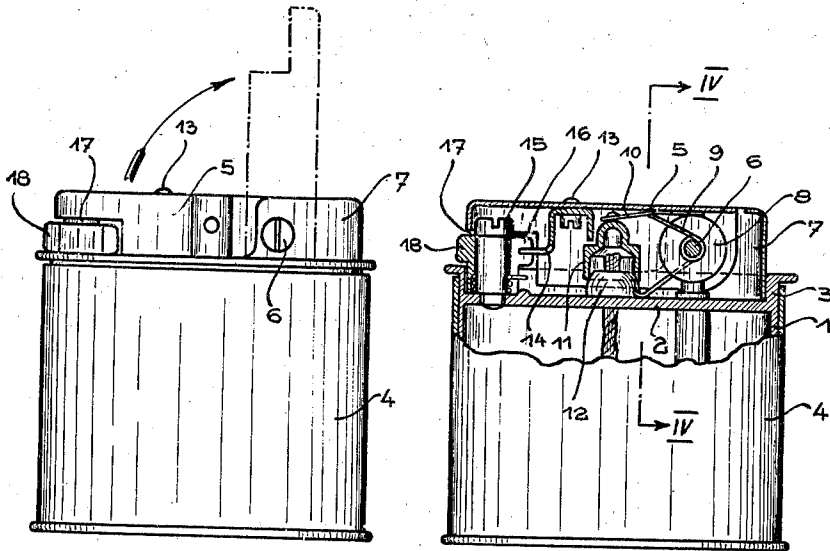


Fig. 1

Fig. 2

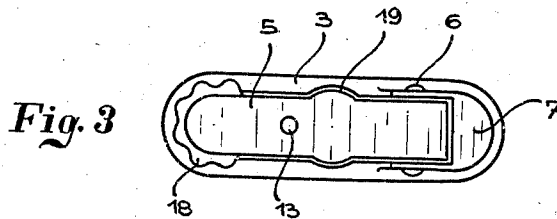


Fig. 3

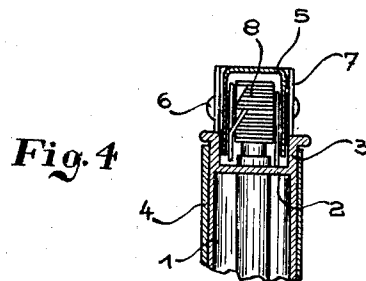


Fig. 4

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FRICTION WHEEL LIGHTER

Hermann Maltner, Offenbach-on-the-Main,
GermanyApplication January 16, 1940, Serial No. 314,174
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1 Claim. (Cl. 67—7.1)

The invention concerns a friction wheel lighter with an upward flinging extinguisher cap carrying arm, which is flinged up by elasticity. Its free part, terminating in an end piece, is, in the initial position, held by a clinching device, rotatable on a spindle. The friction wheel lighter is further equipped with an arm let into a slot arranged in the frontal side of the spindle, in order to secure the initial position.

The present invention relates to a further embodiment of the aforescribed securing device, by which the whole locking device obtains a more accomplished look.

At the same time an undesired release of the lock, caused by projecting parts, is avoided. According to the invention at least the end projection of the extinguisher cap carrying arm has a cap-like shape and, in the initial position, surrounds the spindle of the clinching device. Appropriately the extinguisher cap carrying arm's cross section is U-shaped, the side walls being closed in such a way, that they almost touch the lid of the fuel container but leave a mortice for the clinch catching device. The extinguisher cap carrying arm is kept narrower than the fuel container and its walls are lengthened above the lid until they overlap the side walls of the carrying arm. At any rate they must reach the height of the ball shaped sealing device, which is arranged on the lid of the fuel container and serves as wick holder. The cog of the carrying arm collaborating with the clinch catching device is arranged as a special member on the bottom side of the carrying arm.

By this new embodiment the fuel cap carrying arm covers the whole igniting, burning and extinguishing device, hereby granting absolute safety against slipping off and thus preventing an undesired release of the lock. Any projecting parts being dropped, meddling of the carrying arm with other objects or its being caught in the pocket is avoided.

In the drawing one embodiment of the invention is represented by way of an example. The construction of the embodiment is comprised in Figures 1-4.

Fig. 1 is a side elevation in initial position.

Fig. 2 is a longitudinal section through the machinery.

Fig. 3 is a plan, and

Fig. 4 is a section through IV—IV of Fig. 2.

The lighter consists of a fuel container 1 having its top portion 2 recessed to provide a wall 2 lying below the upper edge of the container, the said wall 2 carrying the spark-producer, the wick

holder and the cover locking device. The fuel container may be covered by a protecting hood 4.

The cover or extinguisher cap carrying arm 5 is of U-shaped cross-section throughout and is mounted rotatably on the spindle 6 of a pedestal 7, which simultaneously carries the friction wheel 8 and the actuating spring 9. The extinguisher cap 11 is mounted on the plate spring 10 of the carrying arm 5. In the initial position of the carrying arm 5 the extinguishing cap 11 is fastened to the ball 12 serving as wick holder. The ball shaped wick holder 12 ends up with the side walls 3 of the fuel container, thus allowing the air to reach the flame without hindrance.

In front of the extinguisher cap a hook 14 is fastened to the carrying arm 5 by way of a little screw 13, which screw collaborates with the clinch catching device 16. The extinguisher cap carrying arm 5 surmounts the spindle 15 and, in the initial position, encloses it hood-like. A mortice 17 in the side walls of the carrying arm 5 leaves room for the handle 18 of the clinch catching device.

As can be recognized by Figs. 2-4 the carrying arm 5 is kept so broad that in the initial position the side walls may enter the room built by the closed walls of the fuel container. A bulge 19 of the side walls enables the extinguisher cap 11 to be lodged comfortably.

Thus the lighter assumes an accomplished appearance, no parts whatsoever projecting. The hood-like terminating endpiece which overlaps the spindle 15 prevents the carrying arm from slipping off.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:

A friction wheel lighter including a fuel container recessed at one end to provide a top wall lying below the upper edge of the container, a flint guide, wick holder, and locking device, all carried by said top wall and within the recessed portion aforesaid, a pedestal including top, end, and side wall portions having the bottom edges of its end and side walls fitted in one end of the recessed portion of the container, a transverse spindle journaled in the opposite side walls of the pedestal and carrying a friction wheel lying above the flint guide, a cover of substantially U-shaped cross-section and including top and side wall portions, the rear ends of said side wall portions overlapping portions of the side wall portions of the pedestal and being secured to the latter by said transverse spindle, the front

portion of said cover being bent downwardly to provide a relatively short front wall overlying the top of the locking device and the front portions of the side walls of the cover being cut away
5 to provide clearance for the side of the locking device, said side walls of said cover being adapted to fit snugly within the recessed top portion of the container when the cover is closed to conceal all of the parts mounted therein, means carried

by the inside face of the cover for cooperating with said locking device, an extinguisher cap carried by the inside face of the cover and cooperating with said wick-holder, and a coil spring carried by the said transverse spindle and having its end portions respectively engaging the
5 bottom wall of the recess and the inside face of the cover.

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