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## PATENT SPECIFICATION



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524,425

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### COMPLETE SPECIFICATION

#### A Spring-cover Pyrophoric Lighter combined with a Container, particularly with a Cigarette Case

We, BRÜDER EISERT AKTIENGESELLSCHAFT, of Wasagasse Nr. 4, Wienix, Germany a German Company, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to a spring-cover pyrophoric lighter combined with a container particularly a cigarette case, of the type which is automatically ignited by the closing of the hinged cover of the container.

A known lighter of this type combined with a conventional cigarette case is provided with a pin projecting out of the housing of the lighter, this pin being arranged on the one hand to coact with a tripping member for the spring-cover of the lighter and on the other hand to be operated, on closing of the container, by a lever mounted on the container cover. This lever is pivoted on the inner side of the cover of the container in spaced relation to the hinge thereof and is counter-supported, with the interposition of a spring, against an abutment in the cover, in such a manner that it is prevented from rotating in one direction and displaces the pin when the container is closed, whereas on opening of the container the lever is pivotally moved in response to the action of the pin so that the pin is not moved and the lighter therefore remains inoperative. With this known type of cigarette case the lighter is positively operated each time the container is closed.

The object of the invention is to enable the container to be closed without effecting operation of the lighter, if desired, and to provide simplified means for operating the lighter.

According to the invention a spring-cover pyrophoric lighter resiliently articulated to a container in a known manner and constituting the fastener for the hinged cover of the container is provided with a tripping member for its spring-cover, which can be engaged and actuated by the edge of the cover of the container on the closing thereof, and which can be brought out of the path of movement of

the said edge by tilting of the lighter relatively to the container so that if desired, the container may be closed without thereby operating the lighter. The tripping member is preferably formed by a slide mounted in the housing of the lighter and adapted to coact with a spring latch serving normally to retain the spring-cover of the lighter in the closed position. At the edge of the container cover there is then provided an opening into which the slide projects when the container is in the closed condition, whereby the spring latch serving to retain the cover of the lighter in the closed position is relieved of tension and the slide serves the dual purpose of actuating the tripping member and of latching the cover of the container in the closed position.

An embodiment of the invention is shown by way of example in the accompanying drawings in which:—

Fig. 1 is a perspective view of the arrangement according to the invention, showing the container with its cover open, while the tilted position of the lighter is shown in dotted lines.

Fig. 2 is a longitudinal section of the end portion of the container and of the lighter hinged thereon, and

Figs. 3 and 4 show a section on the line III—III of Fig. 2 with the container cover in a position just prior to closing and in the closed position, respectively.

With the aid of a spring hinge 3 a lighter 4 is pivoted to a container 1 having a hinged cover 2. The lighter has a housing 5 in or on which there are assembled a fuel tank 6, an igniting arrangement and a spring cover 10. The lighter housing 5 forms the fastener for the container cover 2 by virtue of the arrangement that it engages with its edge 7 over the edge 8 of the container cover when the container is closed (Fig. 4)

The lighter is a known type of friction wheel pyrophoric lighter having a spring-loaded cover 10 retained in the closed position by means of a spring latch 11 having a hooked extension 12 which engages in a recess 13 in the spring-cover.

With the spring latch 11 which is preferably in the form of a leaf spring, there

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[Price 1/-]

coacts a slide 15 adapted to travel in the casing 5. This slide is guided by a keeper 16 and a pin 17 passing through a slot 18 in the slide 15. The slide 15 bears with its rear end against the spring latch 11 and extends forwardly into the cavity of the container 1. On the closing of the container, the forward edge 20 of the container cover engages the slide (Fig. 3), and displaces the latch 11 counter to its spring action, with the result that the spring-cover 10 is released. This cover then flies open under the action of its loading spring and operates the lighter in the usual manner.

Above the engaging edge 20 the container cover is provided with an opening 21 into which the slide 15 projects when the container is closed (Fig. 4), thus allowing the spring latch 11 to return into its initial position to retain the spring-cover 10 in closed condition.

The mode of operation of the arrangement is as follows:—

To open the container the lighter 4, acting as a fastener is tilted about the hinge 3 so that the container cover 2 is released and flies open under the action of its spring. On closing the container the edge 20 of its cover operates the slide 15 to move the latch 11 which releases the spring-cover 10, so that this latter opens and operates the lighter. When the lighter has been used its spring-cover can be closed and will then be retained in the closed position by the extension 12 on the latch 11. Now it may be desirable to close

the container without thereby operating the lighter. To obtain this result the lighter is tilted about the spring-hinge 3 into the position shown in dotted lines in Figs. 1 and 3 while the cover of the container is being closed, so that the slide 15 is brought out of the path of movement of the edge 20 of the container cover and is consequently not actuated to initiate the operation of the lighter.

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

1. The combination of a spring-cover pyrophoric lighter with a container, particularly a cigarette-case, of the type which is automatically ignited by the act of closing the cover of the container, in which the lighter is resiliently pivoted to the container with its housing constituting a fastener for the container cover, a tripping member for the spring-lid being so mounted in the lighter housing that it is engaged and actuated by an edge of the container cover on closing of the container, and is brought out of the path of movement of the said edge by tilting of the lighter relatively to the container, so that, if desired, the container may be closed without thereby operating the lighter.

Dated this 10th day of February, 1939.  
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 Chartered Patent Agents.

Fig. 1

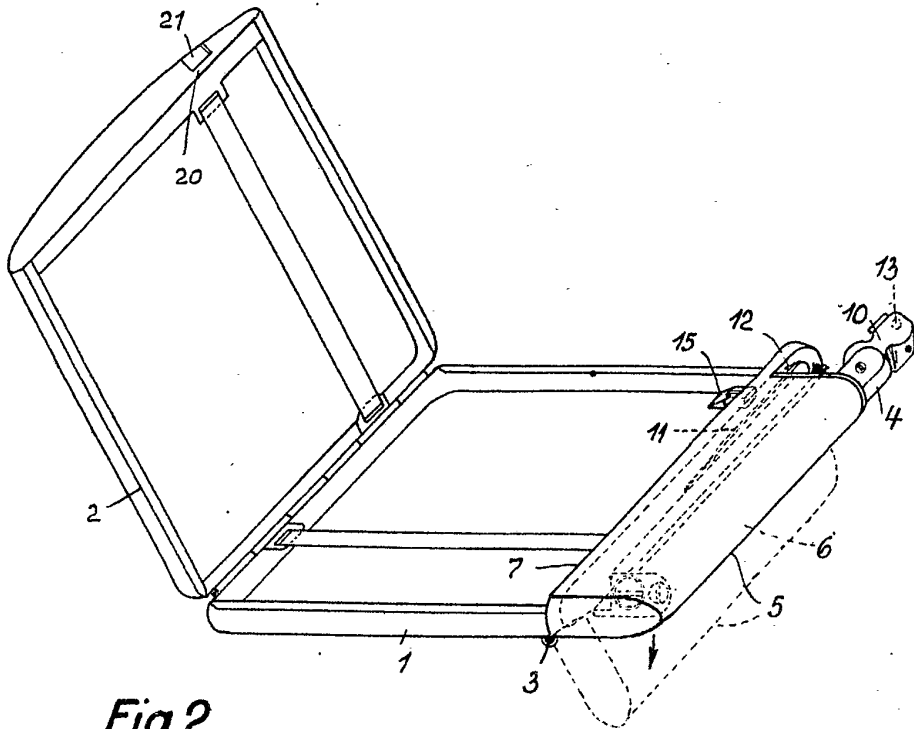


Fig. 2

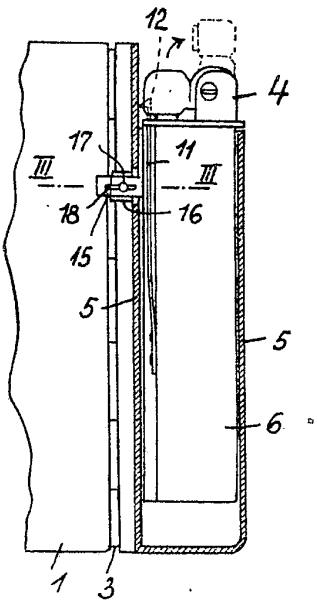


Fig. 3

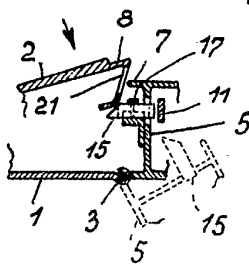
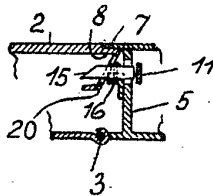


Fig. 4



[This Drawing is a reproduction of the Original on a reduced scale.]