

W. HEYM.
CIGAR LIGHTER.
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1,061,074.

Patented May 6, 1913.

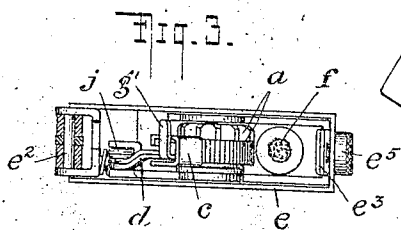
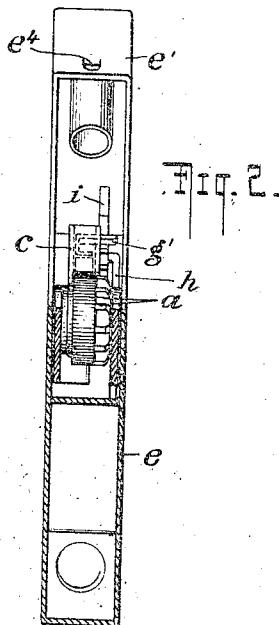
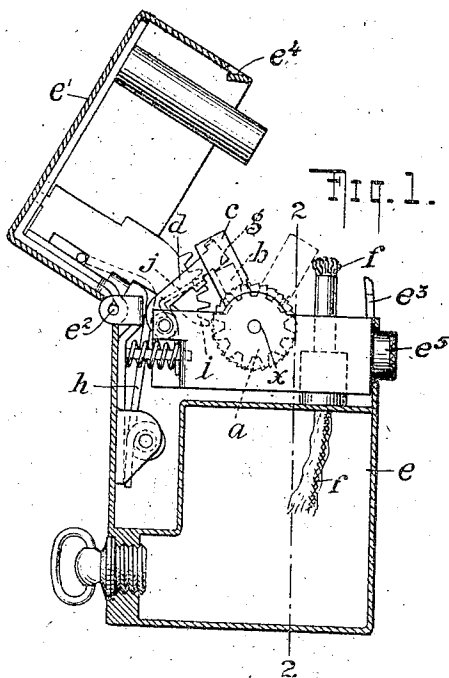
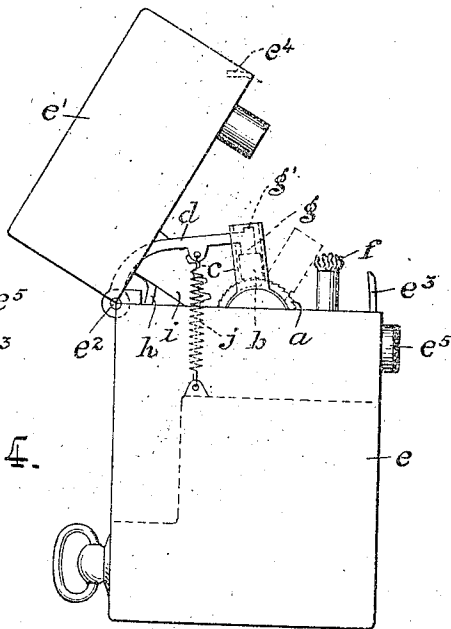


Fig. 4.



WITNESSES

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CIGAR-LIGHTER.

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To all whom it may concern:

Be it known that I, WILHELM HEYM, a subject of the King of Prussia, and a resident of Berlin, Germany, have invented certain new and useful Improvements in Cigar-Lighters, of which the following is a specification.

My invention relates to the well known pocket cigar lighters, in which an inflammable liquid fed by a wick is ignited by means of sparks emitted from a so-called pyrophoric material, for instance an alloy of cerium and iron.

The object of my invention is to provide for the easy renewal of the pyrophoric material, which becomes exhausted after a while. The invention is particularly applicable to cigar lighters, in which the pyrophoric material rubs against a wheel which is rotated by the opening of a spring lid, and the construction is so compact as to leave a large space available as a reservoir for the inflammable liquid.

The invention will be fully described hereinafter, and the features of novelty pointed out in the appended claims.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a sectional view of a cigar lighter embodying my invention, the lid being shown open; Fig. 2 is a section on the line 2—2 of Fig. 1; Fig. 3 is a plan view, the cover being omitted and Fig. 4 is a side elevation showing a modification.

The improved lighter comprises a box or casing made of a body or lower portion *e* containing the inflammable liquid and the wick *f*, and a lid or upper portion *e'* pivoted at *e²* and held in the closed position, by means of a spring catch *e³* engaging a lug *e⁴*. When released by pressing a button *e⁵*, the lid *e'* will fly open under the influence of a spring *h*, and through the medium of suitable gearing or connecting mechanism *i*, this movement will rotate the wheel *a* carrying a suitable friction surface upon its periphery, and journaled in the body *e* at *x*. A holder *c* for the pyrophoric material *b* is mounted to swing about the same axis *x*, and the pyrophoric material *b* is pressed against the friction surface of the wheel *a* elastically by

means of a follower *g* on an arm *g'*. In the particular example shown, this arm is projected laterally from a rigid carrier or pivoted lever *d* drawn downward by a spring *j*. Instead of a rigid pivoted carrier and the spring *j*, I may, of course, employ any other suitable means for exerting downward pressure on the block *b* of pyrophoric material, through the medium of the lateral arm *g'* and follower *g*. Normally, the carrier *d* prevents the holder *c* from turning about the axis *x*. The holder *c* is slotted to allow the arm *g'* to move up and down, the slot being open at the top so that by raising the lever *d* or other part carrying the follower *g*, the latter and arm *g'* may be disengaged entirely from the holder *c*, thus leaving the latter free to be turned about the axis *x*, say to the position indicated by dotted lines at *y* in Fig. 1. In this position, the pyrophoric material *b* can be removed readily and a new block inserted. The raising of the carrier *d* to release the holder *c*, and the removal as well as the insertion of the pyrophoric block *b*, can be effected by hand, without the use of any tools, the lateral arm *g'* forming a convenient handle.

As the mechanism described above takes up but little space, the reservoir for the inflammable liquid may be made of a comparatively large capacity. Another advantage of my invention is that the parts may be inspected readily, and particularly, the proper engagement of the pyrophoric material *b* with the friction wheel *a* may be verified with ease.

It is to be understood that the structures shown and described are merely illustrative of my invention and that various modifications may be made without departing from the nature of my invention as set forth in the appended claims.

I claim:

1. In a pyrophoric lighter, a movable member having a friction surface, a holder for the pyrophoric material, and a spring-pressed follower for forcing said material against said friction surface, said holder and said follower being movable in different paths of movement.

2. In a pyrophoric lighter, a wheel having

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2 friction surface, a pivoted holder for the
pyrophoric material, and a pivoted spring-
pressed follower for forcing said material
against said friction surface, said holder be-
5 ing pivoted independently of the follower.
In testimony whereof, I have hereunto set

my hand in the presence of two subscribing
witnesses.

WILHELM HEYM.

Witnesses:

HENRY HASPER,
WOLDEMAR HAUPT.