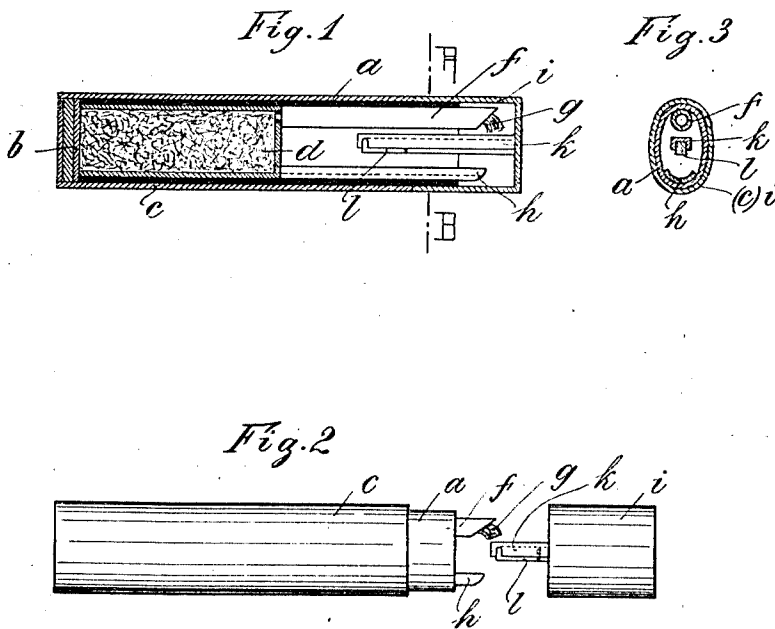


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CERIUM IRON AUTOMATIC LIGHTER.
APPLICATION FILED JAN. 16, 1912.

1,066,405.

Patented July 1, 1913.



Witnesses:
max kumler
Oscar Bock

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SIGMUND GOLDSTEIN, OF NUREMBERG, GERMANY, ASSIGNOR TO FEUCHTWANGER & CO., OF NUREMBERG, GERMANY, A FIRE.

CERIUM-IRON AUTOMATIC LIGHTER.

1,066,405.

Specification of Letters Patent.

Patented July 1, 1913.

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To all whom it may concern:

Be it known that I, SIGMUND GOLDSTEIN, a subject of the King of Bavaria, German Empire, residing at Nuremberg, Bavaria, Germany, have invented certain new and useful Improvements in Cerium-Iron Automatic Lighters, of which the following is a specification.

The present invention relates to a cerium-iron automatic lighter which is arranged in such a manner that it can be easily contained within a small space.

The cerium-iron lighters heretofore known are either provided with screw-threaded openings through which the benzene may be filled for saturating the wick, or the benzene is poured directly into the vessel open at one end. Besides the fact that a lighter with a screw-threaded opening is unfitted for a special outward configuration, it is a very tedious and difficult matter to pour the benzene into this small opening on account of the air still contained within the benzene-tank; the benzene will be frequently spilled and often also the tank will be overcharged, whereas it is only necessary for the wick to be fully saturated. Sometimes the screw-plug will open when the lighter is being carried in the pocket and the benzene will run out. When with the other type the benzene is poured directly into the tank, the unavoidable consequence will be that when the packing is insufficient, the benzene will leak out into the pocket or will rapidly evaporate.

According to the present invention the lighter has a socket containing a receiver with a wick-holder and a grooved spring-arm, said receiver containing cotton, wool or some other material capable of absorbing benzene, and being open at one end. The absorbent material in the socket is then saturated with benzene by dipping its open end in the benzene.

The accompanying illustration exemplifies a constructional form of the lighter.

In this drawing, Figure 1 is a longitudinal section, Fig. 2 is a side-elevation, with the cap removed, and Fig. 3 is a cross-section on the line A—B in Fig. 1.

Similar letters of reference indicate corresponding parts throughout the several figures of the drawing.

A socket *a* having an oval section, which is open at one end and closed by a bottom *b* at the other end, carries on its outside a sleeve *c* made in a manner resembling a cigarette. Within this socket is arranged the receiver *d*, which is filled with cotton, wool or the like absorbent material. The receiver *d* is closed at one end by a wall and is open at the other end. To this receiver are fitted the small tube *f* for receiving the wick and the gutter-shaped spring-arm *h*. On the open end of the socket *a* is detachably fitted an oval cap *i* corresponding with the cigarette-like socket, and in this cap the holder *k* for the cerium-iron igniter *l* is mounted. When assembled the case with the sleeve and the cap has the appearance of a cigarette. The cerium-iron holder *k* has a position between the wick *g* and the spring-arm *h* at such a height that the cerium-iron igniter, which is held at one end only in the holder *k*, is opposite to the arm *h*. For producing the spark the cap *i* is removed and the cerium-iron-igniter *l* is rubbed under pressure along the sharp edge of the gutter-shaped spring-arm *h* projecting from the case *a*. The spark which will be caused thereby will ignite the wick *g* saturated with benzene.

When the benzene is to be replenished, the cap *i* is removed and the receiver *d* is withdrawn by the tube *f* and the arm *h* from the socket *a* and then dipped into benzene. The benzene will penetrate through the open end of the receiver *d* and saturate the wick *g*. The receiver is thereupon again introduced into the socket *a* and the bottom *b* of the latter will produce a safe closure, while the top-wall of the receiver will prevent an evaporation of the benzene.

I claim:

A cerium-iron automatic lighter, comprising a socket closed at one end and open at the other end, a receiver containing absorbent material inclosed in said socket and open at the end adjacent to the closed end of socket, a wick-tube connected with the

opposite end of the receiver, a grooved
spring-arm also connected with the receiver,
said wick-tube and spring-arm projecting
beyond the open end of the socket, and a
5 detachable cap for said socket having a fixed
cerium-iron igniter.

In testimony, that I claim the foregoing

as my invention, I have signed my name in
presence of two subscribing witnesses.

SIGM. GOLDSTEIN.

Witnesses:

MAX SCHNEIDER,
OSCAR BOCK.