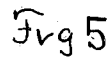


1,006,515.

Fig 1



Inventor
August V. Westerlund

UNITED STATES PATENT OFFICE.

AUGUST V. WESTERLUND, OF NEW YORK, N. Y.

AUTOMATIC CIGAR-LIGHTER.

1,006,515.

Specification of Letters Patent. Patented Oct. 24, 1911.

Application filed January 19, 1911. Serial No. 603,544.

To all whom it may concern:

Be it known that I, AUGUST V. WESTERLUND, citizen of the United States, and resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Automatic Cigar-Lighters, of which the following is a specification.

My invention relates to automatic cigar lighters, and it has for its object to provide lighters of this class, with means whereby the sparks for igniting the lighter are produced more constantly, with more certainty and more steadily.

The other objects are in the combination of the parts for insuring greater safety to the lighter.

Referring to the drawings: Figure 1 is a side elevation of the lighter closed. Fig. 2 is an end view of Fig. 1. Fig. 3 is a bottom view of Fig. 1. Fig. 4 is a sectional elevation (closed) showing the fluid reservoir broken away and taken on line A A Fig. 7. Fig. 5 is another sectional elevation taken on line A, A, Fig. 7, showing only the upper part of fluid reservoir broken away and the cover raised, and in the act of closing and the lever partly broken away. Fig. 6 is a cross sectional view on line X X Fig. 4 looking in the direction of the arrow; Fig. 7 is a top view of the lighter showing the cover turned back; Fig. 8 is a fragmental view in the section on line Y Y Fig. 4 looking in the direction of the arrow.

The lighter consists of a body or shell 2 and a hinged cover 3. The shape and size of the body and cover is not material to this invention, as that will be governed by the requirements of trade.

Within the body, or shell, 2 is placed the fluid reservoir 5, provided with a filling opening 6 closed by a stopper 7. The bottom 8 of this reservoir 5 is formed concaved (see Figs. 4 and 6) and the body-shell 2 is likewise shaped to conform therewith. This is done in order to allow the stopper 7 to be hidden within the bottom so as not to interfere with the lighter standing upright. The reservoir 5 is provided with a wick tube 10 extending upward therefrom some distance from the top edge of the body of the lighter (see Fig. 4); use will regulate the exact height of this tube. The reservoir 5 supports the guide ways 12 of the movable igniting file 15, which travels on an upward angle in said guides toward and along one

side of the wick tube 10. The angle of the travel of the file depending on the height of the wick tube.

Alongside the file surface 16 of the file 15 (being the inside thereof) is placed the pyrophoric or sparking element holder 17 secured to the fluid reservoir. This holder is preferably set at an angle (see Fig. 4) in order that the pyrophoric element 18 within it (see Fig. 7) will move effectually and have a contact with the entire roughened surface of the file for insuring infallible sparking.

The pyrophoric element is held within its holder, so as to press against the file surface by a spring 20 (see Fig. 7) and is held in the holder so as not to fall out by a sliding lid, or by other means. The file is forced or driven forward by the lever arm 22, the contact or connection being effected by a pin 23 on said file and a slot 24 cut in arm 25 of the lever 22, which allows for the straight movement of the said file.

The side extensions 26 of the fluid reservoir form bearing supports for the axle 27 of the lever 22. The outward or forward movement of the lever 22 is automatic and is effected preferably by the coil spring 28 encircling the said axle 27. The return movement of said lever 22 is effected by the presser 29 secured to the inside of the cover which when closed down (see Fig. 4) will cause said presser to press itself down upon the curved portion of said lever and effectually press the same down in normal position for action (see Fig. 4). The cover is forced open by a spring 30 which is so constructed that when the cover is closed (see Fig. 4) it will slightly press the web portion 31 thereof outward, the shoulder 33 of which serving as a rest for the web 34 of the lever 22 to rest against (see Fig. 4), so as to hold said lever 22 in place until the cover is open, and therefore not relying upon the presser 29 to allow the lever to move itself outwardly. Now, when the cover is opened the spring 30 will naturally hug the body of the igniter and gradually release the web portion 31 from off the lever web, and when fully released the lever has the full force of its spring to throw it outward both steadily and effectually against the pyrophoric element, thus producing continuous sparks. The cover is kept closed by the spring snap 40 mounted in the front of the body engaging with a notch on the cover. The

knob or button 41 of this spring snap is movable on same so that when the cover is closed and the lighter is carried in the pocket the said cover cannot be accidentally opened 5 until the knob is moved down so as to allow it to pass through an aperture in the shell to allow the snap to be pressed inward to release its hold on the cover. Safety is thereby insured. To prevent the gases from escaping from the wick tube I use the hood 10 50 secured to the inside of the cover and the stand tube 53 secured to the reservoir (see Fig. 4). This hood is long enough to pass within tube 53 and also to rest and press 15 upon and into the cushion 51 surrounding the wick tube. The gases are thus effectually confined and the fluid prevented from escaping.

What I claim is,—

20 1. In a device of the character described a casing, a lid hinged to said casing, means tending to open said lid, means holding said lid closed, a fluid reservoir placed within 25 said casing, having a filling plug and a wick tube in combination with an igniter comprising a movable file, inclined guide-ways for said file, means for supporting said guide-ways, a pyrophoric element adapted to be acted upon by said file, means for supporting said pyrophoric element in contact 30 with said file, and means for moving said file in said guide-ways.

2. In a device of the character described, a 35 casing, a lid hinged to said casing, means tending to open said lid, means for holding said lid closed, a fluid reservoir placed within said casing having a filling plug and wick tube, a movable file, inclined guide ways for said file, said guide ways mounted within 40 the said casing, a pyrophoric element adapt-

ed to be acted upon by said file, said pyrophoric element mounted within said casing in close proximity to the wick tube, means for supporting said pyrophoric element in contact with the said file and means for 45 moving said file in said guide ways.

3. In a device of the character described a casing, a lid hinged to said casing, means for closing said lid, a spring fastened within said casing, said spring having a web, 50 said spring adapted to open the said lid, said spring adapted to move inward and outward when said lid is opened and closed, an inclined movable file mounted within said casing, means for supporting said file, 55 a pyrophoric element adapted to be acted upon by said file, said pyrophoric element mounted within the casing, means for supporting said pyrophoric element in contact with the said file, a lever arm, pivotally 60 mounted within said casing, said lever adapted to move said file, means for connecting said lever to said file, means for operating said lever in one direction, means for operating said lever in the opposite di- 65 rection, a web mounted on said lever arm, said web adapted to engage the web of said spring when the said lid is closed for restraining the said lever, said web adapted to be disengaged from web of said spring when 70 said lid is fully opened, for releasing the said lever and the said file for constant sparking as described.

Signed at New York in the county of New York and State of New York this 18 day of 75 Jan. A. D. 1911.

AUGUST V. WESTERLUND.

Witnesses:

F. BARRITT,

D. J. RIOSELLI.