

## PATENT SPECIFICATION

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## COMPLETE SPECIFICATION

**Improvement in or relating to Lighters for Cigars, Cigarettes andlike uses**

- I, ALEXANDER SYDNEY WESTON, of 85, East 10th Street, New York, State of New York, United States of America, a Citizen of the United States of America, 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:—
- 10 This invention relates to lighters for cigars, cigarettes and for similar uses, and has for its main object to provide a lighter of a novel improved construction, which will be more efficient than the 15 lighters now in use.
- Another object of my invention is to provide a lighter in which novel means are arranged to feed oxygen to the flame and to prevent an easy extinguishing 20 thereof, thereby making my novel lighter practically wind and storm proof.
- According to my invention I provide a lighter, comprising a casing, and a hollow cylindrical wick for the flame in the casing, open at the top, characterised by 25 openings in the opposite sides of the casing and of the wick, respectively, to permit a current of air to pass through them into said wick.
- 30 Referring to the drawings left herewith:—
- Fig. 1 is a side elevation of my novel lighter in a closed position, and
- Fig. 2 is a sectional elevational view 35 of the assembled lighter in a closed position and on a much larger scale than Fig. 1;
- Fig. 3 is a partly sectional side elevation of the central portion or main body 40 of the lighter with the bottom cap attached thereto;
- Figure 4 is a cross sectional plan view on the line 6—6 of Fig. 3;
- Figure 5 is a fragmentary side elevation 45 of the upper portion of the middle or central section of the housing of my lighter indicating the three apertures provided therein.
- Referring now to the drawings more in detail by characters of reference, my 50 assembled lighter is indicated, in general, by the numeral 10, and is composed of three main parts or sections, being a middle or main section, generally indicated by the numeral 11, a top or upper cap section, generally indicated by the numeral 12, and a lower or bottom cap section, generally being indicated by the numeral 13.
- The middle or main section 11 is arranged in a cylindrical housing 14 having a closed bottom 15 and an open top 16 and preferably being made of some appropriate thin sheet metal material. The upper or top section 12 also has a cylindrical hollow body 16a, open at the bottom 17 and closed at the top 18, its inner diameter being such that it may snugly slide over the main body section 11. The bottom cap section 13 also comprises a hollow cylinder 19, open at the top, as at 20, having a closed bottom 21 and being substantially of identical diameter to the top section adapted to slide over the middle section 11, as indicated in Figs. 2 and 3.
- A comparatively heavy layer of wick fabric 36 is arranged around the circumference of the cylindrical housing 14 of the middle portion. A cylindrical hollow space 37 is thus produced within the wick 36 and the lower portion thereof is filled with an appropriate material 38, like cotton, said material being the carrier of the combustion vapour producing liquid, like gasoline, ether, or some appropriate specific composition, used in this art for such purpose, a small quantity of said liquid being dropped over and on the cotton 38 and being absorbed thereby when filling the lighter.
- A comparatively large hole 39 is provided near the upper end of the middle portion through the wall thereof and through the wick lining 36, and two smaller holes 41 are provided in said wall opposite to said large hole 39 and preferably equi-distantly placed from the diameter passing through the large hole 39. A spark-producing wheel and flint 100 are arranged midway between the two holes 41. An outwardly curved bead 43 is formed in the wall 14 of the middle section to provide an upper limit for the sliding of the bottom section 13 thereover, and, similarly, a lower limit for the downward

sliding of the top section 12.

The use and operation of my lighter will be obvious from the drawings and the herein description.

5 Normally the device is in a closed position, as indicated in Fig. 2.

When it is desired to use it, the upper cap 12 will be pulled off the middle section 11, using the ball shaped head 49 as a grip for this operation, and the spark wheel quickly rotated in the direction of arrow 55, producing a succession of sparks from the upper end of the flint 35. The combustible liquid will rise in the wick lining 36 by capillary action and will evaporate from the upper end 57 of said wick, and the flame will be produced by the sparks igniting the vapours of the liquid around the upper end of the wick 20 36, as it is well known.

A draught of air will be produced by the action of the large hole 39, and the opposite two small holes 41, feeding oxygen to the flame, so that the flame will not be extinguished even in a strong wind or storm. When it is desired to extinguish the device, the upper cap 12 will be pushed over the middle portion 11.

As has been mentioned, it is my 30 experience that the flame will be more resisting against wind and storm than in any of the similar devices used at present.

Having now particularly described and 35 ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A lighter, comprising a casing, and 40 a hollow cylindrical wick for the flame in the casing, both open at the top, characterised by openings in the opposite sides of the casing and of the wick, respectively, to permit a current of air to pass 45 through them into said wick.

2. A lighter, as claimed in Claim 1, comprising a casing, having a wick for the flame in the casing arranged as a lining on the walls of the casing, the

casing and the wick being open at the 50 top, characterised by two small registering apertures through the walls of the casing and the wick, respectively, equidistantly placed at the two sides of one end of a diameter of the casing, and a larger hole in the opposite side of the casing and the wick at the other end of 55 said diameter.

3. A lighter, as claimed in Claim 1 or Claim 2, comprising an elongated casing, 60 a wick arranged around the walls of the casing thereby producing a hollow space within the wick, the top end of the wick and of the casing being open, fuel vapour producing means in the lower portion of 65 the space within the wick, means to ignite said vapour adjacent to the open top of the wick when it is desired to use the lighter, and thereby produce a flame on 70 said open end, registering pairs of openings provided in the opposite sides of the upper portions of the wick and of the casing respectively, substantially below 75 said open top but above said vapour producing medium, whereby currents of air will be produced from said openings through the open top when a flame is produced, feeding said flame and preventing 80 an easy extinction of the same.

4. A lighter, according to Claim 3, in 80 which said openings are in the form of two pairs of registering small holes in the wall of the wick and of the casing, respectively, placed equidistantly at the two 85 sides of one end of a diameter of the casing, and one pair of larger such registering holes at the other end of said diameter, said spark producing means being placed between said two pairs of 90 small holes.

5. The cigarette lighter, substantially as described and as shown in the appended drawings.

Dated this 21st day of August, 1944.

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

