PATENT SPECIFICATION

384,339

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COMPLETE SPECIFICATION.

Pocket Lighter.

I, PAUL WEINBERG, of Zossen, near Berlin, Germany, of German Nationality 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:—

Pocket lighters are generally used for lighting cigarettes, cigars, and the like, but are difficult to handle when used for lighting pipes.

It has already been endeavoured to overcome this difficulty by constructing a pocket lighter so that an air current is forced by an air-pump in the fuel container through a tube leading to a nozzle, arranged horizontally and opening at the centre of the tip of a wick, projecting from the fuel container. Thus, if the air-pump is operated, air is supplied into the centre of the flame and a blow flame similar to that of a soldering lamp is produced.

A stand cigar lighter is also known having a lamp at one end of the case and a pump in the case, from which pump a tube leads to a point in proximity to the flame of the lamp. The cigar is held between two holders on the top of the case with its end to be lighted directed towards the lamp flame. The holder for the end of the cigar to be placed in the mouth forms a cutter. When this cutter is operated, the pump in the case is operated, air is forced through the tube onto the lamp flame thereby blowing the flame onto the end of the cigar. This construction is not suitable for lighting pipes and is much too complicated for a pocket lighter.

The invention consists in that a vertical wick tube leading from a fuel container enclosed in the lighter case projects at its upper end above the upper side of the case near one end thereof and an air tube extending from an air compartment forming a blower also enclosed in the case projects from the middle of the upper side of the case, the air tube being bent towards the wick tube so that when the blower is operated air is directed onto the flame at the end of the wick tube and blows this flame laterally beyond the side of the case thus facilitating the lighting of the pipe. According to a further feature of the invention the walls of the blower are resilient and bulged so that when pressure is exerted on these walls air is forced from the blower through the air tube onto the flame. For the convenience of closing the pocket lighter so that it occupies the least possible space, the air tube is resiliently mounted on the top wall of the case so that it is brought into operative position by a spring and either pushed into the air compartment or swung laterally by the closing of the wick cap.

The construction of such a lighter is shown in the accompanying drawing, in which:

Fig. 1 shows a longitudinal section, lighter open in operative position,

Fig. 2 an elevation, lighter closed,

Fig. 3 a top plan view of a form of construction with oscillatable blower tube, and

Fig. 4 a top plan view similar to Fig. 3, with closed cover.

Fig. 5 shows the arrangement of the inclined surface on the wick cap-lever which serves for pushing aside the blower tube,

The construction and operation of the lighter is hereinafter described.

Referring to the drawing the case 1 contains in its lower end the fuel container 2. This container is filled through an opening closed by a screw plug 3. Evidently the filling opening can be arranged as desired. 4 designates the wick tube which extends through a tube 4a between the container 2 and the upper end of the case 1 where it is fixed by means of a knurled nut 5. In the upper portion of the case the blower 6 is arranged, which consists for example of a resilient metal balloon. As shown in Fig. 2 apertures 7 are provided in the front and rear sides of the case 1 to allow the tips of the fingers to compress the metal blower. The compressed air is blown through the tube 8 in the upper portion of the blower over the flame and thus produces a long extended blow pipe flame. The drawing shows only the

[*Price* 1/-]

shape of the blow pipe flame when the blower is operated, whereas otherwise the flame, as indicated in dot lines extends upwardly. The lighting of the flame is effected in any desired manner, for example by ignition metal and friction wheel. As it is important to cover the lighting flame, and the blower tube in rigid arrangement would be in the way, the latter may, as shown at 9 in Fig. 1, be resiliently pressed into a guide in the blower, so that on opening the closing cap 10 it is pressed back upwards into the position shown in Fig. 1. The inoperative position is shown in Fig. 2. The blower tube 8, as illustrated in Figs. 3 and 4, on closing the cap 10, may be pushed aside by means of an inclined surface 12 arranged on the wick cap lever 10 in the direction of the arrow against the action of a spring 11 which automatically brings the tube into operative position when the cap 10 is raised. The construction of the closing cap may also be selected as desired.

It is evidently within the scope of the invention to make the compressible wall of the blower of any other suitable material which is more elastic than thin sheet metal but remains resistant to benzine and similar vapour.

Having now particularly described and 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 pocket lighter, characterized in that a vertical wick tube leading from a fuel container enclosed in the lighter case projects at its upper end above the upper side of the case near one end thereof and an air tube extending from an air compartment forming a blower also enclosed in the case projects from the middle of the upper side of the case, the air tube being bent towards the wick tube so that when the blower is operated air is directed onto the flame at the end of the wick tube and blows this flame laterally beyond the side of the case, thus facilitating the lighting of a pipe.

2.—A pocket lighter as claimed in claim 1, characterized in that the blower consists of an air compartment with compressible walls made of elastic material which is resistant to liquid fuel.

3.—A pocket lighter as claimed in claims 1 and 2, characterized in that when the lighter is not in use the air tube is adapted to be pressed into the blower by the closing cap for the wick against the action of a spring which automatically returns the tube into operative position when the cap is raised.

4.—A pocket lighter as claimed in claims 1 and 2, characterized in that when the lighter is not in use the air tube is adapted to be oscillated laterally by the closing cap for the wick against the action of a spring which automatically returns the tube into operative position when the cap is raised.

Dated this 8th day of May, 1931.

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Fig. 1.

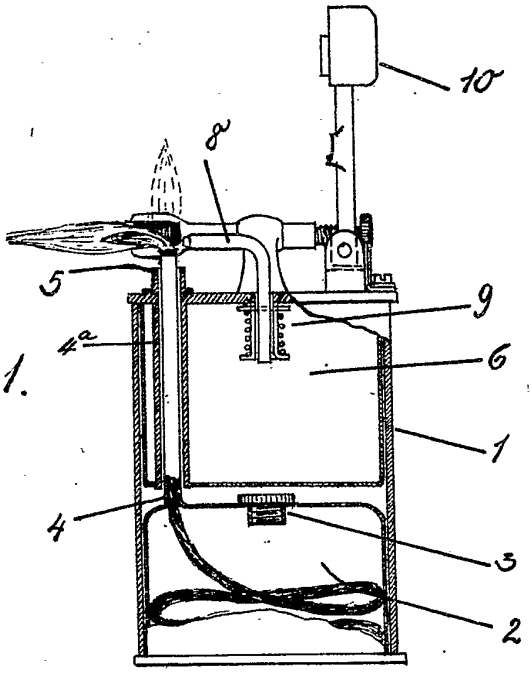


Fig. 2.

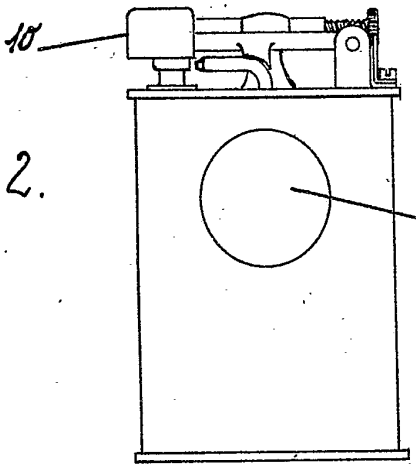


Fig. 5.

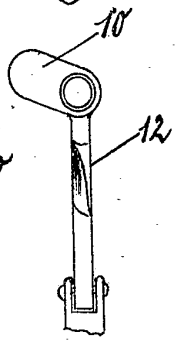


Fig. 3.

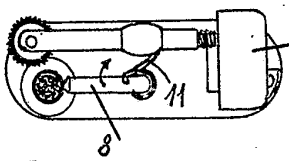
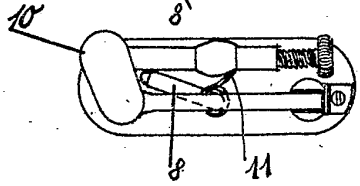


Fig. 4.



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