

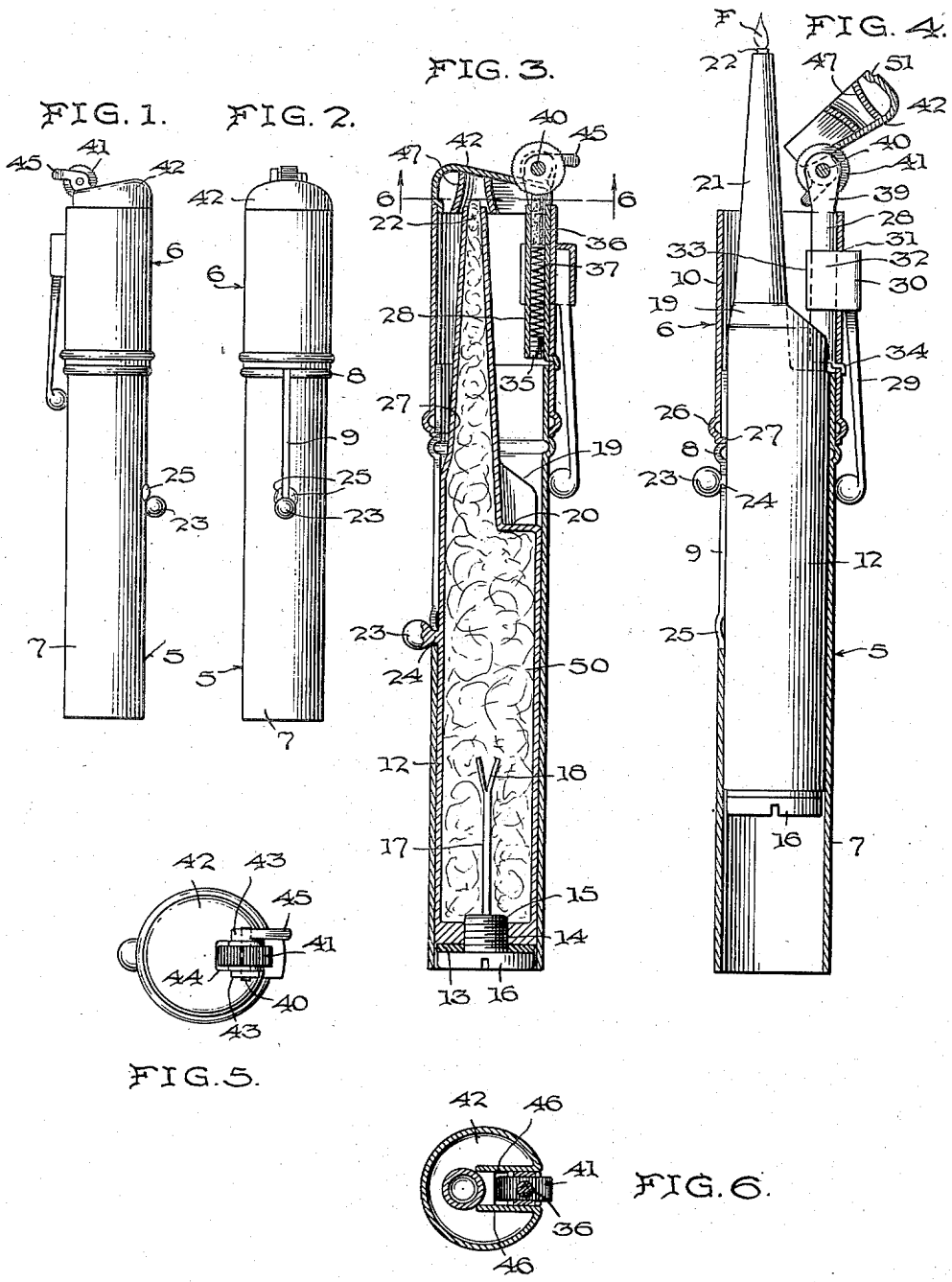
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PIPE, CIGAR, AND CIGARETTE LIGHTER

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PIPE, CIGAR, AND CIGARETTE LIGHTER

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The present invention relates to improvements in combined smoking pipe, cigar and cigarette lighters, and more particularly to a lighter of the flint ignition type.

One object of the invention is to provide a flint ignition type lighter having an elongated wick support or wick end capable of being projected from one end of the supporting casing to a position in which the flame of the wick end can be conveniently presented to a smoking pipe or the like.

Another object is to provide a flint ignition type pocket lighter in which the elongated wick support or end is tapered to facilitate the packing of absorbent cotton within the elongated wick support and thereby enable the lighter fluid to be fed by capillary attraction to the end of the wick in said support.

Another object is to provide a flint ignition type lighter for pocket and personal use which is provided with a relatively large fuel chamber of circular section and elongated form to slidably fit within the outer casing member which is designed to resemble a pocket fountain pen.

Another object is to provide a lighter of the above mentioned type having a rockably and tiltably mounted cover having a friction wheel associated therewith whereby rotation of said wheel will cause the cover to be displaced angularly and removed from the sliding path of the wick end.

Another object is to provide a flint ignition type lighter in which the slidably mounted container will not be jarred or unduly vibrated when the wick is ignited by manipulating the friction wheel.

Another object is to provide a flint ignition type lighter for smoking pipes, cigars and cigarettes in which the fuel container is slidably mounted in an elongated outer casing in such a manner that the fuel container will not be accidentally displaced or moved forward to its projected position regardless of the position in which the lighter is held.

Another object is to provide a flint ignition type lighter for smokers' use in which the fuel container is slidably mounted within an outer casing and is provided with manual control means for conveniently and easily projecting the elongated wick support when it is desired to use the lighter.

Other objects and advantages of the invention will become apparent during the course of the following description of the accompanying drawing wherein:

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Figure 1 is a side elevational view of the pocket lighter showing the general organization of the various elements such as the pivoted closure cup and ignition wheel as well as the general shape of the outer two part casing.

Figure 2 is a side elevational view of the pocket lighter angularly displaced 90° and showing the two part outer casing and the clip for retaining the lighter in the pocket when not in use.

Figure 3 is a vertical cross sectional view of the pocket lighter substantially full size showing various structural details thereof and illustrating the rockably and tiltably mounted cover in its closed position.

Figure 4 is a vertical cross sectional view of the pocket lighter with the fuel container and tapered wick support in side elevation projected to its operative position so that the tapered wick support will extend beyond the opened cover member.

Figure 5 is a top elevational view of the pocket lighter showing the friction wheel and the manner in which the same is rotatably supported on the cover member and

Figure 6 is a transverse cross-sectional view taken on line 6-6 of Figure 3 and looking in the direction of the arrows to illustrate further the manner in which the friction wheel is rotatably supported on a pin carried by the cover member.

In the drawing, and more in detail, there is shown for the purpose of convenience of illustration a pocket lighter including a two-part casing having a lower section generally designated 5 and an upper section, designated 6. The lower section 5 is formed of a cylinder 7 open at both ends and is provided adjacent its upper end with an annular beaded portion 8 to form a limiting stop for the upper casing section 6. A longitudinal slot 9 is formed in the casing section 5 and extends from one end thereof in a direction longitudinal with the axis of the casing to a point midway between its ends. The slot 9 enables the cylindrical casing 7 to be compressed slightly when the upper casing section 6 is slid into position. The lower end of the upper casing 6 being adapted to engage the annular beaded portion 8.

The upper casing section 6 is formed of a cylindrical member 10 of a diameter slightly larger than the diameter of the casing section 7 to provide a sliding snug fit between said casing sections.

Slidably mounted within the casing section 5 is an elongated fuel container 12 which is closed at its lower end as at 13, and is provided with a threaded bore 14 for receiving the correspond-

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ingly threaded portion 15 of a closure plug 16. Integrated with the closure plug 16 is a rod 17 which is provided with a split end 18 to frictionally grip a piece of flint to facilitate insertion of the flint in the holder when replacing the same. The opposite end of the fuel container 12 is provided with an offset conical portion 19 having a cut away portion 20 to enable the fuel container to be projected in an upward direction with the tapered portion extending well within the upper casing section 5. Projecting upwardly from the tapered portion 19 is a tapered wick support 21 which is adapted to contain a wick 22, and said tapered portion 21 or wick support is of elongated form and has its axis offset laterally from the longitudinal axis of a fuel container 12.

Affixed to the fuel container 12 is a spherical operating knob 23 which is provided with a reduced portion 24 extending through the slot 9 and operable therein to enable the fuel container 12 to be moved to and fro within the casing section 5. The innermost end of the slot 9 is provided with raised portions 25 to frictionally engage the spherical operating knob 23 and retain the fuel container 12 in its retracted position.

The lower edge of the casing section 6 is likewise provided with an annular beaded portion 26, and the lower edge is provided with an inwardly extending projection 27 adapted to be received in the slot 9 and prevent relative rotation between the casing sections 5 and 6.

Affixed to the cylindrical casing section 6 is a flint tube 28 which is held in place by one end of a pocket engaging clasp 29. The pocket engaging clasp 29 is provided with a fastener 30 having parallel arm portions which extend through openings 31 in the casing section 6 and embrace the flint tube 28 as at 32. The inner ends of the parallel portions 32 being bent to clampingly engage the flint tube 28 as at 33. The lower end of the flint supporting tube 28 is provided with a projection 34 which extends through an opening in the wall 10 of the upper casing section and is angularly bent (Fig. 4) to clampingly engage the outer peripheral surface of said casing section. The flint holding tube 28 has its lower end closed by a removable threaded plug 35 and the flint 36 is yieldingly urged toward the opposite end by means of a coil spring 37. The upper end of the flint tube 28 is provided with a pair of spaced apart bearing supports 39 having openings for receiving a shaft 40 or relatively short pin which forms a rotatable support for the friction wheel 41 which has a series of indentations or ribs on the peripheral surface to present a friction surface to one end of the flint 36.

Also pivotally attached to the pin 40 is a cover 42 which is provided with a pair of upstanding ears 43 arranged one on each side of a radial slot 44. The radial slot 44 receives the friction wheel 41 so that a portion of its peripheral surface will project above the upper surface of the cover 42. One of the ears 43 is provided with an extension 45 to form a finger engaging portion for simultaneously rocking the cover 42 on its pivot pin 40 and rotating the friction wheel 41 by the thumb. Extending inwardly and downwardly from the radial slot 44 is a pair of spaced apart walls 46 which confine the friction wheel 41 in the area of its contactual engagement with the flint 36 so as to direct sparks inwardly toward the end of the wick support 21 during initial operation of the friction wheel 41. The underside of the cover 42 has affixed thereto one end of a snuffer tube 47 having its outwardly flared

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lower open end arranged to correspond in position to the end of the wick support 21. Thus, when the cover 42 is closed the snuffer 47 will extinguish the flame F (Fig. 4), and in addition will prevent the escape of fumes from the fuel in the container 12. The container 12 is filled with cotton or other absorbent material which, when wetted with igniter fluid, will be fed by capillary attraction to the wick 22. The arrangement being such that a large portion of the tapered wick support 21 is filled with absorbent material 50 to supply sufficient fuel to the wick 22 for accommodating a relatively large flame.

The lower edge of the cover 42 is provided with an annular offset portion 51 to form a recess and enable the cover to be closed so that the side walls are continuous with the peripheral wall of the upper casing section 6 with the offset portion 51 frictionally held within the upper edge of said casing section 6.

The upper and lower casing sections 6 and 7 can be releasably held together if desired by sliding the beads 8 and 26 into interfitted mutual engaging relationship. This can be accomplished by pressing the casing section 7 in the area of the slot 9 to contract the same and permit said interfitting of the beads.

It is to be understood, that the form of the invention herewith shown and described is to be taken as a preferred embodiment thereof and that the wick tube 28 is mounted within the confines of both the lower and upper casing sections 5 and 6 to provide a compact structure which may be easily carried in the pocket of the user and free from projecting portions liable to cause damage to the garments of the user.

Having thus described the invention, the following are claimed as new and desired to be secured by Letters Patent:

1. In a pocket lighter, a cylindrical casing having a longitudinal slot, said casing being formed of upper and lower tubular sections slidably and telescopically connected, a fuel container slidably mounted in the lower casing section having a knob adapted to be received in said slot, an elongated tapered wick support on said fuel container having its axis offset from the longitudinal axis of said fuel container, said wick support being normally housed within the upper casing section and when said fuel container is projected upwardly said wick support will move beyond the upper end of said upper casing section, a flint tube mounted in the upper casing section arranged on the opposite side of the axis of said fuel container, a friction wheel rotatably mounted above said flint tube and arranged such that its peripheral surface will engage the upper end of a flint yieldingly mounted in said flint tube, a cover hingedly connected to said flint tube to swing about the same axis as the axis of rotation of the friction wheel, a snuffer mounted on the inner surface of said cover corresponding in position to the end of the wick support, and a closure plug for the opposite end of said fuel container having a flint gripping member to facilitate insertion and removal of flint rods in said flint tube, said flint tube being mounted within the circular confines of said upper casing section to eliminate projections and obstructions.
2. In a pocket lighter, a cylindrical casing having slidably connected upper and lower tubular casing sections, a fuel container slidably mounted within the lower section, an operating finger-piece on said fuel container projecting through and operably movable in an elongated

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slot in said lower casing section, an elongated tapered wick support on said fuel container adapted to be projected through the upper end of the upper casing section when the finger-piece is moved in a corresponding direction, a flint tube mounted within the circular confines of the upper tubular casing section and arranged opposite said elongated wick support, said elongated wick support being offset laterally from the longitudinal axis of the fuel container to provide space within the upper tubular casing section for the flint tube, bearing supports on said flint tube, a bearing pin mounted in said supports, a friction wheel rotatably mounted on said bearing pin between said supports, a flint rod in said flint tube yieldingly urged in a direction toward said friction wheel, and a cover for closing the open upper end of said tubular casing section pivoted on said bearing pin and arranged to swing out of the path of the wick support when

the same is projected through the open end of said upper tubular casing section by manipulating said finger-piece.

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