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1,938,874

Combined Smoking Pipe and Lighter

Filed March 26, 1929

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

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WITNESS

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This invention appertains to improvements in smoking pipes generally, and has for an object to combine lighting devices with such pipes, and in a manner that the same will always be in a position of readiness for instant use at all times, and to thereby eliminate the necessity for the carrying of separate lighting media on the person of the user.

Another object of the invention is to provide a lighting attachment for the purpose set forth, which is of an extremely simple but durable and efficient construction and arrangement of parts, such as will be capable of being readily installed in an operative position on the bowl of a pipe immediately at the edge of the opening therein, whereby tobacco placed in the bowl will be quickly ignited by the draft created by puffing on the mouth piece of the stem of the pipe by the user.

A further object of the invention is the provision of a mechanical type of lighting device as and for the purposes mentioned, which may be easily and readily incorporated in the wall of the bowl of a pipe at a position as to be convenient for manipulation by the user, and, at the same time in a manner so as not obstruct or interfere with the filling of the bowl with tobacco, or the cleaning of the ash therefrom, or to seriously detract from the appearance in its entirety.

Another object of the invention is to provide a lighting device of the class set forth, which will employ a liquid fuel reservoir of a design to be applied to a pipe in a manner to give the bowl portion of the same the configuration of a standard or acceptable form, and whereby the heat from the tobacco consumed in the bowl will act to volatilize the liquid fuel, in order to thereby greatly increase its otherwise ordinary or usual igniting qualities.

With the foregoing and other equally important objects and advantages in view, the invention resides in the certain new and useful combination, construction and arrangement of parts, as will be hereinafter more fully described, set forth in the appended claims and illustrated in the accompanying drawings, in which:

Figure 1 is a top plan view of a conventional smoking pipe, showing a practical embodiment of the lighting attachment as applied thereto.

Figure 2 is a vertical section through the bowl of the pipe, the same being taken on the line 2—2 of Figure 1.

Figure 3 is a view similar to that of Figure 2, but having a portion of the inner wall of the bowl of the pipe broken away and showing the lighting attachment also in vertical section.

Figure 4 is a front elevation of the pipe bowl and the exposed portion of the lighting attachment.

Figure 5 is a fragmentary section through the wall of the pipe bowl, and showing the ignition mechanism of the lighting device partly in section, and

Figure 6 is a vertical section through one portion of the pipe bowl and the upper part of the lighting attachment, the same being taken on the line 5—6 of Figure 1.

Referring to the drawing, wherein like characters of reference designate corresponding parts throughout the several views thereof, the embodiment of the invention, as shown therein by way of example only, is constituted in a smoking pipe having the usual stem portion 10 and the bowl portion 11. The bowl portion 11 has the outer side of its outer wall flattened to set against the same the upper flat side of a liquid fuel reservoir 12 of the lighting attachment. This liquid fuel reservoir 12 is preferably formed to provide a curved bottom wall in the center of which a filling opening is provided for the introduction therethrough of a supply of a suitable liquid fuel. This opening is preferably screw threaded for the detachable engagement therewith of a cap closure 13. The reservoir 12 is to be secured to the lower flat side of the bowl 11 by means of a screw 14, which is passed upwardly through an aperture formed in the top flat wall of the reservoir 12 and into the bowl wall. The screw 14 is to be secured in position, or removed therefrom, by the insertion of a screw driver or the like inwardly of the screw threaded opening in the lower curved wall of the reservoir 12 when the screw cap 13 is detached therefrom.

Rising from the upper flat wall of the reservoir 12 is a wick tube 15, which is inserted upwardly of a bore formed vertically in the pipe bowl 11, preferably at the front side thereof. A wick 16 is threaded upwardly through the bore of the tube 15 from a mass of the same filling the interior of the reservoir 12, and has its upper end projecting for a slight distance of the edge and into a recess 17 formed in the top edge of the bowl, the upper end of the wick tube 15 preferably terminating substantially in the plane of the bottom wall of the recess 17. The recess 17 in the top edge of the bowl 11 is preferably elongated for a distance along the bowl wall, and open inwardly of the latter throughout its length.
while the outer side of the same is preferably sloped upwardly, and merges into the top edge, so as to leave the exterior wall of the bowl unbroken.

5 Positioned within the recess 17, to one side of the upper edge of the wick tube 15 is a wheel 18, which has its peripheral edge milled, or other-

wise roughened, for abrasive action on the upper edge of a flint 19, supported in a tubular holder 20 seated in a bored opening upwardly through the bottom wall of the recess 17. Positioned within

the holder 20, below the flint 19, is a coiled spring 21, which may have its tension varied by

means of an adjusting screw 22 threaded upwardly of the lower end of the holder 20. The

bore in which the holder 20 is seated is disposed in spaced parallel relation to the bore containing the wick tube 15, and the upper end of the holder 20 is preferably terminated in the plane of the

bottom wall of the recess 17, so that the exposed end of the flint 19 will be in proper position to have the sparks therefrom ignite the adjacent wick end.

The wheel 18 is fixed on a shaft or spindle 23, which has its opposite ends journaled for rotation in a pair of spaced parallel supports 24 of sheet metal, and of a shape to provide pointed laterally disposed portions for driving engagement in the bottom wall of the recess 17. Also secured on the shaft or spindle 23, and partially enclosing one side of the peripheral edge portion of the upper side of the wheel 18 is a segmental member 25, which has an arm portion 26 extending tangentially from one end of the upper curved wall of the same, and in a manner that the free end thereof will normally depend within the recess 17, and over the exposed end of the wick 16. This free end of the arm 26 is preferably cup-shaped, as at 27, to fit entirely over the exposed end of the wick 16, and thereby to act to extinguish the flame after the wick has been previously ignited.

Engaged about the shaft or spindle 23, at one side of the wheel 18, is an intermediate coiled

portion of a spring member 28, which has its opposite ends projecting in opposite directions outwardly from the shaft and tangentially with respect thereto, whereby one of the same will be secured to the underside of the upper curved wall of the segmental member 25, and the other thereof secured in the bottom wall of the recess 17. The arrangement of the spring member 28 is such that, when the cupped end of the flame extinguishing device 25 is engaged over the wick

16, the uppermost end or leg portion thereof is under tension, and tends to turn the shaft or spindle 23 in a direction to move the cup end away from its wick engaging position.

To hold the cupped end 27 of the arm 26 of the extinguishing device 25 in its normally engaged position over the end of the wick 16, a finger piece 29 is provided, and the same is pivoted for horizontal swinging movements to the top edge of the pipe bowl 11, and has a portion 30 depending from its inner end for engagement with the upper side of the cup 27 for the purpose.

The outer end of the finger piece 29 is projected from the side of the pipe bowl 11 for only a sufficient distance that the same will be readily ac-

cessible for manipulation by the user of the pipe. The free end of the outer portion of the finger piece 29 may be provided with an angular portion 31 in order to facilitate the grasping of the same by the fingers of the operator.

In the use of the pipe, as thus constructed and arranged, the user will fill the interior of the bowl with tobacco in the usual manner and with the lighter set in its normally inoperative position will thereafter grasp the outer end of the finger piece 29, and swing the same on its pivot to free the depending portion 30 from its engagement with the cup 27 of the flame extinguishing device 25, as the cupped end 27 is released, the tension of the upper leg portion of the spring 28 will immediately act on the shaft or spindle 23 to rotate the same in an anti-clockwise direction (Figure 5), when the cup 27 will be moved away from the exposed end of the wick 16. Simultaneously with the movement of the frame extinguisher to uncover the wick end, the wheel 18 will be rotated in the same direction, and its peripheral edge will abrade the flint 19, and in a manner that the sparks therefrom will pass to the wick end and ignite the same. As soon as the end of the wick end is in flame, the tobacco in the pipe bowl will be ignited therefrom by the user puffing thereon at the mouth piece of the stem 10. Now, just as soon as the tobacco has been ignited in a satisfactory manner, the flame extinguisher 25 will be engaged by the fingers of the operator and rotated, together with the shaft or spindle 23, in a reverse or clockwise direction, and until the cup 27 has again seated itself over the end of the wick 16, when the finger piece 29 will be moved on its pivot to cause the inner depending portion 30 thereof to engage the upper side of the cup. In this reverse direction of rotation of the segment 25 and the shaft or spindle 23, the spring member 28 will again be placed under tension, and ready for a repeat operation.

Without further description, it is thought that the features and advantages of the invention will be readily apparent to those skilled in the art, and it will of course be understood that changes in the form, proportion and minor details of construction may be resorted to, without departing from the spirit of the invention or its scope as claimed.

Having thus fully described the invention, what is claimed is:

1. A Smoking pipe having a bowl, a fuel reservoir connected to the bottom of said bowl, said bowl having a bore extending upwardly through a side wall thereof and communicating with said fuel reservoir, and a wick tube in said bore and extending from within said reservoir to an ignition point adjacent the open side of the bowl.

2. A smoking pipe as set forth in claim 1, wherein said bowl has a recessed top edge, said recess having communication with said bore whereby the wick in said bore may extend into said recess.

3. The combination with a smoking pipe having a flat bottom bowl, said bowl having an opening through its bottom, a reservoir connected to said bottom and having communication with said opening, said bowl having a bore in its side wall communicating with said opening, and a recess in its upper edge adjacent to said bore, a wick 140 mounted in said bore, and a mechanically operated lighter device mounted in said recess, said lighter device having means connected thereto and normally covering said wick, whereby, when the actuation of the lighter device is completed, the flame will be extinguished by said means.

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