

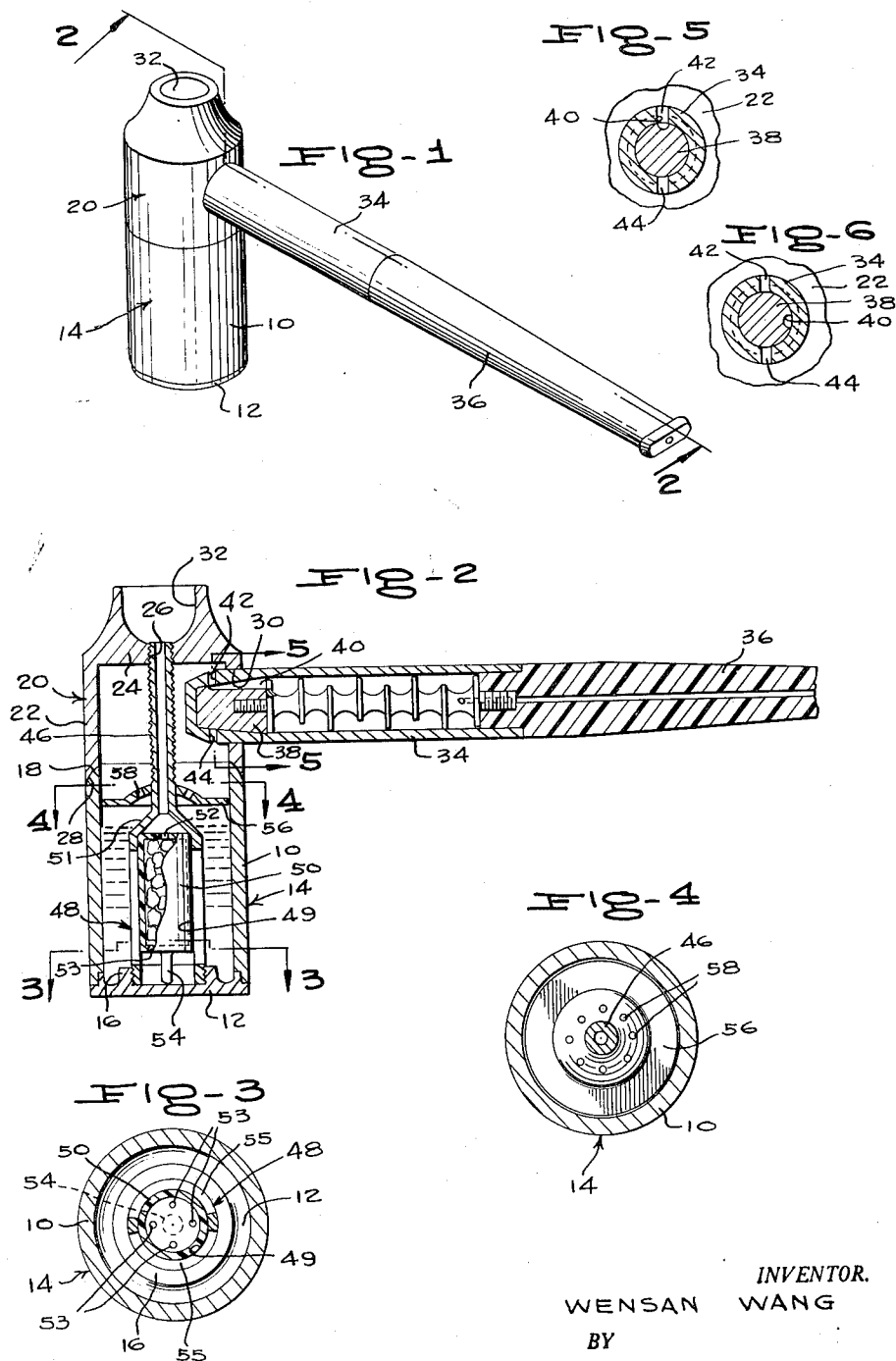
Aug. 27, 1957

WENSAN WANG
SMOKER'S ACCESSORY

2,804,079

Filed Feb. 24, 1956

3 Sheets-Sheet 1



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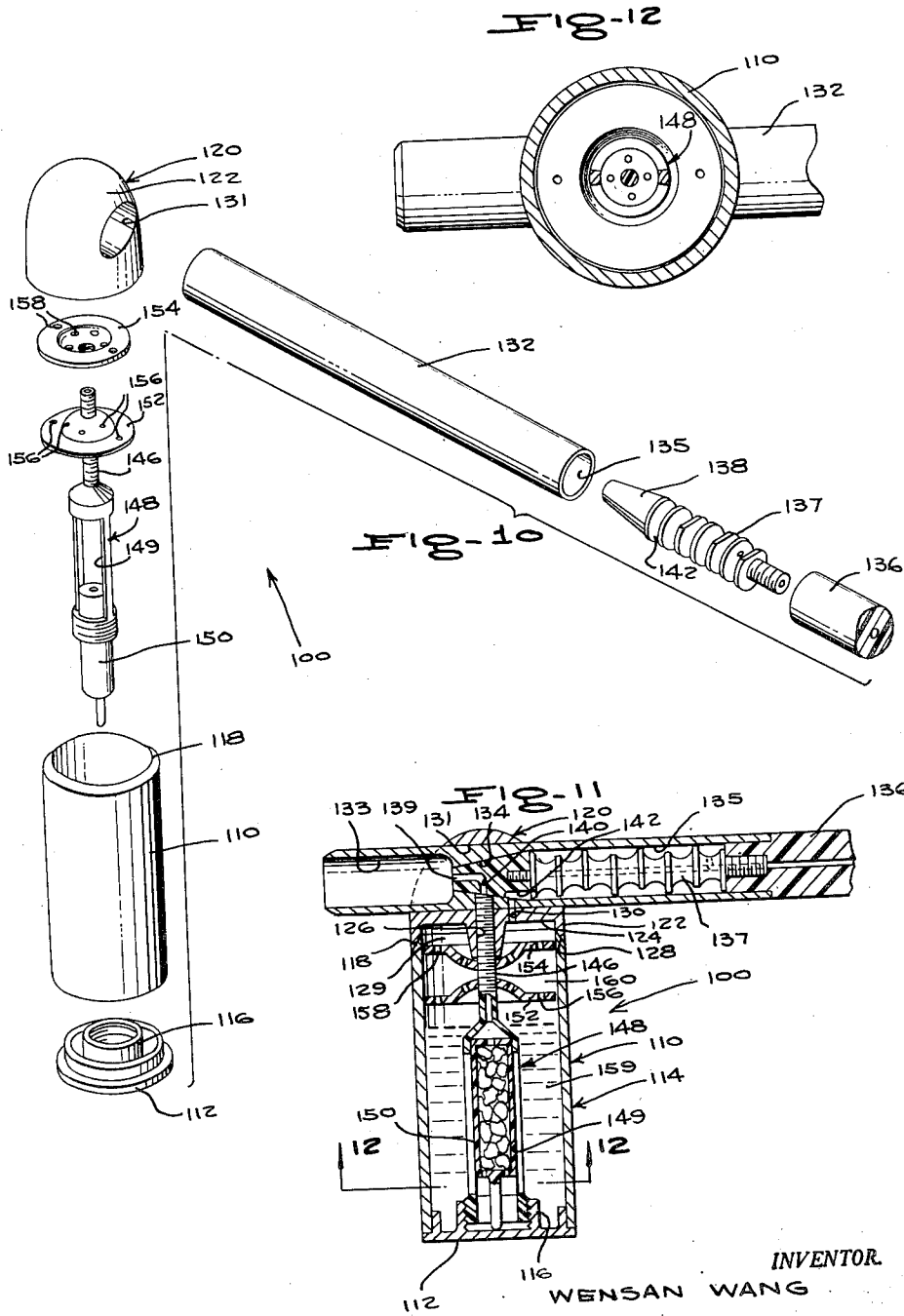
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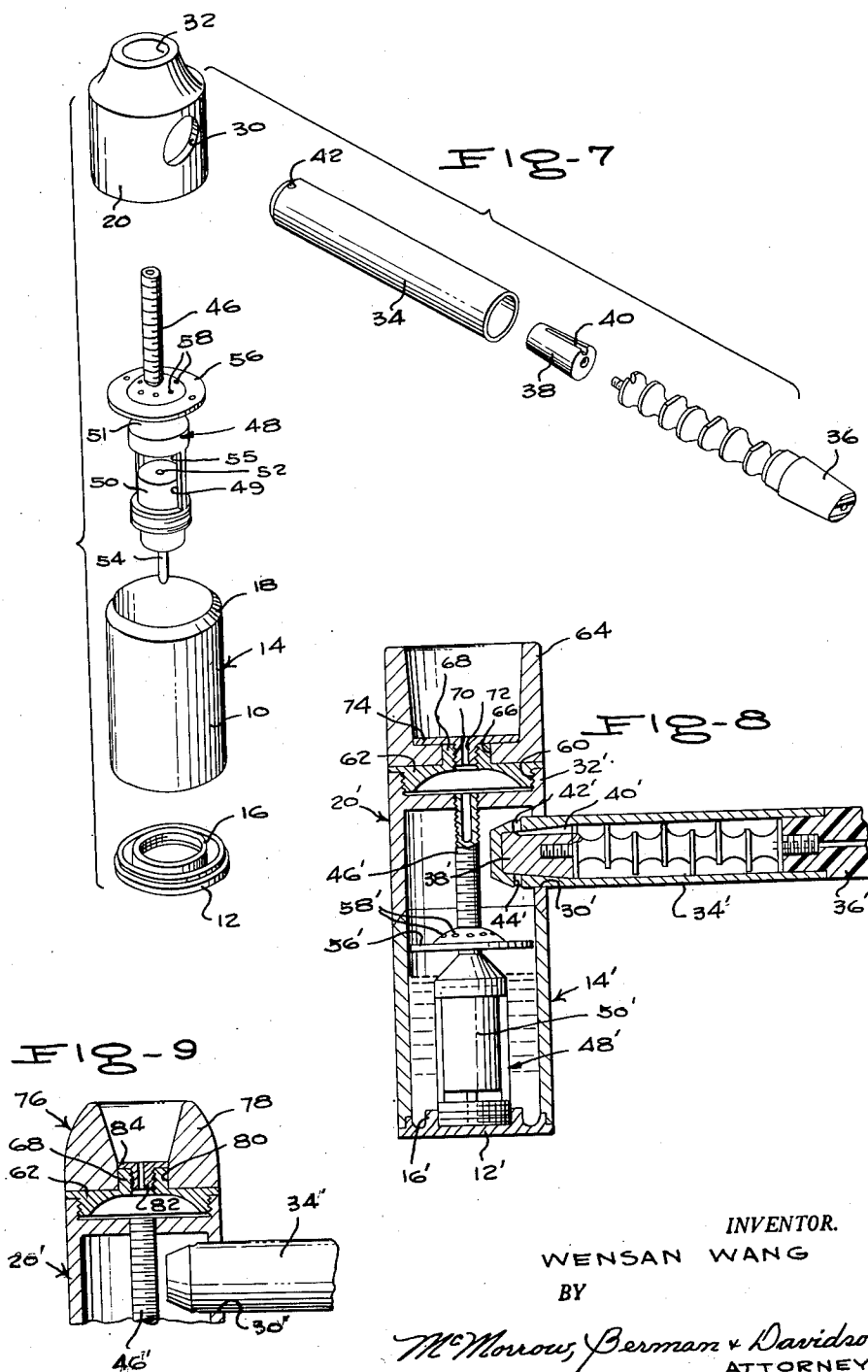
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SMOKER'S ACCESSORY

Wensan Wang, Tokyo, Japan

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4 Claims. (Cl. 131—207)

This invention relates to a smoker's accessory and has for its primary object to cool and cleanse smoke before it reaches the mouth of a smoker.

Another object is to direct smoke through a filter in a smoker's accessory on its way from a smoke generator to the mouth of a smoker to remove undesirable substances from the smoke.

These together with other objects and advantages which will become subsequently apparent recite the details of construction and operation, as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, where like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of a smoker's accessory embodying the features of this invention;

Figure 2 is a longitudinal sectional view taken substantially on the line 2—2 of Figure 1;

Figure 3 is a horizontal sectional view taken substantially on the line 3—3 of Figure 2;

Figure 4 is a horizontal sectional view taken substantially on the line 4—4 of Figure 2;

Figure 5 is a vertical sectional view taken substantially on the line 5—5 of Figure 2, and showing the turning plug communicating with the port in the stem;

Figure 6 is a view similar to Figure 5, showing the turning plug rotated so as to prevent communication between the smoke chest and the interior of the stem;

Figure 7 is an exploded perspective view of the smoker's accessory illustrated in Figures 1 through 6, inclusive;

Figure 8 is an enlarged fragmentary sectional view similar to Figure 2 of a modified form of smoker's accessory;

Figure 9 is a fragmentary sectional view similar to Figure 8 of a further modification of the accessory;

Figure 10 is an exploded perspective view of another embodiment of the novel smoker's accessory;

Figure 11 is a fragmentary elevational view of the smoker's accessory of Figure 10 as assembled, with portions broken away and shown in section for clarity; and

Figure 12 is an enlarged fragmentary sectional view taken substantially on line 12—12 of Figure 10.

Referring to the drawings in detail, an upstanding hollow cylindrical body 10 is closed by a removable bottom 12 which together with the body 10 defines a water reservoir designated generally 14. The bottom 12 is provided with an upwardly extending internally screw threaded collar 16 which lies concentrically about the longitudinal axis of the reservoir 14. The upper edge of the tubular body 10 has an arcuate inclined edge shown at 18 for a purpose to be more fully hereinafter described.

A cap 20 comprising a hollow tubular body 22 is provided as shown in Fig. 2, with top or end closure 24 having an internally screw threaded smoke discharge opening 26 extending therethrough in axial alignment with the collar 16 and formed on the end of the tubular body 22 remote from the end closure 24 is an arcuate inclined edge extension 28 which mates with the inclined edge 18 of the reservoir 14 to define an air-tight junction between

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the cap 20 and the reservoir 14. The cap 20 defines above the reservoir 14 a smoke chest and extending through the tubular body 22 and communicating with the smoke chest is an opening 30, the purpose of which will hereinafter appear. The cap 20 is provided in its upper end with a socket 32 which, in one form of the invention, tapers as it recedes from the open upper end thereof to define a holder for a cigarette or the like.

Entering the smoke chest above the water reservoir 14 and laterally through and frictionally fitting within the smoke discharge opening 30 is a tubular stem 34 carrying a tubular bit 36 which is adapted to be placed in the mouth of the smoker and carried by the bit 36. Extending into the stem 34 for rotation within said stem is a turning plug 38 having a longitudinal groove 40 extending therethrough and opening through the peripheral side thereof, the purpose of which will hereinafter appear. Extending through the stem 34 and communicating with the interior of the smoke chest is a port 42 which, when the turning plug is rotated to bring the groove 40 into registration therewith, establishes communication between the smoke chest and the interior of the stem 34. A clean-out opening 44 extends through the stem 34 in alignment with the port 42 so that with the turning plug 38 extracted from the stem 34, a pipe cleaner or like instrument may be passed through the opening 44 and port 42 to remove any foreign substance which may accumulate in the port 42.

Threadedly engaged with the internal screw threads 26 in the cap 20 is a vertically disposed tube or tubular duct 46 carrying at its end remote from the cap 20 a longitudinally extending annular slotted wall 48 defining a filter retainer portion 49 in which a suitable replaceable filter cartridge 50 is retained. The annular wall includes an upper bonnet portion 51 enclosing the upper portion of the filter cartridge, said cartridge being apertured at 52 for permitting the entrance of smoke within the cartridge for contact with the filter material contained therein. The cartridge is suitably apertured at 53 on its lower end to permit the egress of filter smoke therethrough, and extending from the bottom portion of the cartridge is a longitudinally extending integral spacing pin 54 engageable with the adjacent surface portion of the bottom 12. The pin 54 disposes the cartridge in spaced upwardly disposed relationship from the bottom 12 in order to permit a clear passage of filter smoke up through the slotted side portions 55, see Figs. 2 and 3, of the slotted wall 48. The wall 48 is provided with lower external screw threads which are adapted to threadedly engage the internal threads of the collar 16 to hold the reservoir 14 and cap 20 in assembled relation. The smoke will pass from the slotted side portions 55 into the water reservoir 14 to be washed by water contained therein. Carried by the smoke duct 46 and extending outwardly therefrom intermediate the ends thereof is a horizontally disposed baffle 56 having an annular row of circumferentially spaced openings 58 extending therethrough which establish communication between the water reservoir 14 and the smoke chest defined within the cap 20.

In the modified form of the invention illustrated in Figure 8, a water reservoir designated generally 14', conforming in all respects to the water reservoir 14 previously described, is provided with a bottom 12' carrying an annular upwardly extending collar 16' conforming in all respects to the collar 16 previously referred to. A cap 20' defining a smoke chest is connected to the collar 16' by a tubular duct 46' which corresponds in all respects to the tubular duct 46 and carries at its lower end an annular slotted wall 48' defining a filter retaining portion which carries therein a filter cartridge 50' similar in all respects to that previously referred to. Carried by and extending outwardly from the tubular duct 46' interme-

diate the ends thereof and corresponding to the baffle 56 is a horizontally disposed baffle 56' having an annular series of openings 58' extending therethrough to establish communication between the water reservoir 14' and the cap 20'. The upper end of the cap 20' is provided with an upwardly extending peripheral flange defining an internally screw threaded socket 60 into which a hollow plug 62 is threaded, as shown in Figure 8. Seated on said plug 62 is a pipe bowl 64 having an axial opening 66 extending through the bottom thereof for receiving a tubular boss 68 carried by the hollow plug 62. Extending through the tubular boss 68 is an internally screw threaded opening 70 and threadedly entering said opening is a tubular nipple 72 carrying an outwardly extending annular flange 74 which bears on the bottom of the pipe bowl 64 and retains said pipe bowl in position on the plug 62.

In place of the pipe bowl 64 of the form of Figure 8, a cigar holder generally designated by the numeral 76 may be employed. As shown in Figure 9, the cigar holder 76 comprises an annulus 78 having an opening 80 extending through the bottom thereof for the reception of the boss 68 of the plug 62 so that an externally screw threaded nipple 82 may be threadedly engaged with the threaded passage extending through the boss 68 to hold the cigar holder 76 in position on the plug 62 by means of an annular flange 84 which is carried by the nipple 82 and engages the interior of the cigar holder. In both the modified forms of the invention, illustrated in Figures 8 and 9, the smoke passage 30' extending through the cap 20' receives a tubular stem 34' which corresponds in all respects to the tubular stem 34 and mouthpiece 36. Like the tubular stem previously described, the tubular stem 34' is provided with a port 42' and a clean-out opening 44'. A turning plug 38', corresponding in all respects to the turning plug 38, is mounted to rotate in the tubular stem 34' by rotating the bit 36' to bring the groove 40' in the turning plug into and out of registration with the port 42'.

In use, a suitable smoke generator is connected to the socket 32 or 32', and with water in the reservoir 14 or 14', as the case may be, and suitable filtering material in the filter chamber, it will be evident that upon drawing on the bit 36, smoke will pass downwardly through the duct 46 or 46' and thence upwardly through the openings in the baffle 56 or 56' from whence it will enter the hollow or tubular stem 34 or 34' through the port 42 or 42' and groove 40 or 40'. After the smoking has been completed, the bit 36 or 36' may be turned in the tubular stem 34 or 34' to move the groove 40 or 40' out of registration with the port 42' so as to prevent the escape of water from the water reservoir. Upon extracting stem 34 or 34' from its respective cap 20 or 20' and withdrawing the turning plug 38 or 38' from its respective stem 34 or 34', a pipe cleaner or the like may be passed through the registering port 42 and clean-out opening 44 or registering port 42' and clean-out opening 44' to clear the port 42 or 42' of any objectionable matter that may have accumulated therein after the pipe has been taken apart sufficiently to provide access to the same.

By employing the type of cap 20', as illustrated in Figures 8 and 9, it will be evident that the device may be employed for either cigar or pipe smoking.

Considering Figures 10 through 12, there is disclosed a smoker's accessory indicated generally at 100 and including a cylindrical body 110 closed at the lower end by a removable bottom 112 which, together with the body 110, defines a water reservoir 114. The bottom 112 includes an internally threaded upwardly extending collar 116 concentric about the longitudinal axis of the reservoir 114. The upper edge of the tubular body 110 has an arcuate inclined edge 118 for the same purpose as described relative to the previously described embodiments.

A cap 120 comprising a hollow dome-shaped body 75

member 122 is provided with a transverse end closure portion 124 which includes an internally threaded transverse opening 126 extending therethrough in axial alignment with the collar 116 and formed on the end of the body member 122 remote from the closure portion 124 is a chamfered or beveled edge 128 engageable with the inclined edge 118 and mating therewith to define a sealed air-tight junction between the cap 120 and reservoir 114. The cap 120 defines above the reservoir 114 a smoke chest 129, and extending transversely through the closure portion 124 and in communication with the smoke chest 129 is a bore or passage portion 130.

The dome-shaped body member 122 has extending transversely therethrough a bore portion 131 which intersects the passage portion 130. The bore portion 131 constitutes a socket for receiving therein a tubular sleeve 132 of any suitable material, such as plastic, aluminum, etc., said sleeve including a longitudinal end recess portion 133 for receiving therein a smoke generating means such as a cigarette, cigar or the like. The sleeve 132 is fixedly secured in the bore portion 131 in any suitable manner, and includes in communication with the recess portion 133 a tapered conical bore portion 134 opening away from the recess portion 133 and terminating in a bore portion 135. The transverse threaded opening 126 intersects the conical bore portion 134 and constitutes an ingress for smoke from the smoke generating means contained in the recess portion 133.

The bore portion 135 has removably secured therein a tubular pipe bit 136 including a longitudinal contact type filter element 137 which has suitably secured on the end thereof a rotary tapered conical closure or control plug 138 received within the conical bore portion 134. The plug 138 is rotatable with the bit 136 and includes an internal bore portion 139 communicating with the recess portion 133, the bore portion 139 continues as a lateral bore portion 140 alignable with the threaded opening 126. The control or closure plug 138 includes in the outer periphery thereof in spaced relation from the bore portion 140 a notch or groove portion 142 communicating with the bore portion 135, said notch being alignable with the bore portion 130 extending through the closure portion 124 and permitting filtered smoke to be communicated therethrough, past the filter element 137 and to the pipe bit 136 and thence to the smoker's mouth.

By rotating the plug 138, as previously described, bore portion 140 and notch portion 142 will be positioned out of communication with the threaded opening 126 and bore portion 130, respectively, thus serving to prevent accidental leakage of water contained in the water reservoir 114 when the smoker's accessory is not being used.

Threadedly engaged in the internally threaded opening 126 is a threaded duct element 146, similar to duct elements 46 and 46' of the other embodiments of invention, and incorporated with the duct element 146 is an elongated lower slotted wall portion 148, including a filter retaining portion 149, having disposed therein a replaceable filter cartridge 150, all of the just described structure being of the character similar to the structure of the previously described embodiments.

Threadedly secured in circumsposed relationship about spaced intermediate portions of the duct element 146 are baffle elements 152 and 154. The baffle elements 152 and 154 include a plurality of transverse aperture portions 156 and 158 extending respectively therethrough permitting filtered smoke to pass therethrough from the filter cartridge, the smoke having been washed and moistened to a certain extent by the water 159 in the reservoir 114, the smoke passing by the baffles and out of the bore portion 130 in the manner previously described. The baffle elements 152 and 154 define therebetween an auxiliary filter space 160 whereby smoke contacting the exposed surface portions of said baffle elements provide contact filter means for the smoke addi-

tionally refining the smoke passing to the smoker of the accessory.

Since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed is:

1. In a smoker's accessory, an upstanding hollow body, a bottom closing the lower end of said body, a cap closing the upper end of said body, said cap being provided in the top portion thereof with a smoke discharge opening, a vertically disposed tube positioned within said body having its upper end in communication with said cap smoke discharge opening, an upstanding slotted wall positioned within said body having its upper end dependingly secured to the lower end of said tube, and means on the lower end of said wall and detachably engageable with means formed on said bottom for attaching said cap to said bottom.

2. In a smoker's accessory, an upstanding hollow body, a bottom closing the lower end of said body, a cap closing the upper end of said body, said cap being provided in the top portion thereof with a smoke discharge opening, a vertically disposed tube positioned within said body having its upper end in communication with said cap smoke discharge opening, an upstanding slotted wall

positioned within said body having its upper end dependingly secured to the lower end of said tube, and an externally threaded portion on the lower end of said wall and detachably engageable with an internally threaded collar formed on said bottom for attaching said cap to said bottom.

3. In a smoker's accessory according to claim 2 which includes in addition a horizontally disposed baffle circumposed about and carried by said tube adjacent to and spaced above the lower end thereof, said baffle having spaced smoke egress openings therein.

4. In a smoker's accessory according to claim 2 which includes in addition a replaceable filter cartridge surrounded by said slotted wall.

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