Nov. 7, 1950 F. H. BOWERS 2,529,278

COMBINED TOBACCO SMOKING PIPE AND PYROPHORIC LIGHTER

Filed June 28, 1945

Fig. 1.

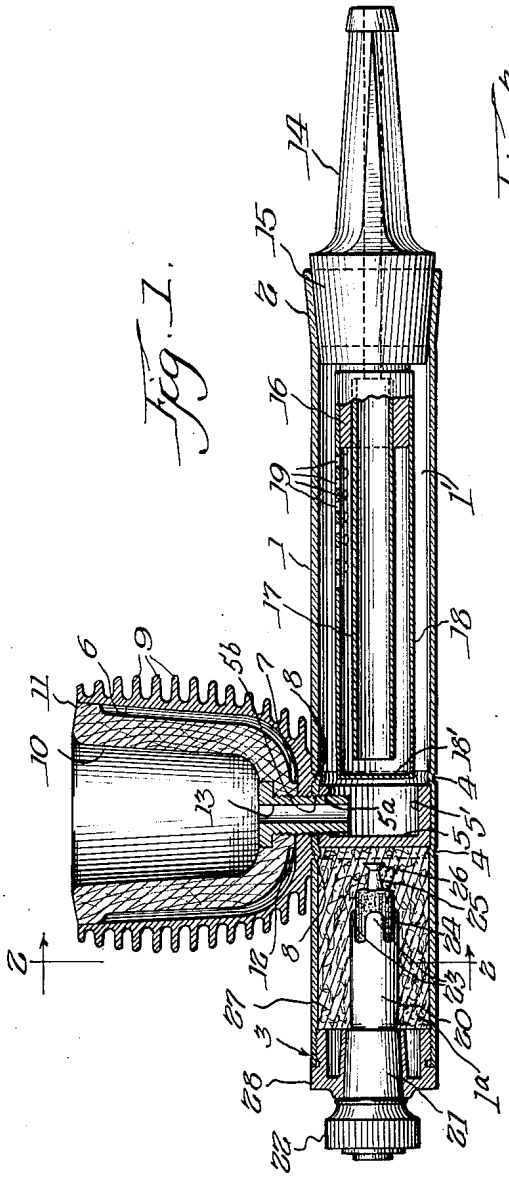


Fig. 3.

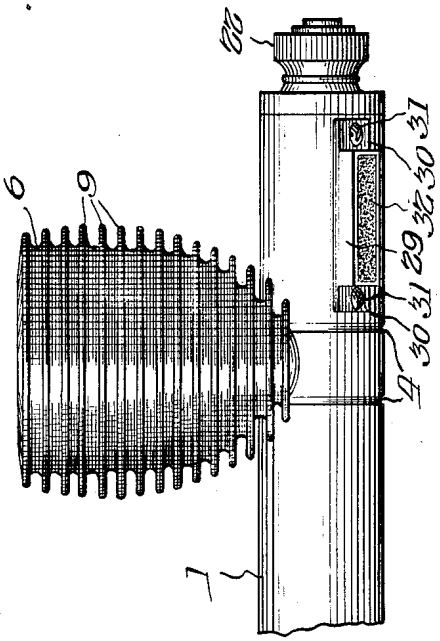
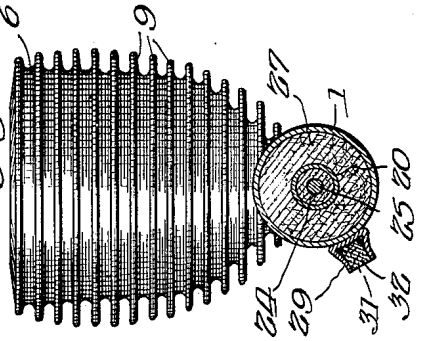


Fig. 2.



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COMBINED TOBACCO-SMOKING PIPE AND PYROPHORIC LIGHTER

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1 Claim. (Cl. 131—185)

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This invention relates to improvements in tobacco smoking pipes and has for one of its objects, to provide a tobacco smoking pipe of novel construction having a lighter device removably housed or received therein in such a manner as to be conveniently and readily accessible or available as and when needed, without in any manner detracting from the handling and/or smoking efficiency of the pipe and without detracting from its ornamental design.

It is also an object of the invention to provide a smoking pipe in which the lighter receiving and retaining chamber or compartment therein is so arranged as to be capable of being formed without adding to the usual pipe fabrication steps or procedures, and in consequence, avoid additional manufacturing costs.

The foregoing, as well as other objects, advantages and meritorious teachings of the invention, will be in part obvious and in part pointed out in the following detailed disclosure thereof, when taken in conjunction with the accompanying drawings; it being understood that the particular form of the invention presented herein is a precise and what is now considered to be the best mode of embodying its principles, but that modifications and changes may be made in its specific embodiments, without departing from the essential features.

In the drawings:

Figure 1 is a longitudinal section through a pipe constructed in accordance with the invention.

Figure 2 is a transverse section taken on the line 2—2 of Figure 1, looking in the direction in which the arrows point; and

Figure 3 is a fragmentary detail in elevation better illustrating the construction and the mounting of the pyrophoric device of the lighter upon the pipe bowl stem, plus its relationship to the lighter when the latter is housed within the pipe stem.

Having more particular reference to the accompanying drawings, the herein presented embodiment of my improved smoking pipe comprises a cross-sectionally circular tubular metal stem 1, open at its opposite ends, one of which is flared, as at 2, and the other internally screw-threaded at 3. An intermediate portion of the stem has longitudinally spaced inwardly disposed annular beads 4 pressed or formed therein. Between said beads a circular partition wall 5 is transversely positioned and, as will be noted upon reference to Figure 1 of the drawings, is formed with an annular right angularly disposed flange 5', one side

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of which is formed with a screw-threaded opening 5a aligning with a like opening 5b formed in an adjacent portion of the stem 1, whose purposes will be hereinafter described. Thus, the interior of the stem 1 is divided into two longitudinally opposed non-communicating chambers 1' and 1a.

A metal bowl-like housing 6 is received and supported upon the normally upper side and intermediate portion of the stem 1 adjacent the aforesaid opening therein. Said housing is formed with an opening provided bottom 7 having saddling engagement with the stem, and with spaced ribs 8 engaged in adjacent portions of the pressed beads 4 whereby to insure its immovable positioning on said stem 1. A plurality of relatively spaced right angularly extended annular fins 9 are formed on the outer surface of the housing 6 and, during use of the pipe, serve to dissipate heat transmitted thereto from burning tobacco, for an obvious purpose.

Received within the housing 6 is a tobacco retaining bowl or liner 10, the shape of which approximately corresponds to that of the interior of the housing 6, as shown in Figure 1. The bowl, which may be constructed of wood, plastic or other suitable materials, has an external annular flange 11 formed or otherwise provided upon the same adjacent its open upper end, while the bottom thereof has an opening formed therein communicating with a flattened foot or boss 12 on its outer side. The flange 11 engages adjacent portions of the inner wall of the housing 6 and the boss 12 engages an adjacent and flat portion of the housing bottom. Thus, it is seen that the bowl 10 is spaced from the housing walls substantially about its entire external area.

To interconnect the bowl 10 and the housing 6, and also connect these members to the pipe stem 1, and to establish communication between said bowl and the chamber 1', a headed screw-threaded nipple 13 is engaged through the registering openings in the bowl and housing bottoms, and the stem and then is engaged through the opening of the annular flange 5'. The head of the nipple 13 is preferably counter-sunk in the bowl bottom and, if desired, may be diametrically slotted to facilitate the engaging of a screw driver or like implement therewith. By sufficient turning of the screw-threaded nipple 13, firm and positive, though detachable interconnection of the parts engaged thereby, is effected.

A smoking pipe bit 14, having an inwardly tapering annular shoulder 15, is frictionally engaged in the flared end 2 of the stem 1 and communicates with the chamber 1'. The inner end

of the bit has a cross-sectionally circular sleeve 16 fixed thereto and disposed substantially concentrically and longitudinally of the stem 1, as well shown in Figure 1 of the drawings.

In order that smoke drawn from the bowl 10 to the bit 14, during use of the pipe, will be moisture relieved and cooled, a tortuous coursing of the same through the chamber 1' stem is effected. To such end, a tubular sleeve 17 has one end portion secured within the bit carried sleeve 16, and thus, is supported in longitudinal and spaced relation to the interior of the stem 1 substantially throughout the length of the receiving chamber 1' therein. A longer and cross-sectionally larger sleeve 18 has one end frictionally engaged over and about the bit carried sleeve 16 and so, is supported thereby and is disposed longitudinally of said receiving chamber 1' of the stem 1 in cross-sectionally spaced relation to the sleeve 17. The remaining or inner end of the sleeve 18 is closed, as at 18', and a normally upper and preferably outer end portion thereof is formed with a plurality of openings or perforations, generally indicated by the numeral 19.

From the foregoing, it will be seen that when tobacco is burning within the bowl 10 and suction is applied to the outer end of the smoke passage or duct of the bit 14, smoke will be drawn from said bowl 10 through the screw-threaded nipple 13 downwardly into the inwardly disposed chamber 1' of the stem 1, whereupon, the smoke will be deflected or baffled against the closed end 18' of the sleeve 18 and pass longitudinally through said stem through the perforations 19 in the sleeve 18, thence, reversed in its course and longitudinally passed between the sleeves 17 and 18, then into that end of the sleeve 17 adjacent the end wall 18' of the sleeve 18, through the duct of the bit 14 outwardly therefrom. During this tortuous coursing or path of travel of the smoke from the bowl 10 to the bit 14, it will be understood and appreciated that the temperature of such smoke will be materially lowered, and moreover, moisture carried thereby into the stem 1 from the bowl 10 will be precipitated therefrom, and ultimately, will be trapped within the chamber 1'. It will also be understood that moisture or saliva entering into the bit 14 from a smoker's mouth will, with downward inclining of the bit, travel into and through the sleeve 17, thence, from the same into the free-end-closed sleeve 18 in which it will be trapped and retained. Consequently, upon the foregoing, smoking satisfaction will be provided to a user of my improved pipe in that (1) the smoke ultimately passing into the smoker's mouth will be materially cooled, and (2) it will be reasonably dry and without objectionable content or matters, such for example, as saliva, tobacco tars, and other undesirable matters.

With a view toward providing the pipe with means whereby tobacco within the bowl thereof may be ignited or lit for smoking, the construction is furnished with a convenient and practical lighting device consisting of a sleeve-like body 20 having an inwardly tapering annular shoulder 21 and a knurled knob 22. The free and normally inner end of the sleeve-like body 20 is formed with a plurality of longitudinally disposed fingers 23 which engage with and retain against displacement an outwardly extended absorbent wick body 24 received within the body 20. A metal shank 25 is fixedly carried within and disposed longitudinally of the sleeve-like body 20 and has its outer or free end extended therefrom and

formed or otherwise provided with a rasp-head or element 26.

The remaining and normally outermost chamber 1a of the stem 1 has a pre-determined amount of absorbent material 27 arranged therein in such a manner as to permit introduction of the sleeve-like body 20 of the lighter device thereinto. A cross-sectionally circular end piece or fitting 28, partially externally screw threaded, is turned into engagement with the internally screw-threaded portion 3 of the stem 1. This fitting is formed with a co-axially disposed inwardly tapering opening into which the tapered annular shoulder 21 of the lighter device is frictionally engaged, as shown in Figure 1 of the drawings.

Positioned adjacent the outer side and end portion of the stem 1 and disposed longitudinally thereof, in proximity to the lighter device engaged or received therein, is a rectangularly shaped trough-like bracket 29, provided with oppositely disposed lateral apertured fingers 30 through which screws or like fastening devices 31 are passed into securing engagement with adjacent portions of said stem 1, in order that the bracket 29 will be fixedly secured to the latter. A body made of pyrophoric material 32 is immovably retained within the trough-like bracket 29 and, as will be observed upon reference to Figure 3 of the accompanying drawings, has its outer side or face exposed.

In using the above described pyrophoric lighter device, it is, of course, understood that the absorbent filler material 27 within the outermost chamber or compartment 1a of the stem 1 is saturated with a suitable volatile liquid. Thereupon, the lighter device is inserted into the said chamber whereby the inwardly tapered annular shoulder 21 is frictionally engaged with the correspondingly tapered opening in the circular end fitting 28. When so inserted, the wick 24 will absorb an amount of the volatile liquid from the material 27. To light tobacco within the bowl 10 of the pipe with my lighter device, the user engages the knurled knob 22 and pulls it from its aforesaid compartment. Thereupon, the rasp-head 26 of the shank 25 is drawn rather sharply over the exposed face of the pyrophoric material 22, producing a spark which, in turn, ignites the volatile liquid saturated wick 24, thus, permitting tobacco within said bowl to be ignited and smoked. Following lighting or igniting of the tobacco within the bowl 10, the lighter device is returned to its nested or normal position within the outer compartment 1a of the pipe stem 1, until needed for further use.

From the foregoing, it will be understood by workers skilled in the art, that I have provided a combined tobacco smoking pipe and lighter device offering material advantages and constituting a distinct improvement in its field. The various parts of the pipe assembly may be disassembled whereby to permit cleaning of the same, and thereupon, quickly and easily re-assembled. If desired, the bowl 10 may be replaced by another of similar construction. The pyrophoric material mounting bracket 29, likewise, is capable of being readily removed, as may be required.

The absolute partitioning of the pipe stem 1 to provide separate and distinct longitudinally opposed compartments, as will be readily understood, maintains each of such compartments individual to itself. In consequence, fumes from the volatile liquid saturated material 27 within the outer compartment of the stem will not be

permitted to seep or to pass into the remaining compartment, particularly, during the smoking of the pipe. And by the same token, foreign matters trapped or retained within the inner compartment of the stem 1, will be prevented from seeping or otherwise passing into the outer or remaining compartment.

As hereinabove indicated, certain changes and/or modifications of the arrangements and constructions herein disclosed, are within the province of the teachings of my invention. I, therefore, do not intend that such disclosure shall or should be construed as limiting the ambit of my invention to any extent, save that as is within the scope and the inventive spirit expressed by the hereto appended claim.

I claim:

A smoking pipe, comprising a stem, a transversely disposed partition received in the stem, dividing the same into separate and opposed longitudinally aligned outwardly opening chambers, a substantially right-angularly disposed flange on and about the outer marginal portion of said partition, snugly engaging adjacent portions of the walls of said stem, a portion of said flange and an adjacent portion of said stem having registering openings formed therein, the opening in the flange being screw-threaded, a bowl having a screw-threaded opening in its bottom, a screw-threaded nipple engaged through the openings

in the stem and flange threadedly engaged in the latter and threadedly engaged in the screw-threaded opening in the bowl bottom mounting said bowl on said stem in communication with one of said chambers and securing said partition against movement in said stem, and a bit engaged in and communicating with said one chamber, said remaining chamber being adapted to receive lighter means.

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