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J. R. RICKETTS

2,363,144

SMOKER'S PIPE

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Fig. 1.

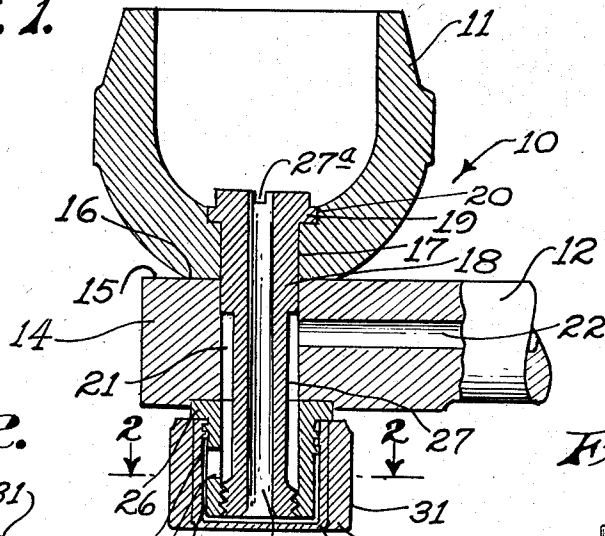


Fig. 2.

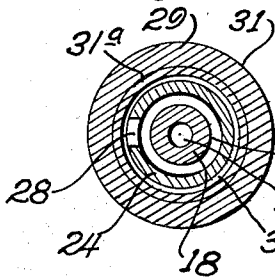


Fig. 4.

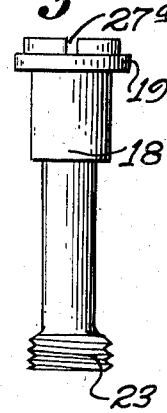
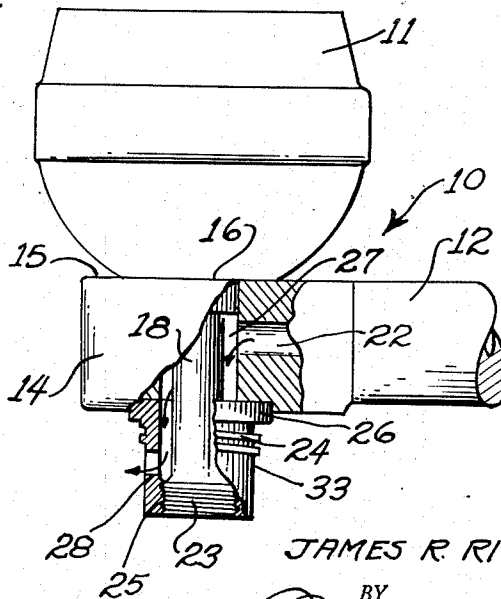


Fig. 3.



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SMOKER'S PIPE

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3 Claims. (Cl. 131-215)

This application is a continuation in part of my copending application entitled "Pipe," filed June 23, 1941, and bearing Serial No. 399,268.

This invention relates to a tobacco smoker's pipe.

It is the principal object of the present invention to provide a generally improved tobacco smoker's pipe which is so constructed that the smoke will be effectively cooled and condensate trapped during the passage of the smoke from the pipe bowl to the pipe stem, which pipe can be expeditiously and easily cleaned.

One form which the invention may assume is exemplified in the following description and illustrated by way of example in the accompanying drawing, in which:

Fig. 1 is an enlarged view in central longitudinal section through my improved pipe embodying the preferred form of my invention.

Fig. 2 is a transverse sectional view taken on line 2-2 of Fig. 1.

Fig. 3 is a view in side elevation of the pipe with parts broken away and partly in section, and disclosing the smoke tube cap removed so as to show one manner of cleaning the pipe.

Fig. 4 is a view in elevation of the smoke tube.

Referring more particularly to the accompanying drawing, 10 indicates a smoker's pipe including a pipe bowl 11 and a pipe stem or mouthpiece 12. The pipe stem 12 is formed with a flattened stem head 14, on the upper flat surface 15 of which the flat bottom surface 16 of the bowl 11 bears, as illustrated. The axis of the pipe stem 12 is, as in common practice, disposed at ninety degrees to the axis of the bowl 11.

The bowl 11 is formed with a coaxial bore 17 through its bottom of a diameter to snugly receive the upper end of a cylindrical smoke tube 18. This smoke tube 18 is formed with an enlarged head 19 fitting a counterbore 20 in the bottom of the bowl 11, as illustrated. The stem head 14 of the stem 12 is formed with a bore 21 of the same diameter as the bore 17 in the bowl and registers and aligns therewith, as illustrated, in order that the smoke tube 18 may project downwardly therethrough. The stem 12 is, of course, formed with the usual smoke passage 22 which communicates with the bore 21 in the stem head 14.

The smoke tube 18 is formed with an open-ended coaxial bore 30 so that smoke may be conducted from the interior of the bowl downwardly through the lower end of the tube. At its lower extremity the smoke tube 18 is formed with a threaded head 23 of a diameter very slightly less

than the diameter of the bores 17 and 21 through the bowl and stem. Between the upper end of this threaded head 23 and a vertical point spaced a distance below the bottom of the bowl and within the stem head 14 just above the stem passage 22 the smoke tube is reduced in external diameter.

Mounted concentrically of the smoke tube 18 is a smoke sleeve 24 which is formed with a threaded bore 25 within its lower end to threadedly engage the tube head 23 and connect the sleeve to the tube head. Above the threaded bore 25 the sleeve 24 is bored to the same diameter as that of the bores 17 and 21 so that when the sleeve is threaded onto the threaded head 23 of the smoke tube 18 with its upper end in abutting relationship to the stem head 14, the bore of the sleeve and a portion of the bore 21 of the stem head which registers with that portion of the smoke tube which is reduced in diameter will form an annular smoke chamber 27.

The upper end of the sleeve 24 is formed with a circumscribing annular flange 26 received in a slight counterbore in the underside of the stem head 14. It is obvious that when the smoke tube 18 is projected downwardly through the bowl and stem and the sleeve is threaded on the lower end thereof, that the latter will act as a nut to rigidly clamp the bowl, the stem, the smoke tube and the sleeve together as a fixed unit. To aid in tightly clamping the parts together, the upper end of the smoke tube 18 is formed with a screw-driver slot 27a.

It will thus be seen that when the bowl 11, the stem 12 and the sleeve 24 are assembled on the smoke tube 18, that the annular smoke chamber 27 is formed around the section of the smoke tube 18 which is reduced in diameter, the ends of which chamber 27, however, will be closed, as illustrated. The chamber 27, however, communicates at its upper end with the stem passage 22 and at its lower end with the exterior of the sleeve 24 through a port 28 formed through the sleeve at the front side thereof or diametrically opposite the point where the passage 22 communicates with the chamber 27. It will also be seen that the port 28 is formed through the sleeve just above its threaded connection with the head 23 of the smoke tube 18.

A cap 29 is provided to fit over the sleeve 24 to close off communication between the atmosphere and the lower end of the bore 30 of the smoke tube 18. This cap can be of any material and design, but I prefer that it have an exterior portion 31 of non-metallic material, such as

wood, with a metallic inner liner 31a. The interior diameter of the liner 31a is greater than the outside diameter of the sleeve 24 so as to provide an annular passage 32 therebetween. A threaded connection 33 between the cap and the sleeve 24 is provided above the port 28 to enable the cap to be threadedly held in place with its upper end tightly abutting against the lower side of the flange 26. The depth of the interior of the cap is greater than the length of the sleeve 24 below the flange 26 so that the lower inner surface of the cap is spaced from the lower end of the tube 18 and sleeve 24. This enables communication between the bore 30 of the smoke tube 18 and the annular passage 32.

By the construction above described, when suction is exerted on the mouthpiece end of the stem 12, the smoke will be drawn from the interior of the bowl downwardly through the bore 30 of the smoke tube 18, thence through the space between the lower end of the tube 18 and sleeve 24 and the cap 29 into the annular passage 32 and through the port 28 into the annular smoke chamber 27, and thence upwardly and into the stem passage 22.

It is thus seen that the smoke first travels downwardly the entire length of the tube 18, thence laterally to the annular passage 32 and through this passageway to the radial port 28 into the annular chamber 27, and thence upwardly around the smoke tube 18 to the stem passage 22. In this manner the length of the travel of the smoke is appreciably long so as to permit adequate cooling of the smoke by the exchange of heat with the metallic surfaces contacted by the smoke in its travel, and, consequently, when the smoke enters the stem passage 22, it will be appreciably cooled and pleasant to the smoker. Likewise, any condensate or foreign matter in the smoke will deposit in the bottom of the cap and will not be conveyed upwardly into the stem passageway.

The pipe can be thoroughly and easily cleaned by merely removing the cap 29 and then removing the sleeve 24 and disassembling the entire pipe for thorough cleansing. However, the stem passage may be easily cleaned by merely removing the cap and blowing through the stem, which will blow out any foreign matter or condensate downwardly through the annular chamber 27 and forwardly out through the port 28. This is clearly illustrated in Fig. 3 of the drawing in which the pipe is shown with the cap 29 removed for this purpose. Thus, it is seen that even while the bowl is filled with burning tobacco, the smoker may remove the cap and cleanse the passageway 22, the annular chamber 27 and the port 28 by merely blowing through the stem, which will blow out any matter as previously described through the port 28. The smoker may then replace the cap and continue smoking.

If desired, the smoker may permit a slight amount of atmospheric air in the annular passageway 32 to commingle with the smoke. Such an air entry may be effected by backing the cap 29 slightly away from its contact with the underside of the flange 26, so as to crack the space therebetween for admission of atmospheric air. The loose fitting threads 33 will enable this air to be drawn therethrough and thence into the passage 32 to commingle with the smoke.

From the foregoing it is obvious that I have provided a very improved smoker's pipe of a construction effecting proper cooling of the

smoke and enabling expeditious cleaning of the pipe.

While I have shown the preferred form of my invention, it is to be understood that various changes may be made in its construction by those skilled in the art without departing from the spirit of the invention as defined in the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A smoker's pipe comprising a bowl, a stem having a portion separate from and underlying the bowl, said bowl and stem having registering bores extending through the bottom of the bowl and the underlying portion of the stem, a smoke tube projecting downwardly through said bores, a sleeve arranged over the smoke tube below the stem and connected to the tube for clamping the bowl, stem and tube together, a cap arranged over the lower end of said sleeve and tube, said tube having an open-ended bore formed longitudinally therethrough, said cap, sleeve and tube being provided with passage means whereby smoke drawn through the lower end of said tube will pass around the sleeve into the bore in said stem around the tube, said stem having a passage communicating with said bore therein.

2. A smoker's pipe comprising a bowl, a stem having a portion separate from and underlying the bowl, said bowl and stem having registering bores of the same diameter extending through the bottom of the bowl and underlying portion of the stem, a sleeve at the underside of the stem aligned with said bores, an open-ended smoke tube extending through said bores and connected with the sleeve at the lower end of the latter, the upper end of the smoke tube abutting the bottom of the bowl interiorly thereof, said stem having a smoke passageway formed therethrough communicating with said bore, said tube engaging the bore of the bowl and the bore of the stem above the smoke passage, said tube being reduced in external diameter between its connection with the sleeve and the point where it engages the bore of the stem, said sleeve being formed with a bore above its connection with the tube of a diameter agreeing with the diameter of the bore in the stem and registering therewith whereby an annular chamber will be formed about said tube, said sleeve being formed with a port communicating with said chamber, and a cap member fitting over the end of the sleeve and tube and connected with the sleeve whereby smoke drawn from the bowl will travel downwardly through the tube around the lower end of the sleeve through said port into said annular chamber and thence into the passage of the stem.

3. A smoker's pipe comprising a bowl, a stem having a portion separate from and underlying the bowl, said bowl and stem having registering bores extending through the bottom of the bowl and underlying portion of the stem, a sleeve member at the underside of the stem having a bore aligned with said bores, an open-ended smoke tube extending through said bores and threadedly engaging the lower end of the sleeve, said stem having a smoke passageway formed therethrough communicating with said bore therein, said tube engaging the bore of the bowl and the bore of the stem above the smoke passage in the latter, said tube being reduced in external diameter between its connection with the sleeve and the point where it engages the stem bore to form an annular chamber, said sleeve having a port formed therethrough at a point

diametrically opposite the point where the passage in the stem communicates with the bore thereof, a cap member fitting over the lower end of the sleeve and tube and connected with the sleeve above the port therein, the interior dimensions of the cap being so related to the dimensions of the sleeve and tube that a smoke passageway is formed between the lower end of the tube and said port around the lower end

of the tube and sleeve whereby smoke from the bowl will pass downwardly through the tube laterally and upwardly around the lower end of the tube and the sleeve and thence laterally through the port into the annular chamber and thence upwardly through the chamber to the stem passage.

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