Sept. 7, 1954

T. R. FORBES

2,688,330

SMOKER'S PIPE

Filed Aug. 8, 1950

Fig:1.

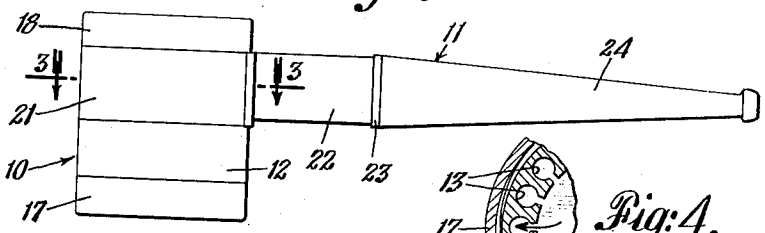


Fig:4.

Fig:2.

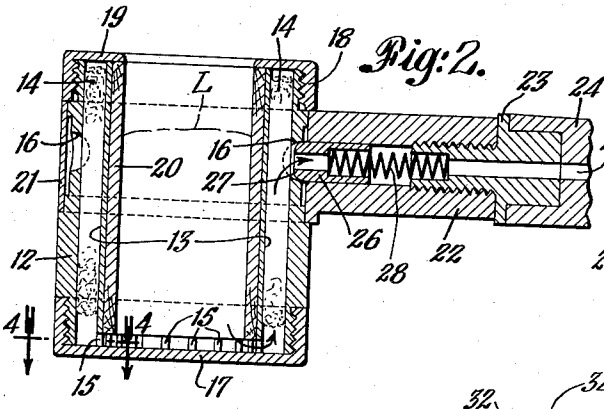


Fig:3.

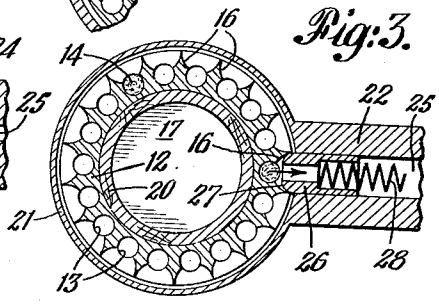


Fig:5.

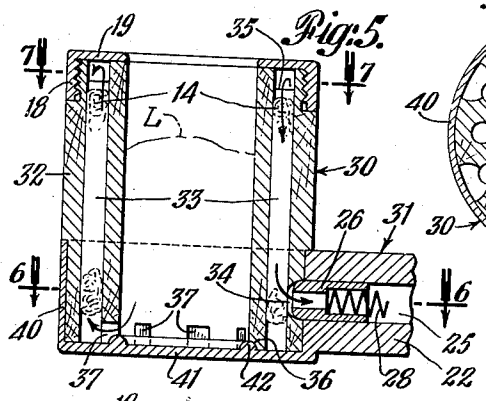


Fig:6.

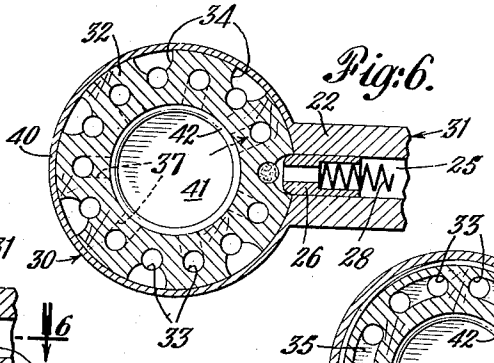


Fig:7.

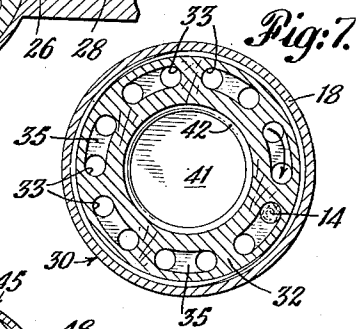


Fig:8.

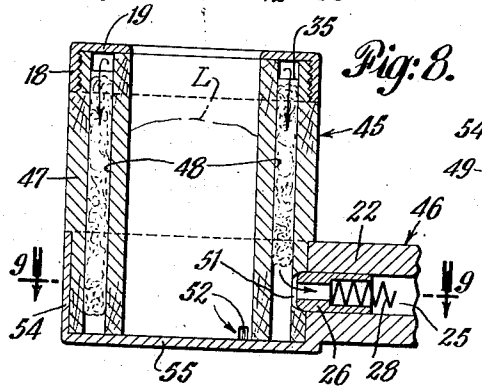
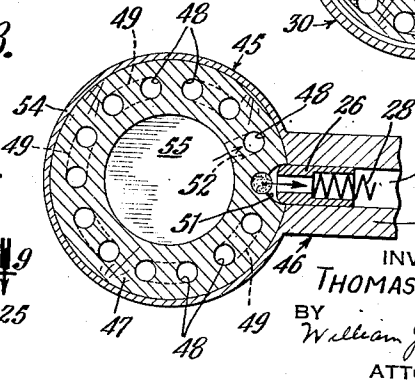


Fig:9.



INVENTOR
THOMAS R. FORBES
BY
William J. Barnes
ATTORNEY

Patented Sept. 7, 1954

2,688,330

UNITED STATES PATENT OFFICE

2,688,330

SMOKER'S PIPE

Thomas R. Forbes, Bayside, N. Y.

Application August 8, 1950, Serial No. 178,229

4 Claims. (Cl. 131—197)

1

This invention relates to a smoker's pipe and more particularly to such a pipe that is adapted to supply relatively cool and clean tobacco smoke to the user.

It is a primary object of the invention to provide a smoker's pipe having novel and improved features of construction.

Another object of the invention is to provide a smoker's pipe having its parts so constructed and arranged that smoke of tobacco consumed therein is filtered and flows along a circuitous path whereby the smoke is cleansed and cooled prior to withdrawal through the pipe stem.

A further object of the invention is to provide a smoker's pipe of the character indicated that may be readily dismantled, cleaned and reassembled as required.

A still further object of the invention is to provide a smoker's pipe that is adapted to perform its intended functions in a trouble-free and effective manner.

One of the outstanding features of the invention resides in so arranging a tobacco pipe bowl unit with respect to a stem unit that the bowl unit is rotatable relative to the stem unit. The bowl unit preferably comprises an upstanding tubular first member having a plurality of longitudinal passages which communicate with the lower portion of the interior of the tubular member. One or more openings establish direct communication between the passages and the exterior of the first tubular member. The stem unit comprises a second tubular member coaxial with and surrounding the first tubular member. The first and second tubular members are relatively rotatable. Attached to the second tubular member is a stem that may consist of one or more pieces and that has a single through passage. A tubular detent is slidable in the stem passage and is adapted to register with any selected one of the aforesaid openings, depending on the angular position of the first tubular member with respect to the second tubular member. Resilient means, preferably a compression spring within the stem passage, normally and yieldingly maintains the tubular detent in registration with the selected opening.

One or more of the longitudinal passages in the first tubular member may be provided with suitable removable absorbent filters, such as conventional pipe cleaners, that serve to absorb moisture, tarry substances and the like in the tobacco smoke. These filters may be readily inserted in or removed from the longitudinal passages as required. Further, the pipe may be

2

readily dismantled, cleaned and then reassembled.

This invention is adapted to be advantageously employed with "conventional" style pipes, i. e., pipes wherein the stem unit is positioned at or proximate the bottom of the bowl, or with "underslung" types of pipes, wherein a substantial portion of the bowl unit projects below the juncture of the stem and the pipe bowl. When the invention is used with conventional style pipes, the second tubular member is closed at its lower end to serve as the bottom wall of the pipe. When the invention is applied to underslung types of pipes, the second tubular member is preferably in the form of a ring.

The enumerated objects, as well as other objects, together with the advantages of the invention, will be readily understood by persons skilled in the art upon reference to the following detailed description taken in conjunction with the annexed drawing which respectively describe and illustrate several forms of pipes constructed in accordance wtih the invention.

In the drawing:

Figure 1 is a view in side elevation of a smoker's pipe constructed in accordance with this invention;

Figure 2 is a central vertical cross sectional view in enlargement of the pipe shown in Figure 1, parts being omitted for better illustration;

Figure 3 is a view in enlargement taken along line 3—3 of Figure 1;

Figure 4 is a fragmentary view taken along line 4—4 of Figure 2;

Figure 5 is a view corresponding to Figure 2 and is illustrative of one modification of the invention;

Figure 6 is a view taken along line 6—6 of Figure 5;

Figure 7 is a view taken along line 7—7 of Figure 5;

Figure 8 is also a view corresponding to Figure 2 and illustrates another modification of the invention; and

Figure 9 is a view taken along line 9—9 of Figure 8.

Referring now to the drawing wherein like reference characters denote corresponding parts throughout the several views, there is illustrated in Figures 1–4 an underslung type of smoker's pipe embodying the invention. The pipe may be considered as consisting of two units, namely, a bowl unit 10 and a stem unit 11. The bowl unit comprises an upstanding tubular member 12, open and externally threaded at each end. Tubu-

lar member 12 is formed with a plurality of spaced vertical through passage 13, each of which is adapted to accommodate an absorbent filter 14 for removing moisture, tarry substances or the like that may be entrained in the tobacco smoke. Such filters may, if desired, be made of convenient lengths of conventional cotton pipe cleaners. Lateral passages 15 establish communication between the lower end of each passage 13 and the interior of tubular member 12. The tubular member is also provided with a plurality of angularly spaced, concave lateral openings 16, arranged intermediate its ends and establishing direct communication between corresponding longitudinal passages and the exterior of the tubular member. An internally threaded hollow closure member 17 engages the lower threads in tubular member 12 and serves as the bottom wall of the pipe. As is best shown in Figure 2, closure 17 is positioned across the lower extremities of passages 13. Mounted at the upper end of tubular member 12 is an annular member consisting of an internally threaded ring 18, which engages the threaded upper end of member 12, and an inwardly projecting flange 19 that extends across the upper extremity of each passage 13. Positioned wholly within and coaxial with tubular member 12 is a hollow liner 20 that terminates slightly above the upper surface of closure 17 whereby tobacco smoke created in the liner is free to enter lateral passages 15 and longitudinal passages 13. Liner 20 is preferably made of briar.

Stem unit 11 comprises a tubular support member or ring 21 having a tubular extension that is integral and preferably normal to the axis thereof. An intermediate tubular connector 23 is threaded at its forward end for engagement with corresponding threads in the free end of member 22. The other end of connector 23 projects into and frictionally engages a bit member 24. Extension member 22, connector 23 and bit 24 constitute the stem of the pipe and define a stem passage 25. A tubular detent 26 rounded at its forward end, as indicated at 27 in Figure 2, is slidable in the portion of passage 25 defined by extension 22. Detent 26 registers with any selected one of openings 16 and is normally urged into registry with a selected opening by a compression spring 28. Tubular members 12 and 21 are relatively rotatable, detent 26 and spring 28 coacting to yieldingly maintain member 21 and therefore the pipe stem in any selected angular position relative to member 12 by virtue of engagement of detent 26 with a corresponding concave opening 16.

For the purpose of briefly outlining the operation of the pipe construction shown in Figures 1–4, it is first assumed that the pipe is assembled and the parts are in the relative position shown in Figure 2. It is further assumed that the bowl unit contains tobacco to the level indicated at L in Figure 2. In the course of smoking, the smoke passes downwardly in liner 20, along lateral passage 15, upwardly through passage 13, thence through apertured detent 26 and finally through stem passage 25. It will be observed that with this arrangement the pipe stem communicates with only the particular longitudinal passage 13 that communicates by way of corresponding concave opening 16 with detent 26. When the filter in that passage 13 becomes tarry or moist, the bowl unit may be rotated relative to the stem unit so as to bring detent 26 into registry with another concave opening 16 that communicates with a passage 13 having a clean filter.

The modification of the invention shown in Figures 5–7 likewise consists of a bowl unit 30 and a stem unit 31. Here the bowl unit comprises a first tubular member 32 preferably made of briar. Member 32 is externally threaded at its upper end and is provided with a plurality of vertical through passages 33. Alternate passages 33 communicate directly with the exterior of member 32 by way of concave lateral openings 34. Intercommunication is effected between passages 33 by arcuate grooves 35 (Figure 7) in the upper end of member 32. The lower end of member 32 has an annular groove 36 (Figure 5). Lateral openings 37 establish communication between the interior of member 32 and alternate passages 33. As in the case of the first described form of the invention, this modification contemplates using filters 14 in passages 33, and the annular member consisting of ring 18 and flange 19.

Stem unit 31 comprises a tubular member 40, closed at its bottom end 41 and having an internal annular ridge 42 that registers with annular groove 36 in tubular member 32. Unit 31 is otherwise the same as unit 11.

The path of the tobacco smoke through the pipe is indicated by the arrows in Figures 5–7. As will be noted, this path is circuitous and the smoke in the course of its passage through the pipe is both cleansed and cooled.

Figures 8 and 9 illustrate another modification of the invention and show a pipe consisting of a bowl unit 45 and a stem unit 46. Bowl unit 45 comprises a tubular member 47, preferably made of briar, and having a plurality of longitudinal passages 48 formed in its wall. Successive pairs of passages 48 are connected at the bottom of the tubular member by lower arcuate grooves 49. The longitudinal passages are similarly connected at their upper ends by arcuate grooves arranged in the manner shown in Figure 7. The described arrangement of longitudinal passages and arcuate passages defines a single circuitous path. A concave opening 51 establishes direct communication between one of the longitudinal passages and the exterior of the tubular member. Another opening 52 establishes direct communication between another longitudinal passage and the interior of the tubular member.

Stem unit 46 is similar to unit 31 of the first described modification and comprises a tubular member 54 closed at its lower end 55.

The smoke enters passage 52, moves upwardly along the longitudinal passage 48 communicating with passage 52, flows across the top arcuate groove, downwardly through the next longitudinal passage, flows across the lower arcuate passage 49 communicating therewith, etc., and finally is transmitted by the last longitudinal passage into opening 51, thence through detent 26 and finally into stem passage 25.

Thus it will be seen that the constructions herein shown and described are well adapted to accomplish the objects of the present invention. It will be understood, however, that the invention may be embodied otherwise than as here shown, and that in the forms illustrated, certain obvious changes in construction may be made. Therefore, I do not wish to be limited precisely to the constructions herein shown except as may be required by the appended claims considered with reference to the prior art.

I claim:

1. A smoker's pipe consisting of a bowl unit and a stem unit, said bowl unit comprising an upstanding first tubular member having a plu-

rality of vertical through passages formed in its wall and at least one opening intermediate its ends establishing direct communication between one of the through passages and the exterior thereof, a bottom wall secured to the lower end of the first tubular member and positioned across the lower extremity of each through passage, an annular centrally apertured member secured to the upper end of the first tubular member and positioned so as to cover the upper extremity of each through passage, said through passages communicating with the interior of the first tubular member in the region of the lower end thereof, said stem unit comprising a second apertured tubular member coaxial with and surrounding the first tubular members, a stem secured to and projecting beyond the side of the second tubular member, said stem having a longitudinal passage formed therein continuous with the aperture in said second tubular member, said second tubular member being rotatable with respect to the first tubular member to selectively locate any one of the longitudinal through passages in the first tubular member in communication with the longitudinal passage in the stem, a tubular detent slidable in the stem passage and communicating therewith and with said opening, and resilient means within the stem normally and yieldingly maintaining the detent in registration with said opening.

2. A smoker's pipe consisting of a bowl unit and a stem unit, said bowl unit comprising an upstanding first tubular member having a plurality of vertical through passages formed in its wall, a plurality of lateral passages establishing direct communication between corresponding through passages and the interior of the tubular member, and a plurality of angularly spaced openings intermediate its ends establishing direct communications between corresponding through passages and the exterior of the tubular member, top and bottom walls secured to the tubular member and bounding the extremities of the longitudinal through passages, said stem unit comprising a second apertured tubular member surrounding the first tubular member, a stem secured to and projecting beyond the side of the second tubular member, said stem having a longitudinal passage formed therein continuous with the aperture in said second tubular member, said second tubular member being rotatable with respect to the first tubular member to selectively locate any one of the angularly spaced openings in communication with the longitudinal passage in the stem, a tubular detent slidable in the stem passage and communicating therewith and with any selected one of said openings, and resilient means within the stem passage normally and yieldingly maintaining the detent in registration with a selected opening.

3. A smoker's pipe consisting of a bowl unit and a stem unit, said bowl unit comprising an upstanding first tubular member having a plurality of vertical through passages formed in its wall, a plurality of lateral passages establishing communication between corresponding through passages and the interior of the tubular member, and a plurality of angularly spaced openings

intermediate its ends establishing direct communication between corresponding through passages and the exterior of the tubular member, a bottom wall secured to the lower end of the first tubular member and positioned across the lower extremity of each through passage, an annular member secured to the upper end of the first tubular member and positioned across the upper extremity of each through passage, said stem unit comprising a second apertured tubular member surrounding the first tubular member, a stem secured to and projecting beyond the side of the second tubular member, said stem having a longitudinal passage formed therein continuous with the aperture in said second tubular member, said second tubular member being rotatable with respect to the first tubular member to selectively locate any one of the angularly spaced openings in communication with the longitudinal passage in the stem, a tubular detent slidable in the stem passage and communicating therewith and with any selected one of said openings, and resilient means within the stem passage normally and yieldingly maintaining the detent in registration with a selected opening.

4. A smoker's pipe consisting of a bowl unit and a stem unit, said bowl unit comprising an upstanding tubular member having a plurality of vertical through passages formed in its wall, each passage communicating directly with the interior of the lower portion of the tubular member, said tubular member having a plurality of angularly spaced openings intermediate its ends establishing direct communication between corresponding through passages and the exterior of the tubular member, a bottom wall secured to the lower end of the tubular member and positioned across the lower extremity of each through passage, an annular member secured to the upper end of the tubular member and positioned across the upper extremity of each through passage, said stem unit comprising an apertured ring surrounding the tubular member, a stem secured to and projecting beyond the side of the ring, said stem having a longitudinal passage formed therein continuous with the aperture in said ring, said ring being rotatable relative to the tubular member to selectively locate any one of the angularly spaced openings in communication with the longitudinal passage in the stem, a tubular detent slidable in the stem passage and communicating therewith and with any selected one of said openings, and a spring within the stem passage normally and yieldingly maintaining the detent in registration with a selected opening.

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