April 5, 1932. G. E. STRANDT 1,852,596

SMOKING PIPE

Filed March 29, 1930

FIG. 1

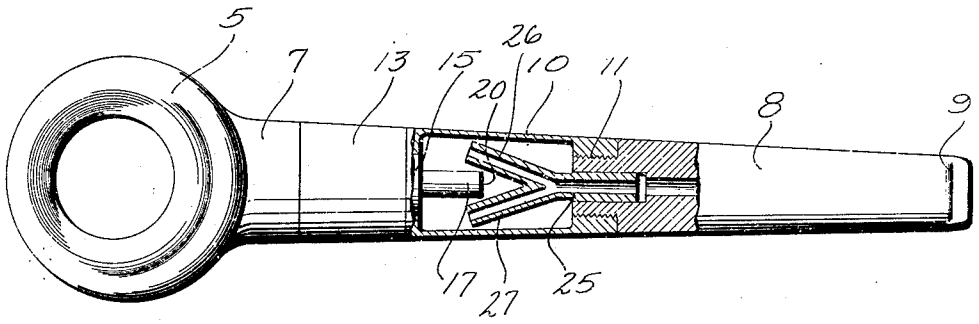
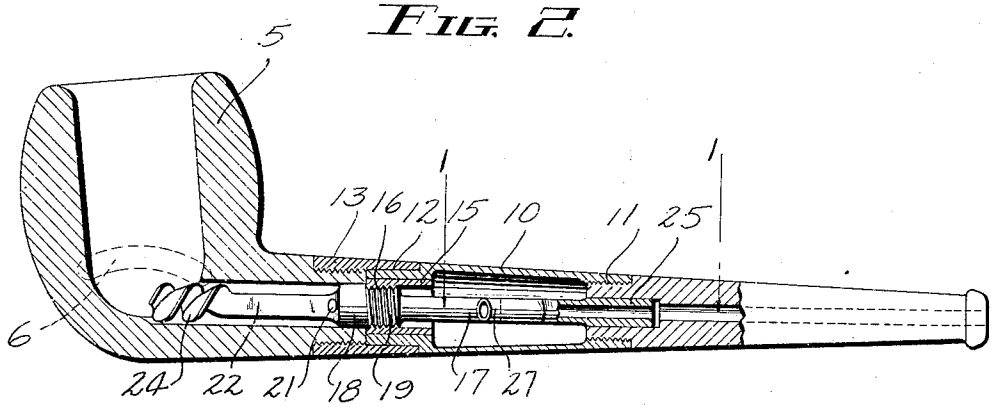


FIG. 2



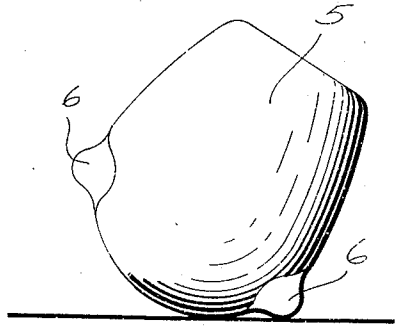


FIG. 3.

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SMOKING PIPE

Application filed March 29, 1930. Serial No. 439,921.

This invention relates to improvements in smoking pipes. The present application is a continuation in part of my application No. 364,457, filed May 20th, 1929.

It is the object of the invention to provide a novel and improved form of pipe in which means is available not only for cleaning the stem, but also for maintaining draft connection between the stem and bowl notwithstanding the packing of tobacco in the bowl.

A further important object of the invention relates to the provision of a novel form of joint between separable portions of the pipe stem whereby two parts of like composition are slidable with respect to each other and supported against change of size.

It is also my purpose to provide a novel and improved disposition of admission and withdrawal ducts in a separating chamber in the stem, whereby to avoid the transfer of moisture between the bowl and mouthpiece end of the stem with very little obstruction to the passage of gases through the stem and without interfering with the separation of the parts for cleaning.

The present invention seeks particularly to provide the unobstructed issue of gases from the separating chamber without noise or gurgling in any position of the pipe.

In the drawings:

Figure 1 is a plan view of a pipe embodying this invention, partially broken away to expose the separating chamber and smoke ducts in horizontal axial section.

Figure 2 is a view of the pipe illustrated largely in vertical longitudinal section and partially in side elevation.

Figure 3 is an end view of the pipe.

Like parts are identified by the same reference characters throughout the several views.

The pipe bowl 5 is provided externally with crescent or lozenge shaped protuberances at 6 which are alternatively available for the support of the bowl to prevent ashes or tobacco from being spilled. Figure 3 shows one of these protuberances in operation to support the pipe with its bowl in a generally upright direction sufficient to prevent the spilling of material therefrom.

The pipe stem comprises a portion 7 attached to the bowl and a portion 8 which includes the mouthpiece or bit 9. These two stem portions are connected by a sleeve 10, threaded at 11 to stem portion 8 and provided at 12 with a slip fit within sleeve 13 which is threaded to stem portion 7.

I have obtained the best results in making the sleeves 13 and 10 of hard rubber. It has been my experience, however, that the hard rubber tends to shrink when unsupported and, due to the fact that the size of sleeve 13 is maintained substantially constant by the stem portion 7 engaged therewithin, the shrinking has been observed to occur primarily in the projecting extremity of sleeve member 10, thereby destroying the fit of the parts and enabling the sleeve 10 to become loosened from sleeve 13.

To avoid this condition I incorporate within sleeve 10 a supporting bushing at 15, which may conveniently be made of such metal as aluminum, internally threaded at 16 to receive a combined duct and cleaner member hereinafter to be described. The bushing 15 prevents shrinkage of the forward end of sleeve 10 thereby maintaining a correct fit at the slip joint 12.

Engaged in the threads 16 is a metallic member of which a portion is illustrated in Figure 1 in a section taken in the plane indicated at 1—1 in Figure 2. This part includes a tube 17 to which is integrally connected a cylindrical member 18 threaded at 19 for engagement with threads 16 in the bushing 15. The smoke hole 20 through tube 17 extends through the cylinder 18 and opens at 21 at either side of a flattened integral extension 22 from the cylinder.

This extension terminates in a helix 24 disposed within the bottom of the bowl 5 of the pipe. It will be noted that the helix is relatively short, being practically confined to the pipe bowl. By virtue of this fact it offers very little obstruction to the passage of smoke and gases from the bowl through the stem of the pipe, and it is available for the performance of an important function in loosening tobacco which is too closely packed in the bowl. It will be found that a pipe

packed too closely to "draw" will yield a good draft if it is provided with a helix such as that shown at 24 and if such a helix be rotated by turning, with respect to the bowl, the stem portion 8 and sleeve 10 with the metallic parts 16, 18, 22 and 24. The direction of rotation should preferably be such as to force the tobacco backwardly away from the stem, thus clearing a passage into the stem for the gases produced by the combustion of tobacco in the bowl.

The bit end 8 of the stem is likewise provided with a metallic tube 25 constituting an extension of its smoke passage into the chamber within sleeve 10. Tube 25 is branched to provide diverging pipes at 26 and 27 which project beyond the end of tube 17 in overlapping relation thereto, thus preventing any delivery of material directly from one tube to the other and enabling the forked portion of tube 25 to act as a baffle for material delivered from tube 17 into the chamber. In the event of relative rotation between the stem portions 7 and 8, the branch pipes 26 and 27 will revolve about tube 17.

In any position of the pipe, one of the branch pipes 26 or 27 will be above the level of any nominal accumulation of liquid in the chamber 26. Thus, one of the pipes is invariably free for the unobstructed passage of gases through the bit. I have found that this construction eliminates the gurgling noises sometimes occasioned in pipes having a central chamber in which the bit extension is provided with only a single offset, which, in some positions of the pipe, may extend to the level of accumulations in the chamber.

The bosses or protuberances 6 on the bowl, in holding the pipe erect, not only prevent spilling of ashes from the bowl, but also maintain the opening 27 of tube 25 in its normally elevated position whereby liquid accumulating in chamber 26 cannot flow therein.

The helix or screw 24 not only has the function of relieving the packing of tobacco in the bowl as above described, but is also serviceable as a cleaner when the stem portions are separated at the slip joint 12. The cylindrical portion 18 of the metallic fitting within the stem increases, in effect, the length of the slip joint and thus functions as a packing.

I claim:

1. In a pipe, the combination with a bowl and an externally threaded stem portion, of a rubber sleeve threaded to said stem portion and projecting therebeyond and a second stem portion provided with a rubber sleeve in slip joint connection with said first mentioned sleeve, a metallic ferrule supporting said second rubber sleeve, and a member threaded within said ferrule and provided with a tubular extension within said second sleeve.

2. In a smoking pipe, the combination with stem portions and a sleeve connecting and spacing said stem portions to provide a chamber therebetween, of aligned tubular extensions projecting into said chamber from the respective stem portions, one of said extensions being offset in overlapping relation to and revoluble about the other.

3. In a smoking pipe, the combination with a bowl and a stem portion contiguous thereto, of a second stem portion provided with a bit, a sleeve connecting and spacing said stem portions whereby to provide a chamber therebetween, axial tubular extensions of said stem portions projecting axially into said chamber, said extensions being disposed in mutually overlapping relation and one of them connected with said bit being offset and revoluble about the extension connected with the bowl.

4. In a smoking pipe, the combination with a bowl and a stem portion contiguous thereto, of a second stem portion provided with a bit, a sleeve connecting and spacing such stem portions, whereby to provide a chamber therebetween, tubular extensions of said stem portions into said chamber, one of which, connected with said bit, is revoluble about the other and normally disposed in a predetermined position above the normal level of accumulations in the chamber, said pipe being provided with means for supporting it uprightly whereby to maintain said last mentioned tubular projection in said position.

5. In a smoking pipe, the combination with a bowl and a stem portion contiguous thereto, of a non-metallic sleeve connected with said stem portion, a second stem portion provided with a nonmetallic sleeve in slip joint connection with said first nonmetallic sleeve, a metallic ferrule supporting the innermost of said sleeves against shrinkage whereby to maintain the proper fit therebetween, a tubular extension of said second stem portion into the interior of said second sleeve, a tubular extension of said first stem portion into the interior of said second sleeve in overlapping relation to the extension from said second stem, and an attenuated arm connected with said last mentioned tubular extension and providing openings at either side of said arm communicating with the last mentioned extension, and a helix carried by said arm and disposed substantially within said bowl.

6. A pipe including a bowl, a stem communicating therewith and having an enlarged central chamber, a tubular duct leading from said bowl into said chamber and projecting centrally therein, and a tubular duct leading from the other end of said stem and projecting centrally into said chamber, said last mentioned duct having divergent branches extending adjacent to opposite walls of said chamber.

7. A pipe including a stem having bit and bowl portions, a sleeve connecting said bit and bowl portions and providing an enlarged

chamber, a central tubular extension into said chamber from the bowl portion of the stem and an aligned tubular extension into said chamber from the bit portion of the stem, said last mentioned tubular extension having divergent ducts overlapping said first extension.

8. A pipe including a stem having bit and bowl portions, a sleeve connecting said bit and bowl portions and providing an enlarged chamber, a central tubular extension into said chamber from the bowl portion of the stem and an aligned tubular extension into said chamber from the bit portion of the stem, said last mentioned tubular extension having divergent ducts overlapping said first extension, and symmetrically arranged with respect thereto.

9. A pipe including a stem having bit and bowl portions, a sleeve connecting said bit and bowl portions and providing an enlarged chamber, a central tubular extension into said chamber from the bowl portion of the stem and an aligned tubular extension into said chamber from the bit portion of the stem, said last mentioned tubular extension having divergent ducts overlapping said first extension, the bowl and bit portions of the stem being separable at one end of the sleeve and relatively rotatable, the divergent branches of the second mentioned extension being revoluble about the end of the first extension.

10. A pipe including the combination with bit and bowl portions of its stem, of a sleeve connecting said sections whereby to provide a chamber therebetween, and aligned extensions of the respective stem portions into said chamber, one of said extensions having forked arms overlapping the other, said last mentioned extension being connected with the bit portion of the stem and so disposed that said arms are normally horizontal in use.

11. A pipe including the combination with bowl and bit portions of its stem, of a sleeve detachably connecting said stem portions and providing a chamber therebetween, aligned tubular extensions of the respective portions into said chamber, the extension of the bit portion being provided with divergent arms so arranged that in any pipe position at least one thereof will be above the normal level of accumulations in said chamber.

12. A pipe including the combination with bowl and bit portions of its stem, of a sleeve detachably connecting said stem portions and providing a chamber therebetween, aligned tubular extensions of the respective portions into said chamber, the extension of the bit portion being provided with divergent arms so arranged that in any pipe position at least one thereof will be above the normal level of accumulations in said chamber, said arms overlapping the other extension and being revoluble about it in the relative movement of said stem portions with respect to each other.

GUSTAVE E. STRANDT.