April 9, 1935. H. R. SEGAL 1,997,536

TOBACCO SMOKING IMPLEMENT

Filed Feb. 12, 1934

Fig. 1

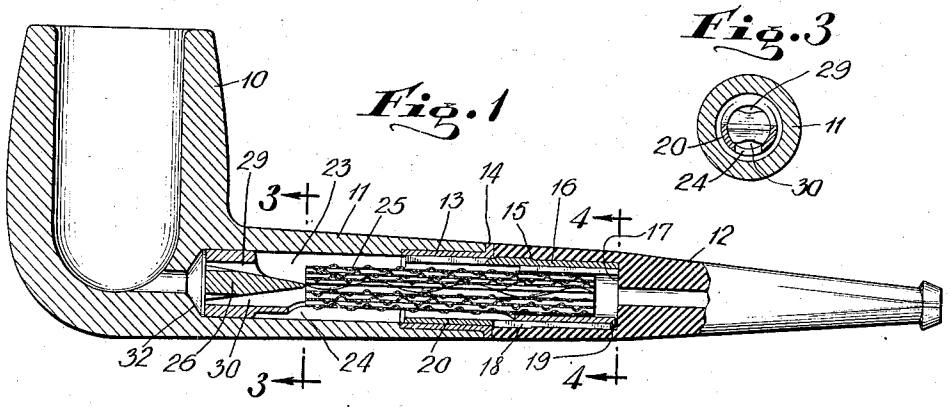



Fig. 3




Fig. 2

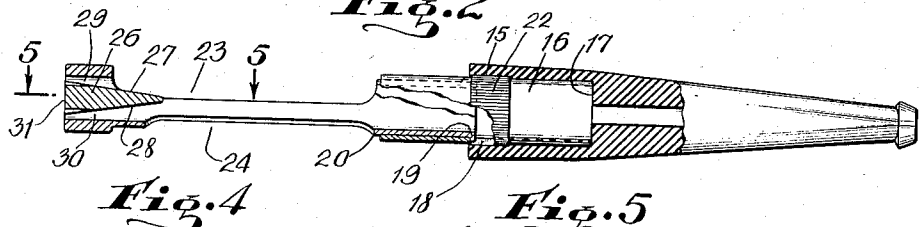



Fig. 4

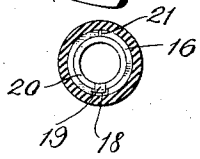



Fig. 5

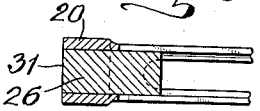



Fig. 7

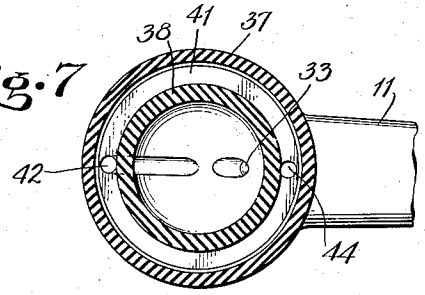



Fig. 6




Fig. 8

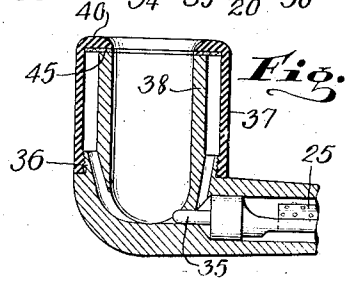
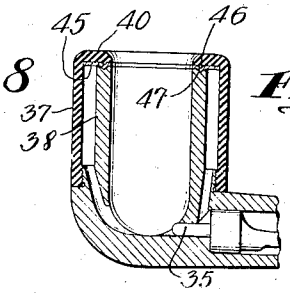



Fig. 9




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# UNITED STATES PATENT OFFICE

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## TOBACCO SMOKING IMPLEMENT

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15 Claims. (Cl. 131—12)

The present invention is directed to smoking implements and more particularly has to do with improvements in tobacco smoking pipes and/or cigar or cigarette holders.

It is an object of the invention to provide an improved tobacco smoking pipe having cooperative means to permit circulation of smoke fumes within a relatively large annular chamber for initial treatment thereof preparatory to their passage into the shank of the bowl and its associated stem or mouthpiece member.

It is a particular object of the invention to provide an improved stem having telescoping and settable means for removably supporting an absorbent filter cartridge providing supplementary means for treating the smoke fumes travelling through the shank or extension of the pipe.

It is another object of the invention to provide a functionally and structurally improved wedge which serves to divide the smoke conducting chamber of the shank into a plurality of relatively narrow passages and which also serves as a baffle to deflect solid particles held in suspension by the smoke.

It is another object of the invention to provide a pipe having a bowl comprising spaced annular members forming an internal smoke circulating chamber whereby the products of condensation and/or nicotine vapors may be deposited on the inner surface of the spaced members in the initial treatment of the smoke fumes preparatory to their entrance into the shank of the pipe.

Other features, advantages and objects of the invention are in part obvious and in part pointed out hereinafter.

The invention accordingly comprises the features of construction, combination of elements, arrangement of parts which will be exemplified in the construction hereinafter set forth and the scope of the application thereof will be indicated in the appended claims.

The present invention will be best understood from the following discussion of the several typical structural embodiments, reference being had to the accompanying drawing in which:—

Fig. 1 is a sectional elevation of a pipe according to the invention.

Fig. 2 is a sectional view, partly broken away, of the stem of the pipe, more particularly illustrating the telescopic and settable holder for supporting an absorbent filter cartridge.

Fig. 3 is a section on the line 3—3 of Fig. 1.

Fig. 4 is a section on the line 4—4 of Fig. 1.

Fig. 5 is a section on the line 5—5 of Fig. 2.

Fig. 6 is a sectional view in elevation of another form of pipe according to the invention.

Fig. 7 is a sectional view taken on the line 7—7 of Fig. 6.

Fig. 8 illustrates a slightly modified bowl in section.

Fig. 9 illustrates another slightly modified bowl in section.

The pipe according to Fig. 1 comprises a bowl 10 from which extends the lateral hollow shank 11 disconnectably holding the mouthpiece member or stem 12.

Secured within the free end of the hollow shank 12 is a ferrule or sleeve 13 having an integral annular flange 14 adapted to abut the end face of the shank. If desired, the ferrule may be omitted. The shank or bowl may be of any suitable heat resisting material, such as bakelite, hard rubber, etc. or either may be of a suitably treated wood. The hollow stem or bit 12 may be made from any suitable material, for example, hard rubber, bakelite, bone, etc.

Appropriately fastened within the bore 15 of the stem 12 and partly overhanging the same is a tubular cylinder 16 having one end positioned against the internal shoulder 17. The cylinder 16 is provided with a relatively long slot 18 in which a tongue or lip 19 of a slidable and telescoping or cylindrical tube generally designated 20 may be reciprocably guided.

To increase the resiliency of the metal tube or shell 16 which overhangs the stem, it is provided with a relatively narrow slot or striation 21 and to facilitate the securing of shell 16 to the inner walls of the bore 15, the intermediate part of the shell 16, if desired, may be knurled as at 22.

The reciprocable telescopic shell 20 has opposed intermediate central portions cut away to provide opposed and relatively elongated openings as 23 and 24 through each of which an absorbent filter cartridge generally denoted 25 may be inserted within the hollow shell 20.

The end of shell 20 adjacent the bowl of the pipe fixedly carries a wedge shaped member 26 which extends diametrically across the bore of the shell, the tapering or inclined faces 27 and 28 of the wedge being spaced from the inner sides of the shell and forming therewith relatively narrow smoke conducting passages such as 29 and 30, the end wall 31 of the wedge being preferably flush with the end wall of shell 20, the latter in turn being limited in its inward displacement relative to the bowl by the countersunk bore 32.

The absorbent filter cartridge 25 may be mounted within the telescoping shell 16 by first

disconnecting the stem from the shank and secondly extend shell 20 by sliding the same relative to the outside cylindrical stationary tube 16, hence openings 23 and 24 may be adjusted for length or shell 16 may be withdrawn or extended until lip 19 meets the end wall of the companion slot 18, the end wall serving as a stop to limit adjustment of shell 16. The cartridge is then inserted either through openings 23 or 24 within the shell and the latter is moved inwardly permitting the inner end portion of the wedge to move the cartridge towards the stop shoulder 17. The cartridge may be held between the wedge and the stop shoulder 17 against longitudinal displacement since shell 16 by reason of being split at 21 snugly and frictionally embracing the inner telescoping tubular shell 20. Inward displacement of the inner shell 20 is also limited by reason of lip 19 engaging shoulder 17 when the inner shell is retracted.

With the cartridge applied to shell 20, the latter is bodily inserted within the shank of the pipe until the free end of shell 20 reaches the countersunk portion 32 at which time the inner end of the stem abuts the annular flange 14.

In the form according to Figs. 6 and 7, the wedge 26 is provided with an overhanging projection or stud 33 which forms a seal or closure for the opening 34 of the bowl, thus preventing the smoke originating within the bowl to pass through opening 34. As shown in Fig. 6, the bowl comprises a base 35 having a reduced threaded annular boss 36 to which is threadably connected an annular jacket or casing 37. Extending upwardly and centrally from the base and preferably integral therewith is an annular jacket or casing 38, the upper portion of which is provided with a continuous rabbeted groove 39, on which the inwardly extending flange 40 is seated.

The spaced casings or jackets 37 and 38 form an annular smoke circulating chamber 41, the smoke being initially drawn upwardly from the opening 42 which is in communication with the central tobacco receiving pocket 43 of the bowl. The smoke then travels upwardly within the annular chamber 41, circulating therein and is subsequently drawn downwardly through an opening 44 and into the spaced openings 29 and 30 between the wedge 26 and shell 20. It is apparent therefore that the smoke fumes impinge a relatively large surface before entering into the shank of the pipe, consequently products of condensation from the fumes are collected by the inner faces of the spaced jackets 37 and 38.

Having passed through the narrow passages 29 and 30, the smoke fumes are further treated upon their impingement with the internal and external walls of the cartridge, that is, the cartridge serves to absorb the moisture or vapors in the smoke and further serves as means to prevent solid particles from reaching the smoker, particles such as, chips of tobacco, tobacco ash, etc.

In other aspects the construction of Figs. 6 and 7 is identical to the structure disclosed in connection with Figs. 1–5 inclusive except that, as shown in Figs. 6 and 7, the parts of the bowl and its shank are of a suitable heat resisting material such as bakelite or hard rubber.

According to the form illustrated in Fig. 8, an annular washer 45 which may be of a suitable resilient and/or yieldable material is interposed between the top of the inner jacket and the inwardly extending flange 40 of the outer jacket as 37 to provide an air or gas tight seal when the outer jacket is screwed down on the threaded boss 36. The jacket 37, in Fig. 8, may be of bakelite and the inner jacket may be of wood. If desired, of course, either may be of wood or bakelite.

With the form shown in Fig. 9, flange 40 is provided with an annular rib or detent 46 which presses a part of the washer 45 downwardly and into an annular indent 47 to provide an air or gas tight seal. In other aspects, the form of Fig. 9 is identical to the form shown in Fig. 8.

The cartridge may be removed from its holder in the form illustrated in either Figs. 1, 6, 8 or 9, by detaching the pipe stem from the shank. Subsequently shell 20 may be grasped and moved or extended relative to the external supporting tube 16, hence openings 23 and 24 are also extended to permit the removal of an old cartridge or the insertion of a new one.

While the invention has been described in detail and many modifications and specific applications thereof have been referred to, the invention herein is not limited to such modifications or to such specific application and it is to be understood that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

I claim:

1. In a tobacco smoking implement, the combination of, a bowl having a shank, a stem removably carried by said shank and in communication with said bowl, a shell carried by said stem and having a part overhanging one end thereof, and a tubular member telescopically associated with said shell and guided thereby, said tubular member having an opening adapted to be varied as to length upon the retraction of said member or upon the projection thereof relative to said shell, said member having one end adapted to be removably confined in said shank.

2. In a tobacco smoking implement, the combination of, a bowl having a shank, a stem disconnectibly carried by said shank and in communication with said bowl, a shell having one end carried by said stem and another end overhanging the latter adapted to be removably confined in said shank, a slidable tube having means guided by said shell to permit said tube to be retracted or extended relative to said shell, and deflector means carried by a free end of said tube having sides spaced therefrom forming relatively restricted passages therewith.

3. In a tobacco smoking implement, the combination of, a bowl having a shank, a stem disconnectibly carried by said shank and in communication with said bowl, a shell having one end carried by said stem and another end overhanging the latter adapted to be removably confined in said shank, a tube slidable relative to said shell and having a depending lip, said shell having a longitudinally disposed slot for guiding the displacement of said lip, the shell including an elongated opening to permit the insertion of a filter absorbent cartridge therein, and means to limit the retraction or the extension of said tube relative to said shell.

4. In a tobacco smoking implement, the combination of, a bowl having a shank, a stem removably carried by said shank and in communication with said bowl, a shell having one end carried by said stem and another split end overhanging the latter adapted to be removably confined in said shank, a tube having a part disposed within said shell and another part overhanging said

split end, cooperative means for slidably guiding said tube relative to said shell, the latter having means to permit the insertion of a filter absorbent member, and wedge means carried by said overhanging part of said tube providing relatively narrow passages therewith in communication with said bowl and said stem.

5. In a tobacco smoking implement, the combination of, a bowl having a shank, a stem removably assaociated with said stem and in communication with said bowl, a cylindrical shell having one end carried by said stem and another split end overhanging the latter adapted to be removably confined in said shank, a cylindrical tube having a part disposed within said shell and another part normally overhanging said split end, said shell having a longitudinally disposed slot, the tube being provided by a depending lip slidably guided by said slot, the latter having one end adapted to limit the movement of said tube relative to said shell, said stem having a shoulder cooperative with an end of said tube to limit retraction of the latter, the shell comprising an opening to permit the insertion of an absorbent filter cartridge, and wedge means carried by said overhanging part of the tube and defining therewith relatively restricted passages in communication with said bowl and stem, said split end being adapted to be slightly compressed against the walls of said tube upon the insertion of the shell into said shank to hold said tube against displacement relative to said shell.

6. In a smoking implement, the combination of, a bowl comprising spaced annular members defining a smoke circulating chamber, a shank carried by said bowl, and a stem disconnectibly associated with said shank and having means to prevent the travel of smoke from said bowl into said shank, said stem comprising an overhanging portion removably associated with said shank and in communication with said circulating chamber.

7. In a smoking implement, the combination of, a bowl comprising disconnectibly associated annular members defining a smoke circulating chamber, a shank extending from said bowl, and a stem disconnectibly associated with said shank and having an extension to preclude the passage of smoke from said bowl into said shank, said stem comprising a slidably guided element removably associated with said shank, said element having smoke deflecting means forming relatively narrow passages therewith in communication with said chamber and stem.

8. In a smoking implement, the combination of, a bowl having a base comprising a boss, an annular member extending upwardly from said boss, an annular member disconnectibly attached to said boss and removably associated with the first mentioned annular member, said members defining an annular smoke circulating chamber, a shank extending from said bowl, and a stem disconnectibly carried by said shank and comprising a slidably guided tube adapted to receive a filter absorbent cartridge, said tube having a wedge member defining relatively narrow passages therewith in communication with said chamber and said stem.

9. In a smoking implement, the combination of, a bowl having a base comprising an externally threaded boss, a jacket having an internally threaded portion adapted to be attached to said threaded boss, an annular member extending upwardly from said boss and spaced from said jacket, the latter including an inwardly extending flange adapted to be removably seated on said annular member, said jacket and annular member defining a smoke circulating chamber, a shank extending from said bowl, and a stem disconnectibly associated with said shank and comprising a telescopic tube including means in communication with said chamber, said tube having an extension to prevent smoke passing from said bowl into said tube, the latter comprising an elongated opening adapted to removably receive an absorbent filter cartridge.

10. In a smoking implement, the combination of, a bowl having a base comprising an externally threaded boss, a jacket having an internally threaded portion adapted to be attached to said boss, an annular member extending upwardly from said boss and spaced from said jacket to define a smoke circulating chamber, said jacket having a flange, a resilient washer interposed between said flange and annular member to prevent air or gas leakage, a shank extending from said bowl, and a stem disconnectibly associated with said shank and comprising a slidable and adjustable tube adapted to removably support a filter absorbent cartridge, said tube having wedge means dividing the bore of said tube into relatively narrow passages in communication with said chamber and stem, said wedge means having an extension to prevent direct travel of smoke from said bowl into said tube.

11. The smoking implement according to claim 10 characterized further in that said flange is provided with an annular detent and said annular member includes an annular cooperating indent whereby said washer interposed therebetween is compressed to form an air or gas tight seal.

12. In a pipe, a bowl comprising a base having a boss defining an annular shoulder with said base, an inwardly disposed annular casing integral with said boss and extending upwardly therefrom, said casing defining a channel in communication with the exterior and interior surfaces thereof, an exterior annular member disconnectibly associated with said boss and having a terminal portion seated on said shoulder, said member and casing defining a smoke circulating chamber in communication with said channel, a tubular shank carried by said bowl, said boss having a passageway in communication with said chamber and the bore of said shank and a stem removably carried by said shank.

13. In a pipe, a bowl comprising a base having a boss defining a shoulder with said base, an inwardly disposed annular casing integral with said boss and extending upwardly therefrom, said casing defining a channel in communication with the exterior and interior surfaces thereof, an annular member disconnectibly seated on said shoulder and concentrically disposed in respect to said casing in spatial relation therewith and defining with said casing a smoke circulating chamber in communication with said channel, a tubular shank carried by said bowl, said boss having a passageway in communication with said chamber and with the bore of said shank, said passageway constituting means for conducting the smoke circulating in said chamber to said bore and a stem carried by said shank and in communication with said bore.

14. In a pipe, a bowl comprising a base having a boss defining a circular shoulder with said base, an inwardly disposed annular casing integral with said boss and extending upwardly therefrom said casing defining a channel in communication with said exterior and interior sur-

faces thereof, an exterior annular member disconnectibly mounted on said shoulder and surrounding said boss and concentrically and spatially disposed in respect to said casing defining therewith a smoke circulating chamber adapted to receive smoke directed upwardly from said channel, a tubular shank carried by said base, said boss having a downwardly directed passageway adapted to receive smoke travelling downwardly in said chamber, said passageway being in communication with the bore of said shank for conducting smoke from said chamber through the bore of said shank, and a stem removably carried by said shank and in communication with said bore.

15. In a pipe, a bowl comprising a base having a boss defining a circular shoulder with said base, an internal annular casing integral with said boss and extending upwardly therefrom, said casing comprising a channel for permitting smoke to travel from the interior to the exterior thereof adjacent the upper portion of said boss, an exterior annular member disconnectibly associated with said casing, said member having an intermediate portion concentrically and spatially arranged in respect to said casing and having a lower portion removably seated on said shoulder, said casing and member defining an annular chamber to permit smoke passing through said channel to travel upwardly therein, the interior surfaces of said chamber constituting moisture collecting means, a tubular shank carried by said bowl, said boss having a downwardly directed passageway to conduct smoke from said chamber into the bore of said shank, and a stem disconnectibly carried by said shank and in communication with said bore.

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