This application is a continuation in part of application Serial No. 261,692; filed March 14, 1939.

This invention relates to smoking pipes in general; and the objects are, in addition to those already stated in the above said application:

1. To make an extension on the stem to constitute a continuation of said joint between the stem and bowl and to facilitate as a base portion, adapted to carry the full weight of the bowl instead of said weight to be mostly upon said locking means and thereby provide increased stability of the structure.

2. To facilitate with said extension novel arrangement for the locking means between the bowl and stem of the pipe whereby the bowl can easily and rapidly be attached to or detached from the stem.

3. To facilitate with said extension an increased area for an absorbent, provided with means, to serve as a cushion for said bowl in addition of absorption and filtering.

4. To make with said extension novel arrangement for the air ducts whereby cross ventilation for said absorbent and also for the jointed area of the bowl and the stem is attained transversely as well as longitudinally in respect to the device.

5. To make a branch line connecting the smoke channel and the drain channel, and arranged so that the heated air flow coming from the bowl toward the mouth end of the pipe is greatly reduced before it reaches the connection between the smoke channel and drain channel, whereby said heated air is practically eliminated before it reaches the mouth of the smoker.

Other objects and advantages will appear as the description proceeds when taken in connection with the accompanying drawing, in which:

Fig. 1, is a side elevational view of one form of the pipe constructed according to the invention, and the dotted lines indicate an assumed position of the cover.

Fig. 2, is an end view of the pipe shown in Fig. 1, but with the assumed position of the cover.

Fig. 3, is a longitudinal and vertical sectional view of Fig. 1.

Fig. 4, is a fragmentary elevational and sectional view of the stem of Fig. 1, and the filter and absorbent element removed therefrom.

Fig. 5, shows the bowl removed from Fig. 1, and in the same position.

Fig. 6, is an enlarged elevational view of the filter and absorbent element used with the form shown in Fig. 1, and embodied in this invention.

Fig. 7, is a plan view of the filter and absorbent element shown in Fig. 6; and Fig. 8 a longitudinal section thereof.

Referring to one form of my invention illustrated in Figs. 1 to 8, inclusive, and wherein the numeral 1 indicates a bowl member, 2 a stem member, and a lid or cover member 3.

The bowl member 1 is provided with a projection 4 upon which is mounted an extension 5. This extension, preferably curved at one end of said projection 4, extends laterally to a suitable length toward the opposed end 4a, which is reduced at 4b.

In Fig. 4, will be seen that the stem member 2 is provided with a chamber 6, adapted to receive said projection 4, and around the upper half portion of said chamber is a projection 7 adapted to interlock with said extension 5. And cheek portions 8, which abutting against the side of the bowl member, are carried downwardly toward a base portion 9 formed at the end of the stem member 2. These cheek portions 8, together with the adjacent area of said base portion 9, are preferably constructed to follow the contour of the lower portion of the bowl member.

Thus to attach the bowl member 1 to the stem member 2, the bowl as seen in Fig. 5 is slightly tipped at the upper end toward the stem when the portion 4a of the projection 4 is pressed downward upon said base portion 9 and slidingly thereupon is inserted into the chamber 6, the edge of the extension 5 will slidingly engage the projection 7 as the bowl is moved to normal position against the end of the stem 2.

10 is a suitable clamping element mounted upon the base portion 9, is pivoted at 11, and provided with a slot 12 adapted to engage a pin 13, which is provided on the bowl 1, and secures the bowl to the stem against accidental movement. And a suitable projection 10a carried by said clamping element 10 to serve as a knob to facilitate movement of the element 10 about its pivot to loosen or to tighten the connection between the bowl member and stem member.

14 and 14a are grooves made in the area of the base portion 9. Those marked 14a are running from the forward end of the pipe into the chamber 6, and the other ones marked 14 are also from said forward end, but they are extended along the cheek portions 8 and edge portions of the projection 7 where they unite. And 15 are one or more apertures (see Fig. 2) connecting the grooves 14 and extended therefrom outwardly to the surrounding area of the stem member thereof.
16 are grooves provided on the bowl member and they are so placed that when the bowl is in normal position with the stem 2, they will align with the grooves 14 of the stem so that both said grooves 14 and 16 will constitute channels of suitable size to function as ducts to convey outer air therethrough.

Thus outer air flowing against the pipe will readily pass through the channels formed by the grooves 14 and 16 and apertures 18 and thereby reduce the heated condition of the area thereabout produced by the burning element in the chamber 1a of the bowl 1.

In Fig. 3 it will be noted that a plurality of smoke apertures 17 placed in the bowl member 15 is arranged so as to extend from the chamber 1a to unite with a cavity 18 which is formed in the face portion of the projection 4. And a smoke channel 18 in the stem member 2, one end of which is aligned with said cavity 18, communicates through said chamber 6 with said apertures 17.

In the smoke channel 18 are made a plurality of openings 28 and 21 to form outlets there below adapted for passage of liquid substance or particles of the burning element used in the chamber 1a and both of which may enter the channel 18 from either ends of the stem member 2, to these outlets are connected drain channels of which diameters are of larger size than that of the smoke channel; and as will be noted in Fig. 3, one of these drain channels marked 22 connected to outlet 20 runs downward to the lower portion of said chamber 6, and the other drain channel 23 connected to the mouth end of said outlet 21 runs inclined upward to connect with the outlet 21.

It is obvious that the arrangement of the said channels tends to show that when the smoke is being drawn into channel 19 the outlet 21, being of a larger diameter than that of the smoke channel 18, will cause to draw thereinto the flow of heated air usually accompanying the smoke. Thus, the force of the stream of heated air is first interfered with at 21, and as same reaches the second outlet 20 it will be again interfered with. Evidently, the force of the stream of air as well as its heated condition is so reduced to produce a cool smoke before said smoke reaches the mouth of the smoker. Further, that particles of tobacco or the like or juice existing in the chamber 6 and introduced by drawing of the smoke into the smoke channel will, due to the interference of the flow of air at outlet 21, be caught there at and caused to settle in the channel 23 and thereby prevent such juice and particles to travel further in the smoke channel, and saliva introduced in the smoke channel will be intercepted at the outlet 20 and drained toward the chamber 6 through the channel 22, and thereby insure sanitary or pure smoke supply to reach the mouth of the smoker.

From Fig. 4, it is obvious that I prefer to shorten the drain channel 23 by increasing at 22 the drain channel 22 to form an extension for the chamber 6, which is increased also in depth from said projection 4 to form shoulder portion 6a. And the side walls 6b of the chamber 6 are of suitable distance to allow the projection 4 and its extension 5 to be inserted easily in said chamber, and at 6c said chamber is still further increased a suitable distance into the base portion 9.

From the drawings, it is obvious that said chamber is thus constructed to engage an absorbent and filter element 24.

And this absorbent and filter element is so formed that it serves at 25 as a cushion portion for the bowl, at 26 contacting the reduced portion 4b, and at 21 the remaining portion of the projection 4, and thus encompassing the cavity 18 for the smoke to be confined thereby, portion 27 of the absorbent and filter element 24 is of a size to produce a suitable smoke chamber 28 therein, and it is made to correspond with said increased portion 6a of the chamber 6; and provided with a screen portion 28, being in alignment with the smoke channel 19 and adapted to purify by screening and absorption the air passing therethrough. Said smoke chamber is provided with grooves 30 spaced upon the wall portions and also upon the ceiling portion thereof; and the floor portion of the smoke chamber 28 is preferably provided with projection 31. Obviously, said grooves 30 and said projection 31 will greatly separate the smoke from foreign element as it is being drawn through the smoke chamber 28 before it travels through the screen portion 29 into the smoke channel 18. Of course, the side walls and ceiling may be without said grooves 30 as shown in Fig. 3.

An additional absorbent portion 32, to engage the increased portion 22a in the said chamber 6, is preferably made one piece with the absorbent and filter element 24, as shown in the drawings. Obviously therefore, the lower portion 32a is reduced substantially so that when inserting the absorbent and filter element 24 in normal position in said chamber 6 said same is easily accomplished, and said portion 32 serves as a sleeve to close the lower opening of the drain channel 23 and prevent leakage of air between the portion 22a and smoke channel 19 in addition to absorption of the juice which may enter the smoke channel 19 thereabout and settle in the drain channel 23. And the interior portion 33 of the sleeve 32 is adapted to absorb and tend to direct the saliva and juice downward forward toward the cushion portion 25 in addition to intercepting particles of matter which may exist with said saliva or juice in said drain channel 22.

It is of course understood that I can construct the branch channel 23 at an angle of about ninety degrees instead of inclining it as shown in the figures, and thereby provide more than one such channel 23.

To facilitate dry condition in the lower portion of the bowl and of course said filter and absorbent element by ventilation I provide ducts as stated in my previous application No. 261,602; filed March 14, 1899. However, in this application it will be noted that I make one or more air ducts 34 and 35 in the side walls of the chamber 6, and one or more air ducts 36 in said base portion 9.

The ducts 34 and 35 connected adjacent the bottom of said chamber 6 are extended outward upwardly and preferably diverging in respect to the vertical axis of said chamber; and the ducts 35 connected intermediate the height of the end of said chamber thereat are extended towards the fore end of said base portion 8, and they preferably are also diverging but with respect to the longitudinal axis of said chamber.

From the drawings, it is obvious that these ducts tend to provide ventilation toward said chamber and its contents longitudinally and transversely and whereby will eliminate the wet condition rapidly when the pipe is being used.

The lid or cover 3, being of the usual type, is
provided with a flange portion 3a at the periphery thereof, and from where a pair of legs 3b extend to be pivotally mounted at 3c upon the stem member 2. And in Fig. 1 is shown in dotted line the direction the lid or cover takes when it is to be positioned upon the stem member 2 to fill the bowl member with tobacco or the like element.

And to detach the bowl member 1 from the stem member 2, the clamping element 10 is turned about its pivot 11 to be disengaged with the pin 13 at the bowl member; then the upper end of said bowl member is yieldedly tipped rearward or toward the stem member, while it is being pushed downward and its bottom end is slidingly upon the base portion 3 is brought forward so that the locking means will depart from each other, and the bowl member moved out.

It is of course understood that all matters described and illustrated and pertaining to the absorbent and filter element, and also to the lid or cover element of this form of this invention shall be considered as matters for a separate application in their respective classifications, which I intend to file with the Patent Office. And that all such matters of the absorbent and filter element and the lid or cover elements are to be considered as shown and described, when such an absorbent and filter element or when either lid or cover elements of the form is employed with a smoking appliance.

Thus said filter and absorbent element 24 and its extension 25 will be ventilated forwardly as well as rearwardly thereof by said ducts 38, 39, and 34 and thereby produce rapid evaporation of the liquids as well as eliminate the usual bad odor existing in pipes heretofore used.

It will be noted that the form shown is constructed with locking means between said bowl member and said stem member, disposed within the boundary of a half portion of the device, and more specifically, that said locking means is preferred horizontally upon the upper portion of the horizontal half portions of the device. However, if desired, the locking means may be confined at either of the projection 4, and said projection constructed with straight or unobstructed sides. Further, that said locking means is shown to be constructed one piece with the stem member and the bowl member; however, if desired, said locking means may be made separately, being of metal composition or the like element, and disposed upon the stem member or bowl member to function as stated above.

It is of course understood that the clamping means, although mounted upon said stem member as shown in the drawing, same can be mounted upon said bowl member to function as described.

Also, that I can provide suitable cover elements 37 to cover each exterior end of said apertures or air ducts 34, 35, and 36. Said cover elements each provided with perforation centrally for ventilation of each duct, in addition to making uniform the outlet of said ducts at the exterior of the device. And when there exist two or more said outlets along the contour of the stem member, one plate could be made to cover said outlets and of course with perforation 37a.

It is of course understood that the base portion at the fore end of the stem member can be extended more forward, and its height increased or reduced and the clamping element mounted upon the bowl member; and the bowl member made to correspond therewith, when it is desired the bowl member at a different or more suitable angle in respect to the stem member, than as shown.

It is believed, that the foregoing conveys a clear understanding of the objects prefixed above.

It will thus be seen that there is herein described an article in which the several features of this invention are embodied, and which article in its actions attains the various objects of the invention and is well suited to meet the requirements of practical use.

As many changes could be made in the above construction of the above form, and many apparently widely different embodiments of this invention could be made without departing from the scope thereof. It is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted by way of example and not in a limiting sense.

And I claim as new:

1. A smoking pipe comprising a bowl, a stem, a recess in the bottom end of said bowl, and means provided at one end of said stem to engage said recess and a side portion of said bowl, and latch means to secure against accidental movement of said stem relative to said bowl when said bowl is in engagement with said stem pivotally mounted upon the device, and a plurality of grooves in said bowl and said one end of said stem normally aligning so as to form ducts capable to convey outer air longitudinally and, also, transversely through the connection between said bowl and said stem.

2. An air conditioned pipe comprising a bowl and a stem separably connected thereto, said bowl and stem having aligned grooves between abutting portions thereof to provide an air channel at the joint, the ends of said channel opening to the outer atmosphere and said channel extending around a smoke passage in the stem, there being no direct communication between the air channel and the smoke passage.

3. A smoking pipe comprising a stem, a bowl separably connected to said stem, a recess in the lower end of said bowl to form a projection thereof, and an extension formed upon one end of said stem adapted to engage said projection and a side portion of said bowl, a chamber in said end of said extension adapted to engage an absorbent, a plurality of grooves provided on a wall of said chamber cooperating with said chamber to produce air channels, said channels adapted to convey outer air into said chamber when normal position of said bowl with said stem is reached, and a smoke passage in said stem communicating with the interior of said bowl.

4. An air conditioned and sanitary smoking pipe and structure comprising a stem member having at one end a chamber into which an absorbent may be provided, and means on the edge portion of said chamber to form a projection, a bowl member, means cooperative with said first means carried on said bowl member provided with other means mountable upon the absorbent, a smoke channel communicating between said bowl and stem members, a drain channel in said stem member communicating with said smoke channel and also said chamber, a branch channel in said stem member communicating with the smoke drain channel, said branch channel being spaced from said chamber, aligned grooves between said bowl member and said end of said stem member to form an air duct longitudinally and transversely thereabout, and a plurality of opposed ducts in the wall of said
chamber placed so as to diverge upward in respect to the longitudinal axis of the device capable to ventilate said chamber.

5. An air conditioned and sanitary smoking pipe as claimed in claim 4 wherein the end portion of said drain channel adjacent said chamber is formed to provide a rear extension for said chamber adapted to engage an additional absorbent rearwardly of the first absorbent.

6. An air conditioned and sanitary smoking pipe as in claim 4, with the addition of another chamber rearwardly of said first chamber and engageable by an extension of said absorbent, said second named chamber extended from said first chamber and integrally united with said branch channel and drain channel.

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