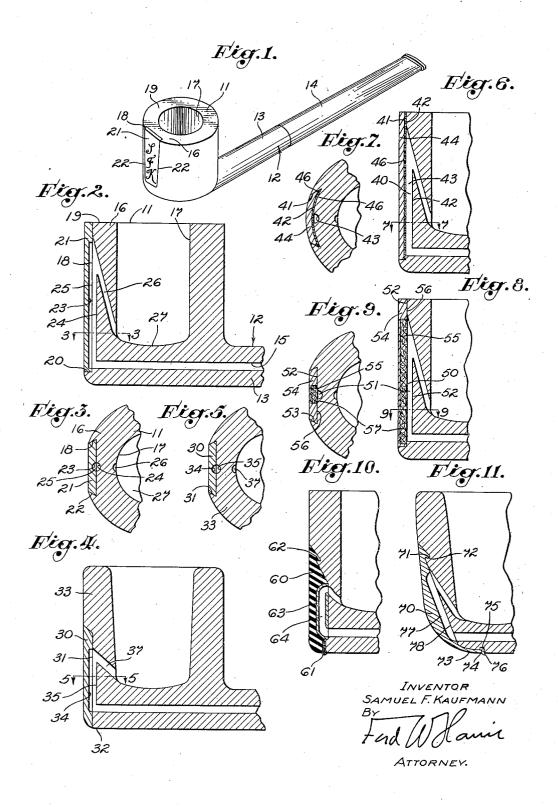
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SMOKING PIPE

Filed Aug. 31, 1936



## UNITED STATES PATENT OFFICE

## 2.149,055

## SMOKING PIPE

Samuel F. Kaufmann, Los Angeles, Calif. Application August 31, 1936, Serial No. 98,656

10 Claims. (Cl. 131—218)

My invention relates to smoking pipes, the general object being to provide such a pipe so constructed that juices exuding from the burning tobacco are prevented from being drawn into the stem, and any saliva which may flow along the stem is prevented from flowing into the bottom of the bowl to be absorbed by the tobacco. Thus the pipe will remain in a desirable dry condition at all times.

It is likewise an object to so construct the pipe that a better cooling action is provided, the smoke being cooled between the bowl and the stem of the pipe by being drawn through a passage in contact with a heat conducting material.

It is an object of the invention to provide a pipe construction in which the bowl of the pipe is provided with an absorbent receiving space through which the smoke passes before entering the stem.

A further object resides in providing a pipe with 20 a removable section forming part of the front wall of the bowl which when removed exposes the passages and space referred to above, the duct communicating with the bottom of the bowl, and the bore of the stem at the front of the bowl.

These and other objects of the invention will be made apparent in the following part of the specification taken in connection with the accompanying drawing and the appended claims.

In the drawing:

Fig. 1 is a perspective view of a pipe embodying the features of my invention.

Fig. 2 is a vertical section through the bowl of the pipe illustrated in Fig. 1.

Fig. 3 is a fragmentary horizontal section taken as indicated by the line **3—3** of Fig. 2.

Fig. 4 is a vertical section through the bowl and a portion of the stem of an alternative form of the invention.

Fig. 5 is a fragmentary horizontal section taken  $_{40}$  as indicated by the line 5—5 of Fig. 4.

Fig. 6 is a fragmentary vertical section of the bowl of another alternative form.

Fig. 7 is a fragmentary horizontal section taken as indicated by the line 7—7 of Fig. 6.

Fig. 8 is a fragmentary vertical section of the bowl of another alternative form of the invention. Fig. 9 is a horizontal fragmentary section taken

as indicated by the line 9—9 of Fig. 8.
Figs. 10 and 11 are fragmentary vertical sec-

 $_{50}$  tions of the bowls of two additional alternative forms of the invention.

Referring to Figs. 1, 2, and 3 of the drawing, I show one form of my novel pipe construction which includes a bowl 11 and a tubular stem 12 comprising a shank 13 which may be integrally

formed with the bowl 11 and a mouthpiece 14 fitted to the shank 13 in a conventional manner.

In this form, the bore 15 of the stem 12 is shown extending entirely through the front wall 16 of the bowl below the interior 17 of the bowl. 5 Formed in the front wall 16 of the bowl is an outwardly facing dovetailed slot 18 extending downwardly from the top wall 19 of the bowl to a point slightly below the bore 15 of the stem, as shown at 20 in Fig. 2. Slidably positioned in the slot 18 is an inset member 21 which, as shown, may be a plate member forming a portion of the front wall of the bowl. The side walls 22 of the inset section 21 and the slot 18 are preferably slightly tapered from top to bottom so as to be trapezoidal in shape for one way insertion thereof into the slot 18.

Formed in the inner surface of the inset section 21 is an upright channel 23, the opposite ends of which terminate closely adjacent the upper and 20 lower ends of the section 21. Formed in the bottom wall of the slot 18 is a channel 24. As shown, the channel 23 in the inset section and the channel 24 in the wall of the bowl cooperate to provide an upright blind passage 25 in the front wall 25 of the bowl. The blind passage 25 communicates at its lower end with the bore 15 of the stem and communicates at its upper end with a downwardly extending duct 26 formed through the front wall 16 so as to communicate with the interior 17 30 of the bowl at or adjacent the bottom 27 thereof.

In this form, the inset section 21 preferably comprises a comparatively thin walled plate of metal or other material characterized by high heat conductivity so that smoke drawn from the 35 bowl through the duct 26 and downwardly through the passage 25 passes in direct contact with the heat conducting material, thereby being substantially cooled before being drawn into the bore 15 of the stem.

The duct 26 is preferably so formed that it communicates with the blind passage 25 at a point substantially above the bottom 27 of the interior of the bowl whereby a relatively long upward path of travel is provided for the smoke 45 being drawn from the bowl so that juices exuding from the burning tobacco are not easily drawn into the passage 25 and into the bore 15 of the

In the form of the invention shown in Figs. 4 50 and 5 an inset section 30 is shown as slidably positioned in a dovetailed slot 31 extending from the bottom 32 of the front wall 33 of the bowl so as to be removable from the bottom. Cooperating channels 34 and 35 are formed in the in- 55

terior surface of the inset 30 and the flat bottom wall of the slot 31 to provide a blind passage similar to the passage 25 of the previously described form, this passage likewise communicating with 5 the interior of the bowl by a downwardly extending duct 37 and communicating at its lower end with the bore of the stem. The inset 30 of this form may also be made of metal or other heat conducting material.

In Figs. 6 and 7 I show a form of construction in which a blind passage is formed in the front wall of the bowl by providing a dovetailed slot 41 having an arcuated bottom wall 42 in which is formed an outwardly facing groove or 15 channel 43 which is closed in the manner shown by an inset plate slidably received in the slot 4!. In this form I prefer that the thickness of the section 44 with respect to the depth of the slot I is such that a space is provided between the 20 inner surface of the inset section and the bottom wall of the slot to receive a thin sheet of compressible material 46 serving to secure a relatively tight fit of the inset section 44. The sheet 46 may likewise be formed of material 25 which is absorbent in character, thus serving as a filtering means effective to absorb moisture from the smoke passing through the passage 40 before it is drawn into the stem.

In Figs. 8 and 9, I disclose another form of 30 the invention in which a passage 50, similar to the passage 40 of Fig. 6, is formed by providing a channel 51 in the bottom wall 52 of a dovetailed slot 53, which channel is closed by an inset section 54 slidably positioned in the slot 53, as 35 shown. In this form I prefer to provide a longitudinally extending cavity 55 in the inner surface 56 of the inset section which is adapted to receive an absorbent material 57 for filtering the smoke passing through the passage 50. If de-40 sired, the cavity 55 may be semi-circular in crosssection so that a tubular filter may be positioned in the passage formed by the cooperating channel 51 and cavity 55.

In Fig. 10 I show an inset section forming a 45 portion of the front wall of the bowl and which is hinged as at 61 at the bottom thereof. At the upper end of the section 60 is a latch member 62 comprising interlocking portions provided on the inset section and the bowl. Secured to the 50 inner side of the inset section 60 is a tube 63. the bore of which forms a blind passage 64 communicating at its opposite ends with a duct leading to the interior of the bowl and the tubular stem of the pipe substantially as shown.

In Fig. 11 I show an inset section forming a portion of the front wall of the bowl, this section being retained by a clipping arrangement which includes a hook portion 71 provided at the upper end thereof which engages a depres-60 sion 72 formed in the front wall of the bowl, substantially as shown, and a flexible portion 73 at the lower end thereof which terminates in a head portion 74 adapted to snap into a depression 75 formed in the bottom wall of the bowl, the head portion 74 having a projection 76 adapted for convenient engagement by a user's thumbnail or other instrument for the removal of the section 70 from the bowl. Formed in the 70 inner surface of the inset section 70 is a channel 77 which cooperates with a wall 78 of the bowl to provide a passage which communicates at its upper end with a downwardly extending duct leading to the interior of the bowl and which 75 communicates at its lower end with the tubular

stem of the pipe substantially in the manner shown.

It will be seen that in each of the described alternative forms of my invention I have provided a pipe bowl having an upright blind passage provided in the front wall of the bowl, which passage communicates with a downwardly extending duct leading to the interior of the bowl at the bottom thereof, the point of communication between the blind passage and the duct being 10 well above the bottom of the interior of the bowl. and the blind passage communicating at its lower end with the bore of the stem at a point below the interior of the bowl; and a removable section forming a portion of the front wall of the 15 bowl, which section is movable to expose the blind passage, the duct, and the bore of the stem at the front of the bowl to facilitate cleaning of the pipe.

It will be seen that the substantial length of 20 the duct leading from the interior of the bowl to the upright passage and the angle at which the duct is formed will effectively prevent moisture or juices from the burning tobacco being drawn into the stem, thus assuring a dry con- 25 dition during use.

As before mentioned, the inset sections are preferably formed of metal or other heat conducting material which by reason of direct contact with the smoke passing through the upright 30 passage effectively cools the smoke before it is drawn into the stem.

In connection with the inset sections, as best shown in Fig. 1, these sections form a panel of contrasting material on the front wall of the bowl  $^{35}$ of the pipe which presents a pleasing appearance and it is intended that the initials or monogram of a purchaser may be stamped or engraved on the inset section, as indicated in Fig. 1, these inset sections being interchangeable for this pur- 40 pose.

Although I have shown filtering means in connection with Figs. 6, 7, 8, and 9 only, it should be understood that simliar filtering means may be utilized in each of the other forms or, if desired, 45 ordinary tubular filters of a conventional type may be inserted in the upright passage of any of the forms shown.

In Figs. 1 to 9, I have shown the inset sections as being slidably removable at either the top or 50 the bottom of the bowl, but it should be understood that the inset sections might readily be dovetailed laterally for removal at one side or the other of the bowl.

It should be understood that I likewise contem- 55 plate other forms of construction of pipe bowls having inset sections forming a portion of the front wall of the bowl for the purpose described above, as well as various means for removably securing these inset sections to the bowl, all of 60 which come within the spirit and scope of the invention which should be interpreted by the appended claims and not limited to the details of construction shown in the drawing and described for illustrative purposes only.

I claim as my invention:

1. In a smoking pipe, the combination of: a bowl having an upwardly extending passage in the front wall thereof; a stem having a bore communicating with said passage, said bowl having 70 a duct communicating between said passage and the interior of said bowl; and a plate member forming a portion of the front wall of said bowl movable to expose said passage, said duct, and the bore of said stem at the front of said bowl.

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2. In a smoking pipe, the combination of: a bowl having an inset plate member in the front wall thereof cooperating with said bowl to form a passage; and a stem having a bore communicating with said passage, the front wall of said bowl having a duct communicating between said passage and the interior of said bowl, the removal of said inset plate member exposing said passage, said duct, and said bore of said stem at the front 10 of said bowl.

3. In a smoking pipe, the combination of: a bowl having a removable inset plate member in the front wall thereof, said plate member having a channel therein cooperating with a groove in said front wall of said bowl to form a passage; and a stem having a bore communicating with said passage, said bowl having a downwardly extending duct communicating between said passage and the interior of said bowl, the removal of said inset plate member exposing said passage, said duct, and said bore of said stem at the front of said bowl.

4. In a smoking pipe, the combination of: a bowl having a removable heat-conducting inset plate member in the front wall thereof, said bowl and said plate member having cooperating channels therein forming a passage; and a stem having a bore communicating with said passage, and said bowl having a downwardly extending duct communicating between said passage and the interior of said bowl.

5. In a smoking pipe, the combination of: a bowl having a removable inset section in the front wall thereof, said section having an upright 35 groove cooperating with the front wall of said bowl to form a passage; and a stem having a bore communicating with said passage, the front wall of said bowl having a duct extending downwardly from said passage to the interior of said bowl.

6. In a smoking pipe, the combination of: a bowl having a removable inset section in the front wall thereof, said section having an upwardly extending passage therein; and a stem having a bore communicating with said passage, and said bowl having a downwardly extending duct communicating between said passage and the interior of said bowl.

7. In a smoking pipe, the combination of: a

bowl having an upright channel in the front wall thereof; a removable inset plate member cooperating with said channel to form a passage; and a stem having a bore communicating with said passage, said bowl having a downwardly extending duct communicating between said passage and the interior of said bowl, the removal of said inset plate member exposing said passage, said duct, and said bowl of said stem at the front of said bowl.

8. In a smoking pipe, the combination of: a bowl having an upright groove in the front wall thereof; a removable inset plate member covering said groove to form a passage, and having an absorbent receiving space adjacent said groove; 15 and a stem having a bore communicating with said passage, and said bowl having a downwardly extending duct communicating between said passage and the interior of said bowl, the removal of said inset plate member exposing said passage, 20 said duct, and said bore of said stem at the front of said bowl.

9. In a smoking pipe, the combination of: a bowl, a closure member mounted on the front wall of the bowl and cooperating with the bowl to 25 form a passage, said bowl having walls forming a duct from said passage to the interior of said bowl; and a stem having a bore communicating with said passage, said closure member having sufficient vertical extent to permit uncovering a 30 substantial longitudinal portion of said passage and to provide access axially both to said duct and said bore.

10. In a smoking pipe, the combination of: a bowl having an upwardly extending passage in 35 a vertical wall thereof and a duct from said passage to the interior of said bowl; a stem having a bore communicating with said passage; and a closure member forming a portion of said vertical wall of the bowl, and forming a portion of the 40 wall of said upwardly extending passage, said closure member extending along at least a major extent of said passage to permit substantial exposure of the passage and to permit convenient access to said duct and bore for cleaning opera-45 tions.

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