

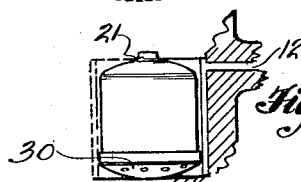
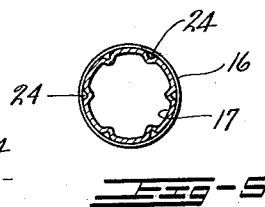
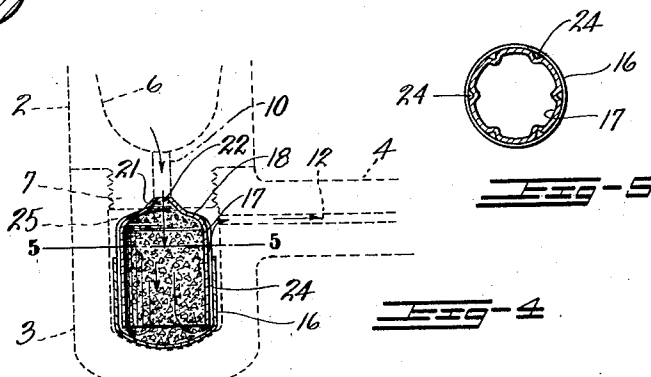
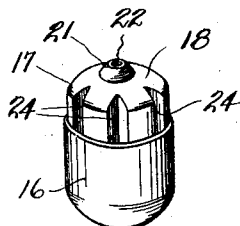
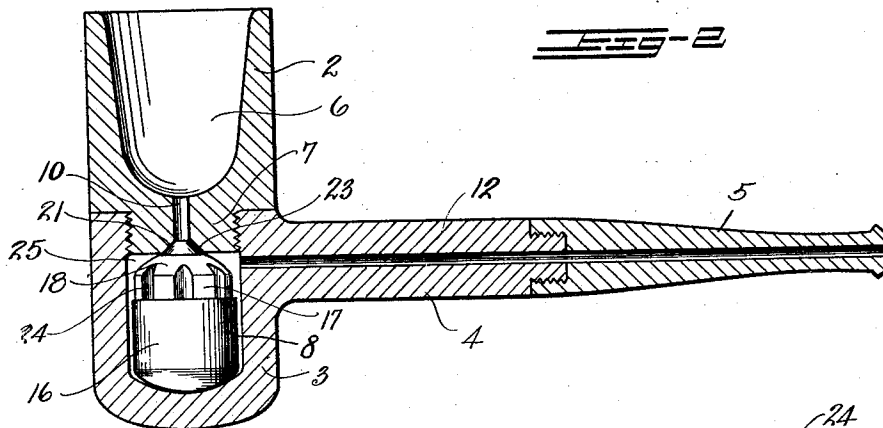
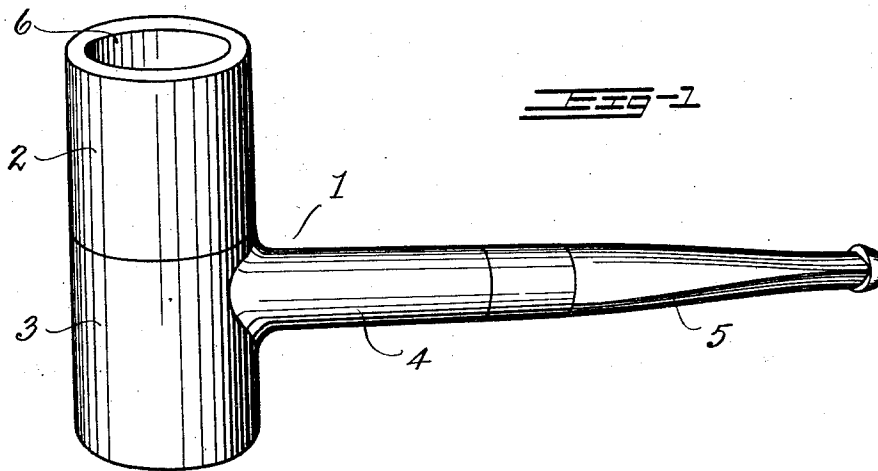
Nov. 24, 1931.

G. E. BALDWIN

1,833,014.

SMOKING PIPE

Filed Aug. 20, 1929



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UNITED STATES PATENT OFFICE

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SMOKING PIPE

Application filed August 20, 1929. Serial No. 387,232.

This invention relates to improvements in smoking pipes and it has reference in particular to pipes of that character designed for filtering, purifying, flavoring and cooling the smoke; the principal object of the invention being to provide a pipe of the above character having a smoke passage designed to hold a capsule containing a purifying composition through which the smoke, in its delivery from the pipe, is caused to pass for the removal of dust and other impurities which are apt to irritate the throat of the smoker, and to cool and flavor the smoke and to retain within the capsule all moisture and those resinous and tarry substances which are the products of combustion and which are a detriment to comfort and pleasure in smoking.

It is also an object of the invention to provide a capsule for the purifying composition, that is of such construction that it may be easily and readily removed from the pipe for refilling or for replacement and to so design the chamber within which it is contained, and to so arrange the smoke channels of the pipe with respect to the inlet and outlets of the capsule that the smoke drawn from the pipe bowl will be caused to pass downwardly through the filtering substance throughout the length of the capsule and will then flow upwardly through a plurality of outlet channels and to the outlet in the pipe stem, the capsule retaining the moisture and impurities.

Other objects of the invention reside in the various details of the construction of the capsule which prevents its passages becoming clogged and which insures an easy drawing of smoke through it. A still further object is to so arrange the capsule with respect to the outlet at the base of the bowl of the pipe that the port opening into the capsule may be easily and readily cleaned out without necessitating removal of the capsule from the pipe and also without necessitating the disconnection of any parts of the pipe.

Other objects of the invention reside in the various details of the construction and in the relationship of parts as is hereafter described.

In accomplishing these objects, I have provided the improved details of construction, the preferred forms of which are illustrated in the accompanying drawings, wherein:—

Fig. 1 is a perspective view of a smoking pipe embodied by the present invention.

Fig. 2 is a longitudinal section of the same, particularly illustrating the relation of the capsule to the outlet at the base of the pipe bowl, and to the smoke channel through the pipe stem.

Fig. 3 is a perspective view of the capsule.

Fig. 4 is a sectional detail of the capsule with arrows indicating the direction of the smoke in passing through the pipe and capsule.

Fig. 5 is a sectional view of the capsule, taken on the line 5—5 in Fig. 4.

Fig. 6 is a sectional detail of a modified construction.

Referring more in detail to the drawings—

1 designates, in its entirety, a pipe constructed in accordance with the present invention. It comprises the usual bowl portion 2, a base portion 3 to which the bowl is attached and from which the stem portion 4 extends; there being also the usual mouth piece 5, threaded or otherwise attached to the stem as an extension thereof. The bowl portion 2 is provided with the usual cuplike chamber 6 for containing the tobacco to be smoked and centrally of the base of the bowl 2 is an extension 7 that is threaded into the upper end portion of a chamber 8 formed within the base portion 3 of the pipe. This chamber 8 is designed to contain the capsule, presently to be described in detail.

As shown best in Fig. 2 there is a channel 10 leading centrally from the bottom of the chamber 6 and opening centrally into the top of the chamber 8. There is also a channel 12 leading through the stem 4 and mouth piece 5 and this opens into the chamber 8 closely adjacent to the top wall of the chamber.

In its preferred form of construction the capsule which contains the smoke treating composition is formed from two metallic, opposite end sections 16 and 17 telescopically fitted together to form a closed container. The lower section 16 is of cup-like character

with a cylindrical body portion and a rounded base or lower end portion adapted to seat upon the base or bottom wall of the chamber 8 which is shaped to receive it. The upper section 17 is of cylindrical shape and is fitted telescopically within the base portion. It is provided with an upwardly crowned upper end wall 18 provided centrally with a conical tip 21 forming a central opening 22. This conical tip fits snugly within a conical seat 23 at the lower end of the channel 10, leading from the pipe bowl, and it forms an airtight connection therewith; it being supported in place by contact of the base of the capsule with the bottom wall of the chamber 8.

The chamber 8 is of such diameter as to loosely contain the base portion of the capsule and about the upward end portion of the capsule the chamber forms an annular space 25 with which the channel of the pipe stem communicates.

The upper section of the capsule extends substantially within the base portion of the lower section and it is provided with a plurality of vertical grooves 24, in its outer surface, leading from the lower end to the top wall, and these grooves provide outlet channels for the smoke after it has been drawn downwardly through the purifying composition. These grooves preferably would be formed by pressing the metal of the cover section inwardly as shown best in Fig. 5, but might also be provided in the walls of the lower section to produce the same result.

In the preferred form of the construction of the capsule it is intended, that the base section extend well toward the top of the capsule so as to retain all the moisture and other products of combustion. However, other constructions might be employed, one of which is illustrated in Fig. 6, wherein the upper section 17 fits within a very shallow base portion 30 which is downwardly rounded and is perforated and there rests upon a flat bottom surface of the chamber 8.

It is to be understood that various details of construction of the pipe and of the capsule might be changed without departing from the spirit of the invention and for this reason it is not desired that the claims be limited only to the details which have been shown and described. For instance, the pipe bowl might be applied to the base portion in a friction tight fit instead of by threading; the stem portion might be curved instead of being straight and the mouth piece might be attached, thereto, by a friction joint instead of by threading; the top wall of the capsule might be made flat and the top wall of the chamber be crowned in order to provide the annular channel which communicates with the outlets of the capsule and with the channel of the pipe stem; in the event that the capsule, as disclosed in Fig. 6, be used, the

chamber 8 might be provided in its side walls with channels corresponding to and serving its purpose of the groove 24 of the capsule.

The principal features of the present construction or the advantages to be gained thereby are:

The capsule is so designed as to retain all dust, moisture and all those tarry and resinous products which are detrimental to the enjoyment of smoking; the capsule at all times retains its smoke purifying contents and there is no possibility of the smoke outlet channels of the pipe being clogged thereby; the inlet to the capsule may be easily cleaned by use of a match or other pointed instrument projected through the channel at the base of the bowl; smoke entering the capsule through the single port at the top must pass downwardly and through the purifying composition before leaving the capsule and the provision of a plurality of outlets overcomes the possibility of obstructing the flow of smoke; the design of the capsule and the chamber which contains it is such as to provide an annular channel about the upper end of the capsule with which all the outlet grooves connect and which has an unobstructed connection with the pipe stem channel.

With the capsule so designed and fitted within the pipe, should it be desired to remove it for replacement or for refilling, it is necessary only to remove the bowl and to invert the base portion so that the capsule will drop out. When the capsule is replaced and the bowl threaded into place the capsule automatically centers and seats itself to form the airtight connection with the lower end of the channel 10. If there should be any looseness this may be taken up by placing a layer of paper at the bottom of the chamber 8.

While I have not illustrated such a construction, it is quite apparent that a capsule substantially like that of Fig. 2 or of Fig. 6, but without the bottom cap, could be employed with good results, so long as it was grooved, or the chamber walls grooved in a manner which would provide the various outlets for the smoke. Such a device would still serve as a filter and would permit clearing of the bowl passage 10 by punching any material clogged into the passage down into the capsule. While such a capsule would not have the moisture-retaining ability of the closed one, it would serve as a container for the filtering material and would cause the smoke to be drawn through it on passing to the stem.

Having thus described my invention what I claim as new therein and desire to secure by Letters Patent is:—

1. A pipe of the character described formed with a bowl, a chamber beneath the bowl and a channel leading from the bowl into the top of the said chamber, a stem having a channel opening into the chamber, and

a capsule, for a smoke treating material, disposed in the chamber and having an inlet in registration with the channel leading from the bowl and having a plurality of outlets communicating, through the chamber, with the stem channel.

2. A pipe of the character described formed with a bowl, a chamber beneath the bowl and a channel leading from the base of the bowl centrally into the top of said chamber, a stem having a channel opening into the chamber close to the top thereof, and a capsule, for a smoke treating material, disposed within said chamber and forming an annular space between the chamber wall and top portion of the capsule, said capsule having a central inlet port at the top in registration with the channel from the bowl, and having a plurality of outlets leading from the base thereof and opening into said annular space through which communication is provided with the stem channel.

3. A smoking pipe comprising a base portion formed with a chamber and having a stem with a channel opening into the said chamber, a bowl fitted to the base portion and provided with a channel leading from the bottom thereof into the said chamber, and a capsule for a smoke treating material, disposed within the chamber and having an inlet registering in an air tight connection with the channel from the bowl and having outlets opening into the chamber and communicating therethrough with the stem channel.

4. A smoking pipe comprising a base portion formed with an upwardly opening chamber and a stem having a channel opening into the upper end portion of the chamber, a bowl fitted removably over the upper end of the chamber to close the latter and said bowl having a channel leading from the base thereof and opening centrally into the top of the said chamber, and a capsule for a smoke treating material removably fitted in the chamber and provided at its upper end with an inlet port registering an air tight connection with the channel from the bowl and having a plurality of outlets at the base opening into the chamber for communication therethrough with the outlet channel of the stem.

5. A smoking pipe of the character described comprising a base portion formed with an upwardly opening, cylindrical chamber and a stem having a channel leading into the upper end of the chamber, a bowl mounted on the base and having a mounting portion removably fitted in the upper end of said chamber to close the latter, said bowl having a channel leading therefrom centrally into the top of the chamber, and a capsule for a smoke treating material, removably fitted in the said chamber and having a tip at its upper end forming an inlet to the cap-

sule and said tip being seated in the end of the channel from the bowl in an air tight connection; said capsule having a plurality of outlets from its base portion communicating, through an annular space between the chamber wall and the upper end portion of the capsule, with the stem channel.

6. As an article of manufacture, a capsule comprising a cylindrical body formed from a cup-like base portion and an inverted cup-like upper portion that is telescopically fitted within the base portion, said upper portion being closed at its top end, and provided with a tapered tip formed with a central inlet to the capsule, and said side walls of the upper portion having grooves longitudinally therein forming outlet channels leading from the base of the capsule and opening to the outside thereof above the top edge of the base portion.

7. A smoking pipe of the character described comprising a base portion formed with an upwardly opening cylindrical chamber and a stem having a channel leading into the upper end of the chamber, a bowl mounted on the base and having a mounting portion removably fitted within the upper end of the chamber to close the latter, said bowl having a channel leading therefrom centrally into the top of the chamber and formed with a conical seat at its lower end, and a capsule removably fitted within the chamber and comprising a cylindrical body formed from a cup-like base portion and an inverted cup-like upper end portion telescopically fitted within the base portion; said upper portion being closed at its top end by a upwardly rounded wall, said wall being provided centrally with a conically tapered tip forming an inlet that is fitted within the conical seat of the channel from the bowl in an air tight connection and said side walls of the upper portion having grooves therein forming outlet channels from the base of the capsule and opening to the outside thereof, above the top edge of the base portion into an annular space about the capsule which communicates with the stem channel.

8. A smoke treating capsule, comprising complementary upper and lower end portions telescopically fitted together; said upper member having an inlet in its end wall and there being a plurality of outlet passages between the side walls of the telescoped members leading from the lower end of the capsule and opening to the outside thereof at a substantial distance above the lower end.

Signed at Seattle, Washington this 30 day of July, 1929.

GEORGE E. BALDWIN. 125