

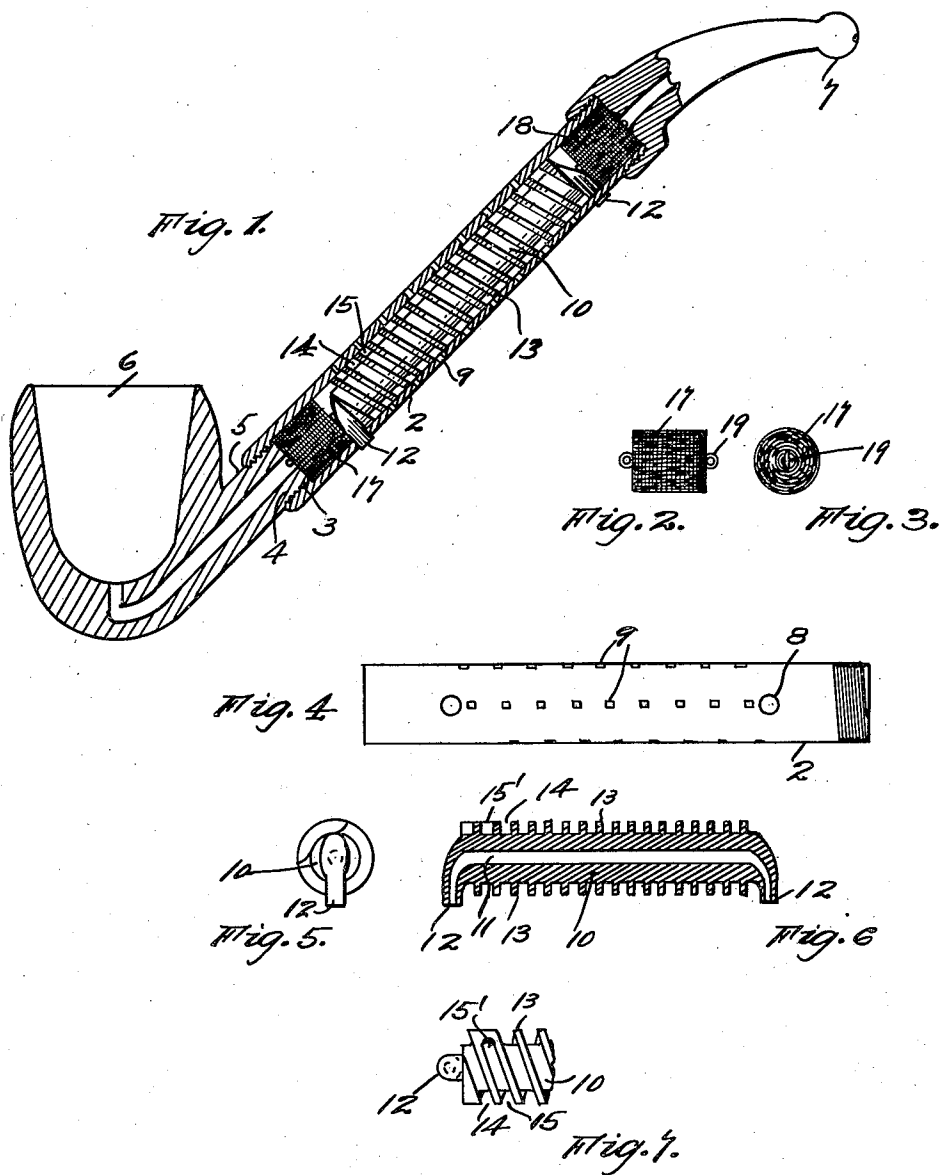
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THERMO AIR-COOLED PIPE STEM

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THERMO-AIR COOLED PIPE STEM

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This invention relates to tobacco pipe stems.

It is an object of the invention to provide a pipe of this class with means whereby to effectually strain the hot smoke coming from the bowl so as to practically eliminate the flow of produced liquids to the mouth of the smoker, and in this connection to provide for the easy and quick cleaning of the stem from time to time by provision of stem elements which may be readily separated for the extraction of an interposed screening medium. Further, an object is to provide a screening or straining medium of low cost so as to be inducive of frequent cleaning of the stem to keep it sweet and wholesome, and free from strong smoke which will have a biting effect on the tongue of the smoker. Additionally, a purpose is to provide a pipe stem structure which will act to preserve a "dry" pipe bowl thus eliminating the matting of soggy tobacco mass which is unburnable in the pipe and is a direct loss of so much tobacco, therefore an advantage of this provision is capacity to burn tobacco ordinarily wasted by reason of saturation; a corollary being a saving on the cost of consumed tobacco.

To further improve the stem and obtain a cooled stream of smoke to the smoker's mouth means are provided to cause a thermally induced flow of cooling air within the stem without the admixture of such air with the educted smoke.

The invention consists of certain advancements in this art as set forth in the ensuing disclosure and having, with the above; additional objects and advantages, and whose construction, combination and details of means, and manner of operation will be made manifest in the description of the herewith illustrative embodiment; it being understood that modifications, variations and adaptations may be resorted to within the scope, principle and spirit of the invention as herein claimed.

Figure 1 is an axial section of the pipe.

Figure 2 is a side elevation of a preferred form of straining pack, and

Figure 3 is an end view thereof.

Figure 4 is a side elevation of the jacket of the stem, partly in section.

Figure 5 is an end view of the core of the stem, and

Figure 6 is an axial section thereof.

Figure 7 is a plan of one end of the core to show the separate terminals of double-thread channels therein.

The stem comprises an exterior jacket or cylindrical sleeve 2 one end of which is screwed at 3 onto a contiguous connection 4 having a nipple 5 to the bowl 6 of the pipe. The opposite end of the sleeve, hereinafter called the jacket, is screwed into the socket of the mouth piece 7.

Snugly fitted in the jacket is a considerably shorter core 10 having an inner longitudinal passageway 11 continuing into down turned snouts 12 at the end of the core and which are of such length as to project into respective holes 8 made in the bottom of the jacket for such snouts. Therefore, cool air may pass freely into and from the core; this flow being accelerated by temperature changes in the smoke stream passing through the stem.

The core 10 is preferably made of some more or less readily deformable material, such as rubber which may be flexed under pressure of resistance acting on thread-like helices 13 provided along the exterior of the core and forming one channel 14 which is open to both ends of the core space in the jacket and another, blind channel 15 lying between the turns of the open-end channel 14 which serves as the duct along the core and inside of the overlying jacket wall for the eduction of smoke from the bowl 6 to the mouth piece 7.

Figure 7 shows at 15' the blind end of the channel 15 of one end of the core; it being understood that both of its ends are so blinded. The jacket 2 has a helical arrangement of small vent holes 9 which register with the blind channel 15 so that cooling air may surge in and out as to the channel 15 during use of the pipe.

It will be seen that the core is internally cooled by air passing into the interior passageway 11 via the snouts 12, and is additionally cooled by air action in the air channel 15 externally along the core. At the

same time the jacket 2 is prevented from becoming hot and the temperature of the smoke flowing to the mouth piece is kept pleasingly moderate.

- 5 Since no smoke passes into the internal passageway 11 this never becomes fouled or jammed and therefore needs no cleaning. The smoke is compelled to traverse the accessible channel 14 between the helices 13 and
10 can therefore be easily cleaned when the stem parts are disassembled for such purpose, as is obviously desirable in order to maintain a sweet pipe.

As above stated the core 10 is much shorter
15 than the jacket 2 and thus provides a space at each end for the introduction of means which have the function of straining the passing smoke; first, near the bowl nipple and later as it passes to the mouth piece. Such
20 means comprises a lower pack of fibrous material 17 and a similar upper pack 18; which latter has the further purpose of forming a dam to catch saliva which may seep from the mouth piece. While any convenient mass of
25 fibrous material may be utilized as packs in the jacket, preferably each pack consists of a body of such material mounted on a piece of wire 19 whose ends are exposed so as to be easily grasped to enable removal without soiling the fingers of anyone cleaning
30 the pipe.

The helices are sufficiently thin as to give a little as the core is pushed into the stem jacket and will therefore make a tight seal
35 therewith when in place to prevent leak of smoke into the adjacent air channel 15, and vice versa.

What is claimed is:

1. A stem, for a tobacco pipe, including an
40 outer jacket and an inner core removable therefrom and having an exterior air channel; the jacket having a system of apertures opening to the said channel.

2. A pipe stem including a jacket, and a removable core in the jacket having end snouts leading to a longitudinal passageway in the core; said jacket having holes for said snouts to open through for air flow in the passageway.

3. A pipe stem including a jacket attachable at its ends to a bowl and to a mouth piece, a removable core in the jacket forming a smoke channel therein, and straining media at each end of the core to catch liquid substance.
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4. A tobacco pipe stem including a jacket, and a core having a double system of helices whose ridges fit snugly in the jacket and which form an open-ended smoke channel
60 along the core and a blind-end channel between the turns of the smoke channel the jacket having air inlets to the blind channel.

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