April 5, 1938. L. L. MARTIN 2,113,181

TOBACCO PIPE

Filed May 21, 1936

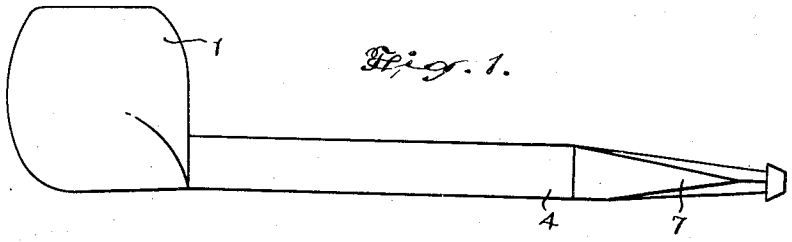


Fig. 1.

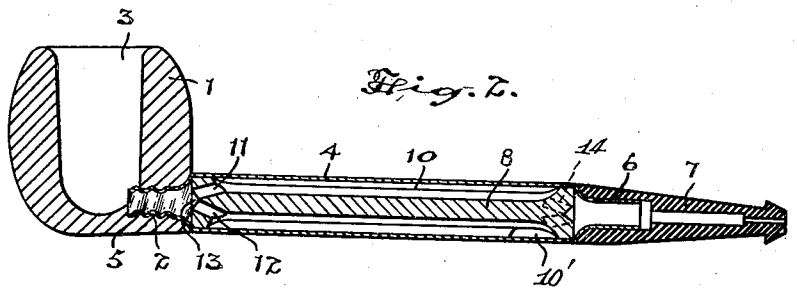


Fig. 2.

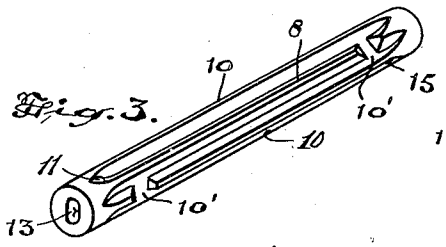


Fig. 3.

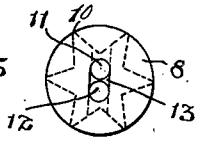


Fig. 5.

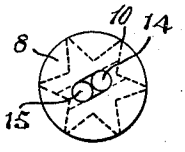


Fig. 6.

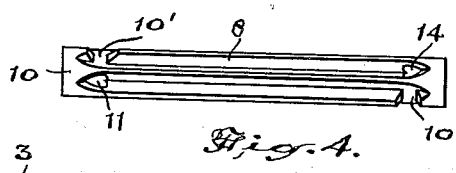


Fig. 4.

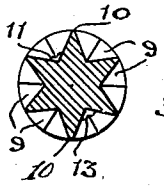


Fig. 7.

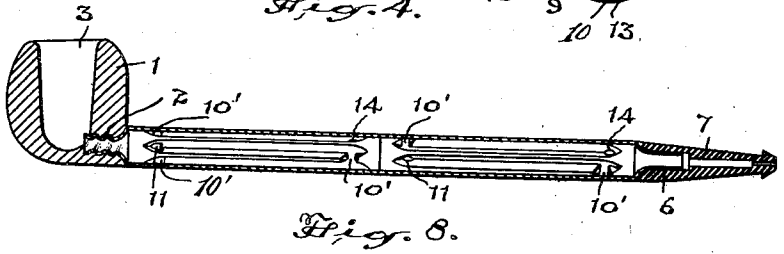


Fig. 8.

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TOBACCO PIPE

Louis L. Martin, Toronto, Ontario, Canada

Application May 21, 1936, Serial No. 80,934
In Canada June 6, 1935

4 Claims. (Cl. 131—12)

The principal objects of this invention are to eliminate many of the disagreeable features incident to pipe smoking and to provide a pipe which will effectively cleanse and cool the smoke before it reaches the mouth of the smoker, and further, to eliminate the disagreeable feature known as "gurgling" due to condensation of moisture in the smoke passage.

A further and important object is to materially reduce the cost of manufacture of the bowl of the pipe through the elimination of the integral stem.

The principal features of the invention consist in the novel construction of a metal tube with the reduced end adapted to be secured in the orifice in the bowl and with the opposite end reduced to receive a bit or mouthpiece, the intermediate tubular portion containing a core formed with a plurality of longitudinal passageways interconnected to form a plurality of smoke ducts of elongated circuitous form.

In the accompanying drawing, Figure 1 is an elevational view of a pipe constructed in accordance with this invention.

Figure 2 is a longitudinal vertical mid-section of the pipe shown in Figure 1.

Figure 3 is a perspective detail of the grooved core enclosed within the metal pipe stem.

Figure 4 is a plan view of the core shown in Figure 3 illustrating the arrangement of end openings to the circuitous passages.

Figure 5 is an enlarged view of one end of the core shown in Figure 3.

Figure 6 is an enlarged view of the opposite end of the core shown in Figure 3.

Figure 7 is an enlarged cross section through the core shown in Figure 4.

Figure 8 is a longitudinal sectional view on a smaller scale of a pipe with an elongated stem.

Many different forms of tobacco pipes have been devised to provide an elongated smoke passage for the purpose of cooling the smoke, but most of these are of a very complicated form and are not conducive to production at the low cost of pipe that is demanded at the present time.

According to the present invention the bowl 1 is turned from a solid block of material without a stem which of course effects a very material saving in the initial cost and the blanks from which the bowls are cut may be cut much more economically.

The exterior of the bowl is shaped to any desired configuration and a hole 2 is bored therein to extend into the bowl orifice 3. The walls of the hole 2 are threaded to receive a rolled threaded tube.

The stem 4 of the pipe is formed of a length of metal tubing swaged inwardly at the ends, the end 5 being provided with a large roll thread to fit the thread in the hole 2 of the bowl.

The opposite end 6 of the tubular stem 4 is reduced to fit into the counter-bored end of the mouthpiece 7.

Enclosed within the tube 4 is a core 8 preferably formed of wood and of a cylindrical size to fit snugly within the inner wall of the enlarged central portion of the stem 4. This core is grooved longitudinally with a plurality of V-shaped grooves 9, but these grooves do not extend to the end of the core. In the form shown there are six grooves. An opposing pair of the intervening ribs 10 are unbroken from end to end and the two intervening ribs are provided with notches 10' at opposite ends.

A pair of holes 11 and 12 are bored diagonally from the bottom of the V-grooves 9 and at opposite sides of the unbroken longitudinal ribs and open through the end of the core in a common orifice 13 which communicates with the threaded stem end which threads into the bowl of the pipe.

At the opposite end of the core a pair of holes 14 and 15 are arranged in an offset diagonal relation to the holes 11 and 12. This arrangement is particularly shown in Figures 4 and 7 and also in Figures 5 and 6, but on reference to Figure 4 it will be seen that the hole 11 opening through the bowl end of the core is arranged on one side of the unbroken rib 10 and the hole 14 at the opposite end of the core is on the opposite side of this rib. The smoke entering the V-groove in the core through the hole 11 passes throughout the length of the core to a notch 10', then flows back toward the bowl end and through the next adjacent notch and then back to the stem end from whence it passes out through the hole 15. Likewise the smoke entering the hole 12 at the bowl end passes to the front end of the core through a notch, back to the bowl end, and through another notch and back to the stem end, passing out through the hole 14.

There are therefore two circuitous passages extending the length of the stem, and when suction is applied by the smoker the air draws equally through both the circuitous passages. In the event of moisture accumulating inside the stem from over-moist tobacco or moisture-laden air and forming a drop of moisture within the lower-

most passage, as naturally the moisture will run to the lower passage, the other passage will be clear. Consequently the pressure of air from the bowl side will find egress through the free passage and will not try to force past the impeding moisture drop, which in the ordinary pipe with a single passage, causes "gurgling".

It will be understood that the smoke-laden air passing through the back-and-forth longitudinal passages in close association with the heat-absorbing metal stem, said stem readily absorbs the heat and cools the smoke, and the heat readily radiates from the metal surface to the surrounding air.

The core is encased within a seamless tube, which as previously stated, is swaged down to the desired diameter of tube to enter the threaded hole in the bowl, and at the other end is swaged down to fit into the opening in the mouthpiece. The double passage through the core leads from a single opening from the bowl to the single opening in the mouthpiece. Any objectionable matter condensing in the threaded end of the tube may be removed by blowing on the mouthpiece end or even by washing if desired.

A pipe such as described is extremely desirable from the smoker's standpoint as it always remains clean and is free from the numerous objections found in the ordinary type of pipe.

It is also of a very simple construction and therefore may be obtained at a moderate cost.

Where an extra cool smoke is desired the stem may be replaced by a special stem made in extra long lengths such as shown in Figure 8. In this form the tubular stem is long enough to incorporate a pair of the wooden cores. These are the same as standard and the stem is simply long enough to hold the two cores, the smoke passing from one core to the other through the holes in the ends.

It will be understood that pipe stems may be made to contain one, two or more of the cores described. A very light soft wood is used and the tube comprising the stem is a thin gauge aluminum, so that even when an extra long length of stem is provided the pipe is not over heavy. The dispensing with the stem portion of the bowl materially affects this condition.

It is found that pipe smokers can enjoy the smoking of this pipe for exceedingly long periods without burning the tongue and without ever having the disagreeable experience of having ashes, moisture or nicotine condensate pass through the stem to the tongue.

It will be understood that the stem unit can be used with various pipe bowls or with cigar or cigarette holders.

What I claim as my invention is:—

1. A tobacco pipe having a stemless bowl provided with a threaded orifice leading to the interior thereof, a tubular stem having one end thereof swedged inwardly to a reduced size and threaded to fit into said threaded orifice of the bowl and having its other end swedged inwardly to a reduced size to fit into a mouthpiece, a core having a plurality of longitudinal grooves in the periphery separated by dividing walls, said walls having inter-connecting notches to form longitudinal circuitous passages, holes extending from a plurality of said circuitous passages to one end of the core, and holes extending from the opposite end of said plurality of circuitous passages through the opposite end of the core providing separated smoke passages joined at opposite ends of the core.

2. A tobacco pipe comprising a bowl, a tubular stem having a reduced end adapted to be secured in said bowl and having a reduced end inserted into a mouthpiece, and a core sealed between the reduced ends of said stem having a plurality of parallel longitudinal grooves arranged in its periphery, said grooves being connected by cross notches at opposite ends in groups of odd number to form a plurality of passages extending from the bowl end to the stem end, back to the bowl and then back to the stem end, each group of grooves having a hole connected with the bowl and a hole connected with the stem end, said groups providing a plurality of separate circuitous smoke passages.

3. A tobacco pipe comprising a bowl having a threaded orifice, a thin metal tube having one end reduced and threaded to fit said bowl orifice, a plurality of cores arranged in series in said tube in end to end relation each having a plurality of longitudinal circuitous passages communicating with the passages of the adjacent core through the ends, and a mouthpiece secured to the outer end of the tube.

4. A stem for cooling smoke in passage therethrough, and core means co-operating with said stem to provide a plurality of back and forth separate circuitous passages each of which is of greater length than said core means and each of which is normally open to the passage of smoke whereby when one of said circuitous passages becomes blocked with condensation or a particle of tobacco, the remaining circuitous passage or passages will continue to direct the smoke in a circuitous path or paths within said stem.

LOUIS L. MARTIN.