

N. B. STONE.  
TOBACCO PIPE.  
APPLICATION FILED MAY 5, 1904.

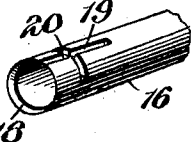
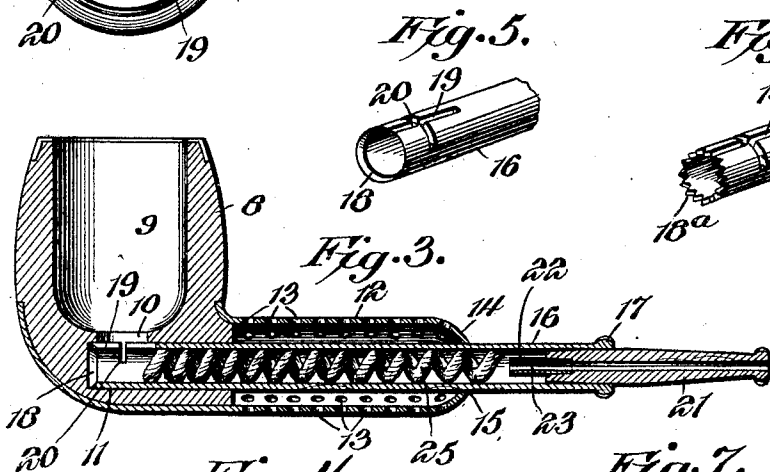
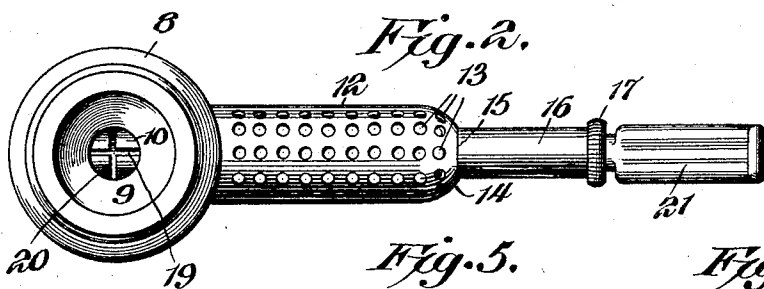
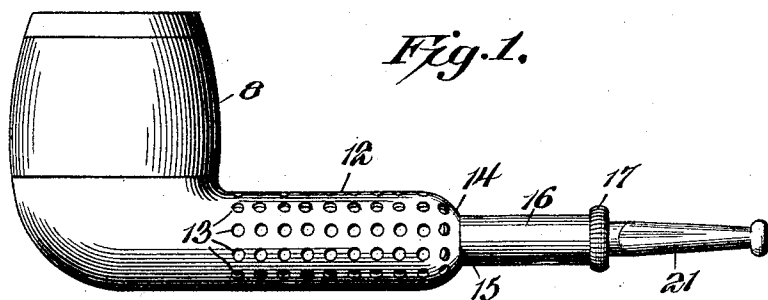


Fig. 6.

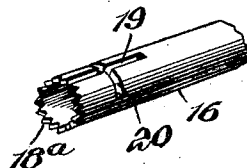


Fig. 4.

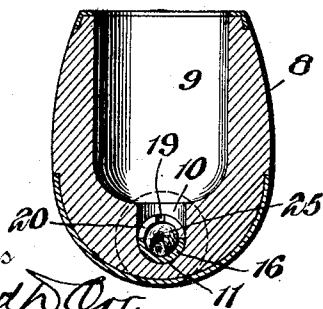


Fig. 7.



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# UNITED STATES PATENT OFFICE.

NATHANIEL B. STONE, OF OUTLOOK, WASHINGTON.

## TOBACCO-PIPE.

No. 796,613.

Specification of Letters Patent.

Patented Aug. 8, 1905.

Application filed May 5, 1904. Serial No. 206,560.

*To all whom it may concern:*

Be it known that I, NATHANIEL B. STONE, a citizen of the United States, residing at Outlook, in the county of Yakima and State of Washington, have invented a new and useful Tobacco-Pipe, of which the following is a specification.

This invention relates to improvements in pipes employed for smoking.

One of the objects is to provide a pipe of this character wherein the smoke is relieved of its impurities, such as nicotin and the like, and is properly cooled prior to its passage into the mouth of the smoker.

Another object is to provide a pipe that can be readily and completely dismembered, so that access can be gained to all the elements thereof, and said elements are so constructed and arranged that they may be thoroughly cleansed and, if necessary, replaced by new ones at small cost.

The preferred form of construction is illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevation of the pipe. Fig. 2 is a top plan view of the same. Fig. 3 is a longitudinal sectional view. Fig. 4 is a vertical cross-sectional view through the bowl. Fig. 5 is a detail perspective view of the inner end of the tube. Fig. 6 is a similar view of a slightly-modified form of construction. Fig. 7 is a detail sectional view, on an enlarged scale, of the absorbent spiral preferably employed.

Similar reference-numerals indicate corresponding parts in all the figures of the drawings.

In the embodiment illustrated a bowl 8 is employed, which can be constructed of any material desired and may be a composition. This bowl is provided with a tobacco-receiving chamber 9, having a reduced opening 10 in its bottom, that communicates with a horizontally-disposed bore 11. Secured to the bowl in any manner desired is a neck, preferably formed of sheet metal and comprising a shell 12, having perforations 13 and a contracted outer end 14, provided with an opening 15 therethrough, that is alined with and of substantially the same diameter as the bore 11, the diameter of the interior of said shell being greater than that of the bore 11 and opening 15. A smoke-conducting tube 16 is detachably fitted in the shell 12 in

spaced relation to the perforated wall thereof, said tube snugly fitting in the opening 15 and projecting beyond the end 14. This outer end is provided with a knurled head 17, while its inner portion is adapted to detachably fit snugly in the bore 11, the inner end thereof being sharpened to provide a cutting edge 18. The cutting edge may, as shown in Fig. 5, be beveled outwardly, or it may be serrated, as shown at 18<sup>a</sup> in Fig. 6, to form cutting-teeth. The upper side wall of the tube has an opening therethrough which constitutes the means of communication between the interior of the tube and the lower portion of the chamber 9. In the present instance this opening is in the form of crossed slots 19 and 20, the slot 19 extending longitudinally into the tube from the end thereof, the other slot 20 being disposed at substantially right angles to the slot 19, and therefore being located transversely of the tube.

The outer end of the tube 16 receives the inner end of a mouthpiece 21, preferably flattened, as shown at Fig. 2, so as to provide a bearing-surface not only for the lips, but for the fingers, so that said mouthpiece can be turned in the tube. The inner end of the mouthpiece 21 is provided with an inwardly-projecting stem 22 of less diameter than the tube 16 and having a smoke passage-way 23 therethrough, which passage-way also extends through the mouthpiece, as illustrated in Fig. 3. The stem is thus spaced from the tube 16, and the moisture which may be collected in said tube will therefore not pass into the stem.

Another important feature of this pipe is an absorbent wick, detachably fitted within the tube, said wick being in the form of a spiral. It is in the present instance formed of a wire 24, covered with absorbent material, such as cotton 25, the whirls of said spiral being spaced apart and fitting snugly within the tube. The result is a tortuous passage-way within the tube, through which the smoke must pass.

It is believed that the operation of this pipe will be clearly apparent. Smoke drawn from the bowl to the mouthpiece will pass through the crossed slots and thence longitudinally through the tube. Here it will follow the tortuous passage-way formed by the absorbent wick, and a comparatively great surface of the latter being thus exposed nicotin and other impurities will be absorbed.

At the same time the tube being exposed to the air, which can circulate freely through the shell, is kept in cooled condition, and the smoke must traverse the same, being thrown against the walls of said tube by the spiral passage-way. Consequently by the time the smoke reaches the mouthpiece it is thoroughly cooled. It will be evident that the pipe can be readily cleaned, for the mouthpiece and tube can be removed, after which the absorbent wick can be taken out. Thus a straight open-ended tube is secured through which a comparatively large cleaning device of any character can be passed. For instance, an ordinary pencil carried by the majority of smokers can be passed freely through the tube, removing all sediment therefrom. The slots are particularly advantageous, and these are cleaned merely by wiping the outside of the tube. The cutting edges are useful when the tube is reinserted into the bowl. If a collection of any sort should take place within the bore 11 after the tube has been removed, said tube will cut its way therethrough when returned to place, and thus can always be properly positioned. The absorbent wick can be manufactured very inexpensively, and therefore when saturated may be replaced by new ones without material cost.

The exterior configuration of the pipe is substantially the same as that ordinarily employed, notwithstanding the improvements in the structure, and this I consider a comparatively important feature.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. In a pipe, the combination with a bowl having a chamber provided with a bottom opening and a bore located beneath the chamber intersecting the bottom opening thereof and extending beyond the same, of an open-ended tube detachably fitted in the bore and having its inner end abutted against and close to the wall of the bowl, said tube having a longitudinally-disposed slot extending into the same from its inner end and alined with the bottom opening, said slot constituting the means of communication between the bowl and tube and having its inner end covered.

2. In a pipe, the combination with a bowl having a chamber, of an open-ended tube de-

tachably fitted into the lower portion of the bowl, said tube having a lateral opening constituting means of communication between said chamber and the interior of the tube and furthermore having its inner end edge serrated to provide an annular series of cutting-teeth that project longitudinally of the tube.

3. In a pipe, the combination with a bowl having a chamber, a bore located beneath the chamber, and an offset stem comprising a shell having a reduced outer end, of a tube detachably arranged in the shell and of less diameter than the same, said tube having its inner end fitting in the bore of the bowl and its outer end projecting beyond the free end of the stem-shell and supported by said shell, and a mouthpiece detachably fitted in the outer projecting end of the tube.

4. In a pipe, the combination with a bowl having a chamber and a bore extending beneath the chamber, of an open-ended tube detachably fitted in the bore and having a cutting edge at its inner end that is adapted to abut against the inner end wall of the bore, said wall closing the inner end of the tube and said tube having, in its upper wall, crossed slots that constitute the means of communication between the interior of the tube and the lower portion of the chamber, one of said slots extending into the tube from its cutting edge.

5. In a pipe, the combination with a bowl having a chamber, a bore communicating with the chamber, and an offset stem comprising a perforated shell, of a tube detachably arranged in the shell and of less diameter than the same, said tube having an opening in its side wall that communicates with the bowl-chamber and furthermore having its outer end projecting beyond the free end of the stem-shell, and a mouthpiece having a tapering end that detachably fits in the projecting end of the tube.

6. In a pipe, the combination with a bowl provided with an offset neck comprising a perforated shell, said bowl having a reduced bore extending from the inner end of the shell and communicating with the lower portion of the interior of the bowl and said shell having a reduced opening in its outer end, of a tube having its inner end fitted in the bore of the bowl and provided with a lateral opening constituting the means of communication between the interior of the bowl and the interior of the tube, said tube also fitting snugly in the outer reduced opening of the shell and having the portion that is located within said shell spaced from the perforated walls thereof.

7. In a pipe, the combination with a bowl having an offset perforated shell, of an open-ended tube detachably fitted in the shell and extending beneath the chamber of the bowl, said tube having crossed slots in its upper

wall that constitute means of communication between the interior thereof and the chamber of the bowl, a mouthpiece detachably fitted in the outer end of the tube, said tube extending through the shell in spaced relation to the spaced walls thereof, and a spiral absorbent wick detachably fitted in the tube.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

NATHANIEL B. STONE.

Witnesses:

JOHN H. SIGGERS,  
B. G. FOSTER.