

S. G. PENNEY.
 SANITARY TOBACCO PIPE.
 APPLICATION FILED JULY 25, 1910.

1,005,067.

Patented Oct. 3, 1911.

FIG. 1

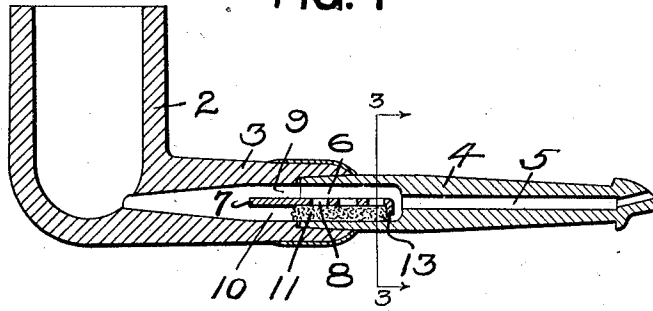


FIG. 2

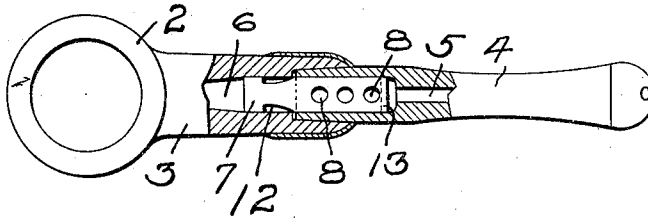


FIG. 3

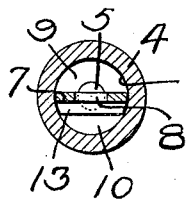


FIG. 4

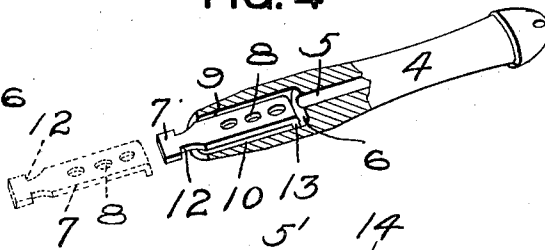


FIG. 5

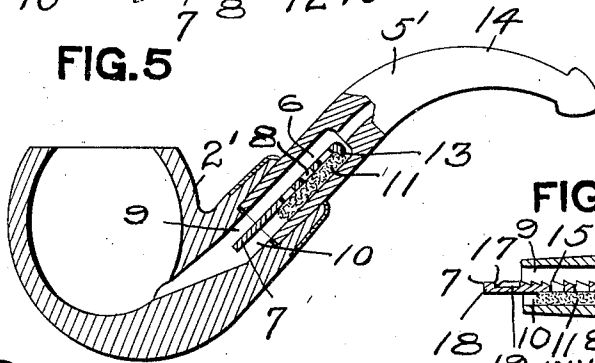
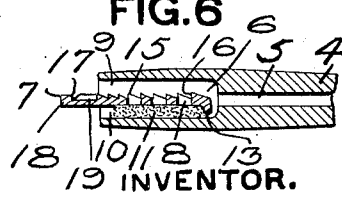


FIG. 6



WITNESSES.

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SAMUEL G. PENNEY, OF PITTSBURGH, PENNSYLVANIA.

SANITARY TOBACCO-PIPE.

1,005,067.

Specification of Letters Patent.

Patented Oct. 3, 1911.

Application filed July 25, 1910. Serial No. 573,810.

To all whom it may concern:

Be it known that I, SAMUEL G. PENNEY, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Sanitary Tobacco-Pipes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form part of this specification.

This invention relates to tobacco pipes and its primary object is the provision in a pipe construction of means for the effectual collection of the nicotinic and other injurious condensations formed in the pipe by burning of the tobacco; the absorption of the saliva passing from the mouth of the smoker into the stem; and the modification of the strength of strong tobacco. I also aim to provide a construction in which these collected injurious liquids may be readily and conveniently removed, as will be hereinafter more fully set forth.

I will now describe my invention, referring to the accompanying drawings, so that others skilled in the art to which it appertains may understand and construct the same.

Figure 1 is a longitudinal sectional view of a tobacco pipe embodying my invention; Fig. 2 is a top plan view, partly broken away, of the same; Fig. 3 is a transverse section on the line 3—3 of Fig. 1; Fig. 4 is a perspective view of the pipe stem, partly in section, showing my invention as applied thereto; Fig. 5 is a longitudinal sectional view of a modified form of pipe, embodying my invention; and Fig. 6 is a similar view showing modified form of diaphragm.

In the drawings, the reference numerals 2, 3 and 4, indicate respectively the bowl, stem-nipple, and stem of a tobacco smoking pipe of ordinary construction, the stem in this instance being smooth-fitted to the nipple 3. The smoke passage-way or bore 5 of the stem and nipple, communicating with the bowl 2, is usually intermediately chambered or extended as indicated by the numeral 6, and within this chamber 6 I longitudinally fit the diaphragm 7 which is provided preferably with the perforations 8. This diaphragm divides the chamber 6 into substantially two secondary chambers 9 and 10, and preferably within the lower one, 10, I place the cotton or other suitable absorbent material 11, which serves to collect the noxious

moist vapors from the smoke. This absorptive collection is effected as the smoke passes over the perforated diaphragm 7, by means of the perforations in the diaphragm in its passage through the unobstructed passage 9, and as it filters through the lower chamber 10. It will also be apparent that the condensation precipitated from the vapors and which flow to the bottom of the passage-way 5, will also be taken up by the material 11 by reason of its disposition in the lower chamber 10. And this is also the case when the saliva flows from the mouth of the smoker, within the stem; the saliva is readily absorbed by the material 11 and thereby prevented from reaching the bowl of the pipe and there form noxious vapors.

The diaphragm 7 is preferably removably mounted within and capable of being removed intact with the stem 4, and of such length as to extend beyond the inner end of the stem a distance sufficient to enable a purchase being had thereon by the finger of the operator for desired withdrawal from and insertion in the chamber 6; the diaphragm being preferably smooth-fitted to the chamber 6 so as to permit of direct withdrawal and insertion longitudinally of the stem as indicated by dotted line in Fig. 4. This purchase or grip may be rendered more effectual by oppositely notching the side edges of the extended portion, as at 12. The inner end of the diaphragm 7 is also preferably provided with the downwardly projecting shoulder 13 which serves to eject the material 11 from the chamber 6 as the diaphragm is withdrawn, thereby enabling ready cleaning of the chamber without the necessity of the operator bringing his fingers in contact with the soiled material 11. After the pipe has been cleaned the diaphragm is returned to the chamber 6 and fresh absorbent material inserted or tucked within the chamber 10 from the end of the stem 5.

The diaphragm 7 is preferably made of hard rubber, amber, or other suitable non-corrosive material. If desired, aluminum may be employed for that purpose.

If desired, the diaphragm 7 may be provided, as shown in Fig. 6, with the irregular upper face 15, which serves to baffle the smoke, drawn through the chamber 9, in such a manner as to bring it in intimate contact, through the perforations 8, with the absorbent material 11. Moreover this

interrupted upper surface 15 prevents such liquid as would gather on this upper face from the chamber 9, from flowing into the passage 5 toward the mouthpiece; the shoulders 16, forming the irregular surface, being so disposed as to direct such liquid into the perforations 8. In Fig. 6 I also show the diaphragm 7 as being provided with the upper transverse notch or recess 17 in lieu of the side notches 12 spoken of above. This latter diaphragm (the construction shown in Fig. 6) is preferably a little thicker than that shown in the preceding views so as to provide for such notching of the upper face as shall produce shoulders 16 of effective depth, and in order to prevent restriction of the chamber 9 by the forward end 18 of this thickened diaphragm I provide the longitudinal channel or recess 19 as shown in this Fig. 6 which leads from the notch 17 to the notched-perforated diaphragm face within the chamber 9.

In Fig. 5 I show my invention as applied to a pipe 2', the stem 5' of which has the curved bit or mouthpiece 14. The diaphragm 7 and chamber 6 correspond to those above described. And it will be apparent, without necessity for further specific illustration, that my invention is applicable to other forms of pipes, cigar holders, and the like, and that various changes may be made in the construction shown without departing from my invention, and I do not therefore desire to limit my invention to the particular application and construction shown and described.

The advantage of my invention will be appreciated by those skilled in the art.

The device is strong and simple in construction and inexpensive to manufacture;

it may be readily applied to an ordinary pipe; and lends itself to facility and convenience in cleaning.

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

1. In a device of the character described, the combination of a stem-like portion having a large bore, of a diaphragm carried by and longitudinally dividing the bore into a plurality of chambers, the diaphragm having a plurality of perforations, and absorbent material carried by one of the chambers, and the stem being provided with a longitudinal bore leading from both of the chambers.

2. In a device of the character described, the combination of a stem-like portion longitudinally bored, of a perforated diaphragm carried by and longitudinally dividing the bore into a plurality of chambers and having a shouldered portion lying within one of the chambers, and absorbent material carried by the chamber receiving the shoulder portion.

3. In a device of the character described, the combination of a stem-like portion longitudinally bored, of a perforated diaphragm carried by and longitudinally dividing the bore into a plurality of chambers, and absorbent material carried by a chamber; the diaphragm having one of its longitudinal faces transversely interrupted at intervals.

In testimony whereof, I have hereunto set my hand.

SAML. G. PENNEY.

Witnesses:

M. ARTHUR KELLER,

M. A. BARTH.