

April 9, 1935.

J. B. CULLEN

1,996,990

SMOKER'S SANITARY APPLIANCE

Filed Oct. 19, 1933

2 Sheets-Sheet 1



Fig. 2.

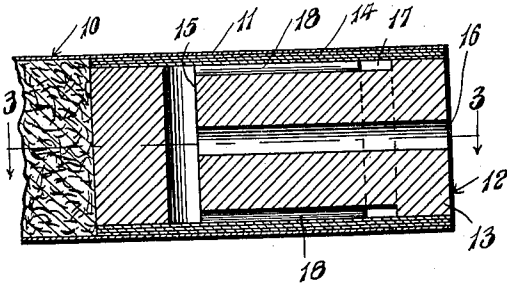


Fig. 3.

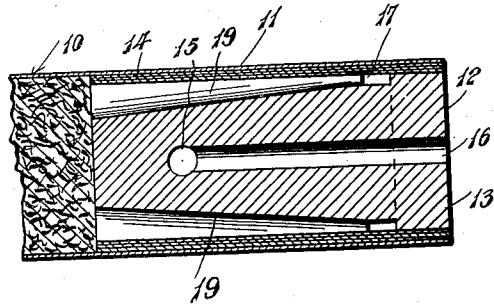


Fig. 4.

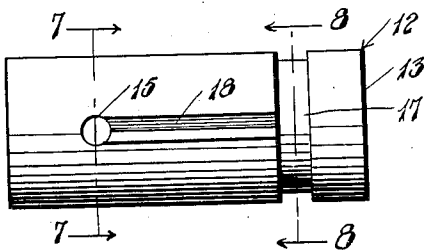


Fig. 6.

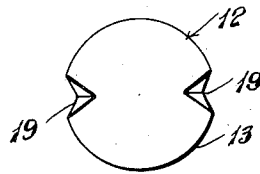


Fig. 5.

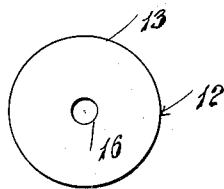


Fig. 8.

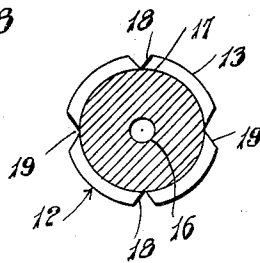
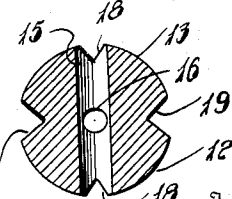


Fig. 7.



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Fig. 9.

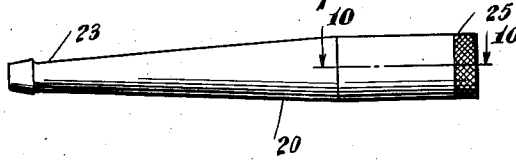


Fig. 10.

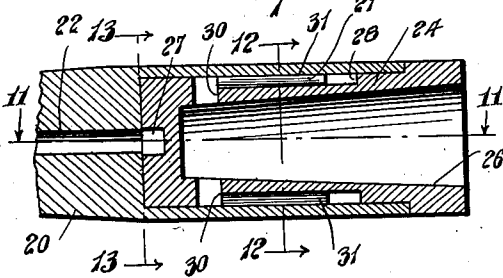


Fig. 11.

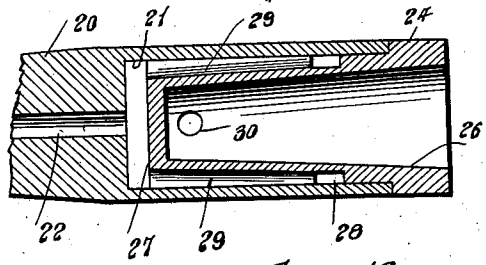


Fig. 12.

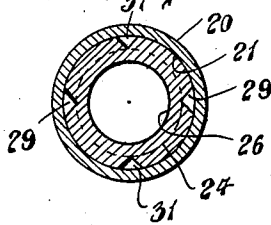


Fig. 13.

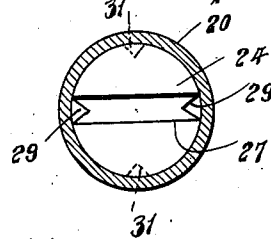


Fig. 14.

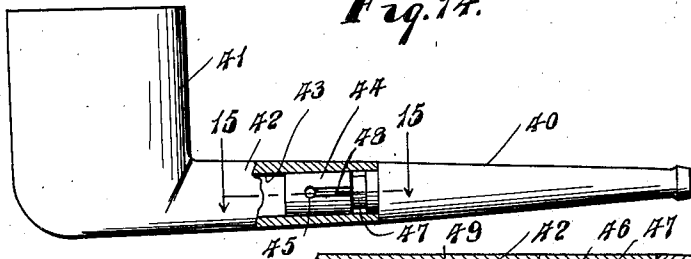


Fig. 15.

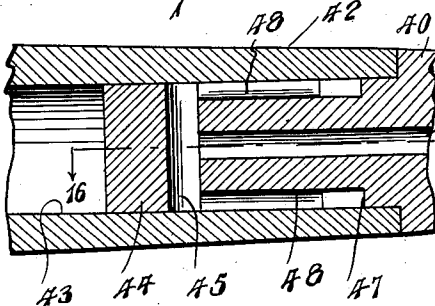
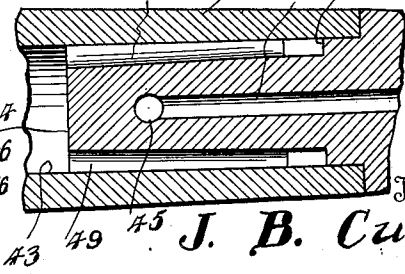


Fig. 16.



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UNITED STATES PATENT OFFICE

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SMOKER'S SANITARY APPLIANCE

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Application October 19, 1933, Serial No. 694,303

3 Claims. (Cl. 131-52)

The invention relates to sanitary smoking appliances for pipes, cigar and cigarette holders and cigarettes, and has for its object the provision of means attached to the mouthpiece of the smoking appliance, whereby the smoke is directed through a tortuous path, before emerging from the mouthpiece so as to cool the smoke before reaching the mouth of the smoker, and to also retard and to a large extent retain moisture carried by the smoke, thus making the result of the use of the pipe or cigar or cigarette holder or cigarette pleasing for the user as well as more sanitary.

The invention will be described in detail hereinafter and will be found illustrated in the accompanying drawings, in which

Figure 1 is a side view in elevation of a cigarette showing in broken lines the position of the plug or insert,

Figure 2 is a longitudinal sectional view, on an enlarged scale, on a plane indicated by the line 2-2 of Figure 1,

Figure 3 is a longitudinal sectional view on a plane indicated by the line 3-3 of Figure 2,

Figure 4 is a side view in elevation of the plug,

Figure 5 is an outer end view,

Figure 6 is an inner end view,

Figures 7 and 8 are transverse sectional views on planes indicated by the lines 7-7, and 8-8, respectively, of Figure 4,

Figure 9 is a cigarette or cigar holder made in accordance with the invention,

Figure 10 is a fragmentary longitudinal sectional view of the cigar or cigarette holder, taken on a plane indicated by the line 10-10 of Figure 9,

Figure 11 is a similar view taken on a plane indicated by the line 11-11 of Figure 10,

Figures 12 and 13 are transverse sectional views on planes indicated by the lines 12-12 and 13-13, respectively, of Figure 10.

Figure 14 is a side view of a pipe partly broken away and in section to disclose the improvement applied thereto,

Figure 15 is a fragmentary longitudinal sectional view on a plane indicated by the line 15-15 of Figure 14, and

Figure 16 is a longitudinal sectional view on a plane indicated by the line 16-16 of Figure 15.

In the drawings similar reference characters are used to designate corresponding parts in all of the views.

In Figures 1 to 8, inclusive, the improvement is shown applied to and consists of a plug that may be made of any suitable cheap material, such

for instance as wood, or other fibrous substance, and is adapted to be rolled in the cigarette wrapper simultaneously with rolling the tobacco thereon, it being intended that the plug shall be sold with each individual cigarette and to be so reasonable in cost of production that it may be thrown away after the cigarette has been smoked.

In the drawings, Figures 1 to 8, inclusive, a cigarette is designated at 10, and has enclosed within the wrapper 11 thereof at one of its ends, an insert 12 that comprises a plug 13 of wood or other cheap material, preferably of a fibrous nature, that is enclosed within a wrapper 14 of sheet fibrous material, such for instance as paper, said wrapper being adapted to reinforce the wrapper 11 of the cigarette surrounding the plug 13 and prevents moisture of the lips from wetting the wrapper 11 and collapsing into the grooves in the surface of the plug 13 and prevent satisfactory operation of the insert in smoking the cigarette.

Plug 13 is provided with a transverse opening 15 that is preferably arranged diametrically of the plug, as shown best in Figures 2 and 7, and a longitudinal opening 16 extending from the transverse opening 15 to the outer end of the plug and of the cigarette.

In order to provide means whereby the smoke from the burning tobacco before entering the transverse opening 15 for passage into the longitudinal opening 16, shall travel through a tortuous path, the plug 13 is provided with a circumferential groove 17 that is adjacent to the outer end of the plug, and longitudinal grooves 18 connecting the circumferential groove 17 with the transverse opening 15, and other longitudinal grooves 19 connecting the circumferential groove 17 with the inner end of the plug 13.

As heretofore explained, the plug 13 is enclosed within the wrapping of sheet fibrous material, such for instance as paper, that is preferably of a type that is resistant to moisture, so as to prevent the grooves 17, 18, and 19 from being clogged by the cigarette wrapper 11 that is usually made of moisture pervious material and is liable to be moistened by the lips when smoking the cigarette.

In operation, it will be apparent that the smoke is drawn through the grooves 19 to the circumferential groove 17 around which it passes to the grooves 18 and thence into the transverse opening 15 and finally through the opening 16. This tortuous path that is described by the smoke cools the smoke and also at the same time relieves it of considerable of the moisture carried thereby

so that the smoke when it reaches the mouth of the smoker is substantially cool and dry, thus making the use of the insert conducive to a more pleasurable use of cigarettes as well as making the use of cigarettes more healthful or sanitary.

In Figures 9 to 13, inclusive, another form of the improvement is shown applied to a cigar or cigarette holder, in which the cigarette holder 20 is provided with an orifice 21 communicating with the longitudinal orifice 22 that extends through the bit 23 in the holder. The recess 21 is provided to receive a plug or insert 24 but has its outer end 25 knurled or milled to enable separation of the plug or insert from the holder, the holder being provided with a recess 26 to receive the cigar or cigarette to be smoked.

The inner end of the plug 24 is provided with a transverse groove 27 communicating with the longitudinal orifice 22, and intermediate of the plug or insert 24 a circumferential groove is provided in the outer surface of the plug, designated 28. 29 designates longitudinal grooves that are preferably V-shaped connecting the circumferential groove 28 with the transverse groove 27. At right angles to the groove 27 are provided openings 30 to the plug from its outer surface to the recess 26, said openings being located adjacent to the inner end of said recess, and connecting said opening with the circumferential groove 28 are V-shaped grooves 31.

It will be apparent that in using the cigarette holder for smoking a cigar or cigarette, the smoke will be drawn through the openings 30, along the grooves 31, into the circumferential groove 28, from whence it will pass to the longitudinal grooves 29, to the transverse opening 27, and then through the longitudinal orifice 22 to the smoker's mouth, this tortuous passage of the smoke serving to cool it, and to also arrest moisture and to a large extent retain it so that the smoke when it emerges from the end of the bit 23 is substantially dry and cool. It will be apparent that the plug or insert 24 may be removed if desired for cleansing and replacement in the holder.

In Figures 14, 15 and 16 is disclosed another form of the sanitary smoking appliance applied to the stem or bit 40 of a pipe, 41 designating the bowl, and 42 the stem of the pipe having an orifice 43 communicating with the bowl. The plug 44 may be constructed, as shown in the drawings, integral with the bit 40, or it may be separable therefrom in any suitable manner. The plug 44 by engaging in the orifice 43, serves to hold the bit connected with the stem of the pipe.

Plug 44 is provided with a transverse opening 45 that communicates with the orifice 43 through the bit 40, and between the bit 40 and the transverse opening 45 the plug is provided with a circumferential recess 47. 48 designates longitudinal grooves connecting the transverse opening 45 and the circumferential groove 47, and 49 designates longitudinal grooves connecting the circumferential grooves 47 and the inner end of the plug, and the orifice 43 in the stem 42.

In using the pipe as shown and described, the smoke is drawn through the grooves 49 into the circumferential grooves 47, and from thence it passes through the grooves 48 into the transverse opening 45 and thence to the orifice 46. This tortuous path through which the smoke is compelled to travel has the same effect as in the other form to cool and dry the smoke.

What is claimed is:—

1. A mouthpiece insert for cigarettes, comprising a plug contained within the wrapper of a cigarette, said plug being provided with a transverse opening therethrough, a longitudinal opening connecting the transverse opening and the outer end of the plug, and the plug being provided with a circumferential groove adjacent to its outer end, and longitudinal grooves communicating with the circumferential groove, some of said grooves communicating with the transverse opening and others with the inner end of the plug.

2. A mouthpiece insert for cigarettes, comprising a plug contained within the wrapper of a cigarette, said plug being substantially closed at its inner end and provided with a transverse opening intermediate of its ends and a longitudinal opening connecting the transverse opening and the outer end of the plug, the plug being provided with grooves leading from the inner end of the plug to the transverse opening to direct smoke from the cigarette along a tortuous path to said opening, and a wrapper of fibrous sheet material enclosing the plug within the cigarette wrapper.

3. A sanitary smoking appliance, comprising a plug adapted for insertion in an orifice of a smoking appliance, said plug having a circumferential groove adjacent to one end thereof and longitudinal grooves communicating therewith, one pair of said longitudinal grooves communicating with a tobacco container, the other pair of said grooves communicating with a smoke outlet, and a transverse opening connecting one pair of said grooves.

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