Feb. 2, 1926. 1,571,729

A. B. MODINE

TOBACCO PIPE

Filed Dec. 6, 1923

Fig 2.

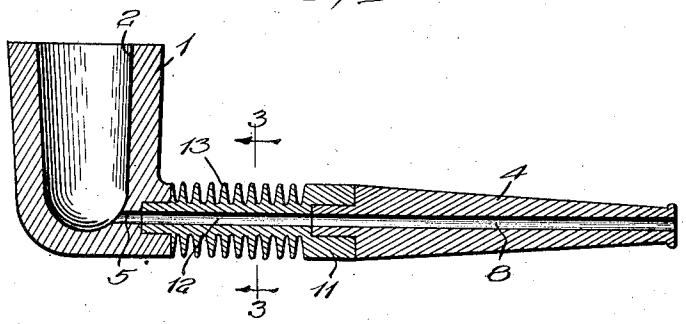


Fig. 3.

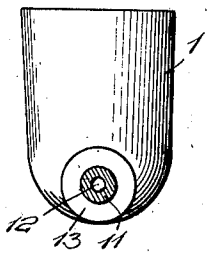


Fig. 4.

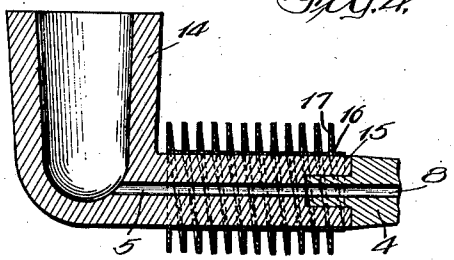
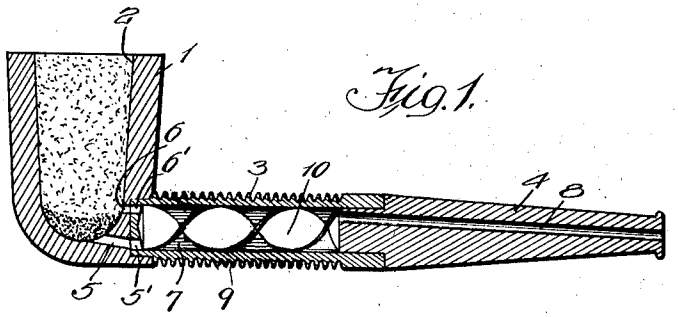


Fig. 1.



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UNITED STATES PATENT OFFICE.

ARTHUR B. MODINE, OF RACINE, WISCONSIN.

TOBACCO PIPE.

Application filed December 6, 1923. Serial No. 678,901.

To all whom it may concern:

Be it known that I, ARTHUR B. MODINE, a citizen of the United States, residing at Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Tobacco Pipes, of which the following is a description.

My invention relates to improvements in tobacco pipes, and more particularly to a pipe having means for cooling the smoke passing therethrough so as to render the same most pleasing to the taste, and prevent burning of the tongue and mouth.

The invention has among its objects the production of a device of the kind described, which is simple, convenient, compact, durable, reliable, satisfactory and efficient for use wherever found applicable.

Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art from the disclosures herein given.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts,

Fig. 1 is a longitudinal sectional view taken through one form of my device;

Fig. 2 is a similar view showing a modified form;

Fig. 3 is a section taken on the line 3—3 of Fig. 2; and

Fig. 4 is a section showing another modified form.

In the drawings, wherein I have illustrated the preferred embodiments of my invention, there is shown in Fig. 1 a pipe having a bowl 1 hollowed out as at 2 to provide a tobacco-receiving chamber and having passages 5 and 6 leading from said chamber to the exterior of the bowl. The passage 5 is substantially at the extreme bottom of the chamber, while the passage 6 is at a higher elevation. A stem 3 having a rather large bore 7 therethrough from one end is fastened to the bowl and has a pair of openings 5′ and 6′ through one end, to register with the openings 5 and 6 through the bowl.

A mouthpiece 4 is removably fitted to the open end of the stem 3 and has a draft passage 8 therethrough from end to end, said passage extending obliquely downwardly from adjacent the upper end of that portion of the mouthpiece that enters the bore 7 of the stem.

In order to cool the smoke passing through the pipe, the stem is preferably made of metal and has ribs or fins 9 extending about its periphery, so that these fins may serve to carry off and radiate or dissipate the heat from the smoke passing through the stem. The capacity of the chamber 7 is made sufficiently large so that it will hold a substantially full puff of smoke so as to give the smoke a chance to have its heat absorbed or radiated before passing through the mouthpiece 4.

In order to agitate the smoke passing through the cooling member and absorb or dissipate substantially all of the heat therefrom, a spiral member or vane 10 is arranged in the chamber 7 so that the smoke passing through the chamber will be conducted along a spiral path so that all of it will engage the wall of the stem 3. The spiral member 10 is preferably secured to the mouthpiece 4 so that when the mouthpiece is removed the spiral member may act as a scraper to clean the stem 3.

In smoking a pipe, the bottom of the bowl generally in time fills up with tobacco and moisture making a gummy or partly liquid substance, which I term the "slug", and it is sometimes difficult to prevent drawing particles of this slug up through the mouthpiece when smoking the pipe. It is on account of this slug that there commonly occurs those irritating noises or gurgling. In use, the pipe is generally held so that the bowl is below the smoker's mouth and therefore, when using a pipe of my construction, even though there is a slug at the bottom of the bowl, the smoke will pass through the upper port 6, moving spirally through the stem, and thence through the mouthpiece. Any nicotine, vapors, or tobacco oils impinge on the walls of the stem and spiral member, where they may condense and flow back into the bowl through the lower duct 5. It is to aid in this purpose that the draft passage 8 is formed in the manner shown, that is, one end of the same communicates with the stem at the upper part of the stem rather than at the center or bottom thereof.

In the form shown in Figs. 2 and 3, the stem part 11 has a draft passage 12 therethrough in registry with and of the same

size as the passages 5 and 8 through the bowl and mouthpiece respectively. Radial fins 13 extend about the stem and radiate the heat therefrom.

In the form shown in Fig. 4, any pipe of present construction may be used without alteration, it being necessary merely to arrange my heating or radiating means about the stem portion of the same. In this form, the bowl 14 has the stem portion 15 extending therefrom and about the upper periphery of the stem portion there is spirally wound a metallic member having one flange which lies against the periphery of the stem and the other flange or rib 17 extending laterally of the stem and conducting the heat away therefrom.

Thus it is seen that I have provided a pipe in which the smoke is cooled during its passage through the stem and in which any of the vapors or oils will be condensed when passing this cooling means, so that only the cool, dry smoke will be taken up by the smoker.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention, hence I do not wish to be understood as limiting myself to the exact form, construction, arrangement and combination of parts herein shown and described or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:

1. A tobacco pipe comprising a bowl, a metallic stem having fins for radiating the heat therefrom, and means for swirling the smoke outwardly against said stem during its passage therethrough.

2. A tobacco pipe comprising a bowl, a metallic stem communicating therewith adjacent the bottom thereof and having integral fins thereon for radiating the heat of the smoke passing through the same, and a spiral vane extending longitudinally through said stem and swirling the smoke outwardly during its passage through said stem.

3. A tobacco pipe comprising a bowl, a tubular metallic stem part with an enlarged bore therethrough, fins formed integral with the stem for radiating the heat of the smoke passing through the same, a mouthpiece extending from said stem and having its bore downwardly inclined from the top of said stem, said bowl having openings into said stem adjacent the bottom and top of the bore through the stem.

4. A tobacco pipe comprising a bowl, a tubular metallic stem with an enlarged bore therein, fins formed integral with the stem for radiating the heat of the smoke passing through the same, a spiral vane extending longitudinally through the stem for swirling the smoke outwardly during its passage through said stem, and a mouthpiece extending from said stem and having its bore communicating directly with the upper part of said enlarged bore, said bowl having openings into said stem adjacent the bottom and top of the enlarged bore through the stem.

In testimony whereof, I have hereunto signed my name.

ARTHUR B. MODINE.