(No Model.)

W. S. HANNAFORD.

TOBACCO PIPE.

No. 589,258. Patented Aug. 31, 1897.

Fig. 1,

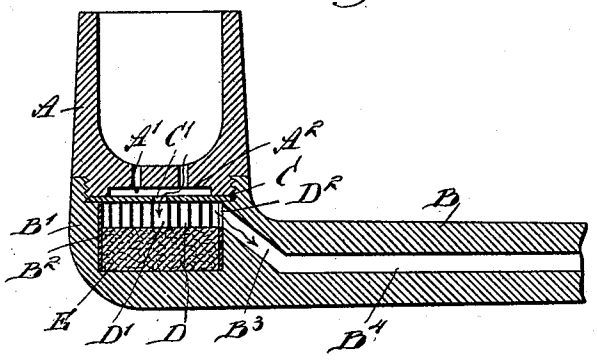


Fig. 2,

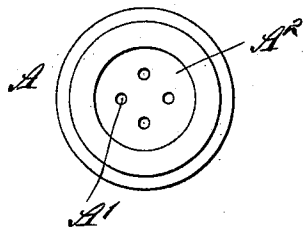


Fig. 3,

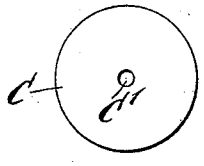
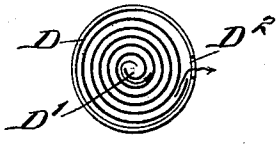


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM SALE HANNAFORD, OF PASADENA, CALIFORNIA.

TOBACCO-PIPE.

SPECIFICATION forming part of Letters Patent No. 589,258, dated August 31, 1897.

Application filed April 6, 1897. Serial No. 630,911. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. HANNAFORD, of Pasadena, in the county of Los Angeles and State of California, have invented a new and Improved Tobacco-Pipe, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved tobacco-pipe which is simple in construction and arranged to prevent the nicotine and other unhealthy substances from passing to the mouthpiece and to purify and cool the smoke on its passage through the pipe, to render smoking pleasant and innocuous.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement. Fig. 2 is an inverted plan view of the bowl. Fig. 3 is a plan view of the cover for the spiral passage, and Fig. 4 is a plan view of the spiral passage.

The improved tobacco-pipe, as illustrated in Fig. 1, is provided with a bowl A, adapted to be screwed or otherwise secured to the enlarged end or subbowl B′ of the stem B, having at its forward end the usual mouthpiece. (Not shown.) In the bottom of the bowl A are arranged the smoke-outlets A′, terminating at their lower ends in a recess A^2, formed in the bottom of the bowl A, as plainly shown in Figs. 1 and 2.

The recess A^2 is closed by a cover C of blotting-paper or other suitable material and held in place in the subbowl B′ over a chamber B^2 by the lower end of the bowl A. The cover C closes the top of a convolutional spiral passage D, arranged in the upper portion of the chamber B^2 and connected at its middle D′ with a central opening C′, formed in the cover C, it being understood that the walls of the said spiral passage are disposed vertically, as plainly indicated in Fig. 1.

The outer end D^2 of the spiral passage connects with the inner end B^3 of the bore B^4 in the stem B, the said end B^3 being inclined downwardly and forwardly, as shown in Fig. 1. The under side of the spiral passage D rests on an absorbing-pad E, made of a suitable absorbent material, placed in the bottom of the chamber B^2 below the connection between the outer end of the spiral passage D and the end B^3.

Now it will be seen that by the arrangement described the smoke from the tobacco burned in the bowl A is drawn through the outlets A′ into the recess A^2 and from the latter passes through the central opening C′ into the center or beginning D′ of the spiral passage D, through which it passes to finally pass through the end D^2 into the bore of the stem B and to the mouth of the smoker.

The smoke during its travel through the spiral passage D deposits nicotine and other impurities upon the absorbing material E, forming the bottom for the said passage and contained in the chamber B^2.

It will further be seen that by arranging the passage D spirally a long path for the smoke is obtained in a comparatively small space, so that the smoke becomes cooled and purified before reaching the smoker's mouth.

By unscrewing the bowl A the cover C and the absorbing material E may be renewed from time to time, so as to keep the pipe always in a fresh condition.

It is evident that the arrangement may be applied in a cigar-holder between the mouthpiece and the tip to prevent the nicotine from passing to the mouth of the smoker and to cool the smoke and purify the same on its passage from the tip to the mouthpiece.

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

1. A tobacco-pipe provided with a convolutional spiral passage connected at one end with the bowl and at the other end with the pipe-stem to cause the smoke to pass through the said convolutional spiral passage on its way from the bowl to the stem to cool and purify the smoke, substantially as shown and described.

2. A tobacco-pipe provided with a convolutional spiral passage having its wall disposed vertically and connected at its center

with the bowl and at its outer end with the pipe-stem, to cause the smoke to pass through the passage on its way from the bowl to the stem, to cool and purify the smoke, substantially as shown and described.

3. A tobacco-pipe provided with a convolutional spiral passage having an inlet-opening at one end connected with the bowl and an exit-opening at the other end connected with the stem, whereby the smoke is caused to pass through the passage on its way from the bowl to the stem to cool and purify the smoke, and an absorbent material over which the smoke passes during its travel through the spiral passage, substantially as shown and described.

4. A tobacco-pipe comprising a bowl, a stem formed with a chamber and adapted to receive the said bowl, a convolutional spiral passage arranged in the said chamber and having its wall disposed vertically, the said passage being covered at the top and bottom, the center of the passage being connected with the outlets of the bowl, and the outer end of the passage being connected with an inclined end of the bore of the said pipe-stem, substantially as shown and described.

5. A tobacco-pipe comprising a bowl, a stem formed with a chamber and adapted to receive the said bowl, a convolutional spiral passage arranged in the said chamber and having its wall disposed vertically, the said passage having a cover at its top, the center of the passage being connected with the outlets of the bowl, and the outer end of the passage being connected with an inclined end of the bore of the said pipe-stem, and an absorbing material in the bottom of the said chamber and forming the bottom for the said passage, substantially as shown and described.

6. A tobacco-pipe comprising a bowl, a stem formed with a chamber and adapted to receive the said bowl, a convolutional spiral passage arranged in the said chamber and having its wall disposed vertically, the center of the passage being connected with the outlets of the bowl, and the outer end of the passage being connected with an inclined end of the bore of the said pipe-stem, a cover placed on the open top of the said passage and formed with a central aperture leading to the center of the spiral passage, to conduct the smoke from the outlet of the bowl to the center of the passage, and an absorbent material forming the bottom for the spiral passage, substantially as shown and described.

7. A tobacco-pipe comprising a stem formed with a chamber, a bowl removably connected with the said stem at the said chamber and formed in its bottom with outlet-openings leading to a recess in the under side of the bowl, a cover over the said chamber and forming a bottom for the said recess in the bowl, the cover being provided with a central opening, a convolutional spiral passage arranged in the said chamber directly under the said cover and connected at its middle with the opening in the cover, and at its outer end with the bore of the pipe-stem, and an absorbing material held in the bottom of the chamber and forming the bottom for the spiral passage, substantially as shown and described.

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