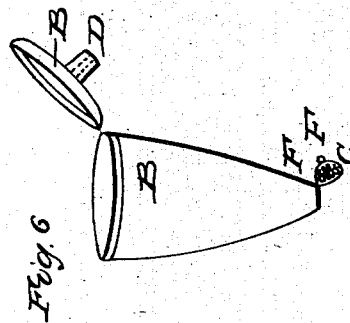
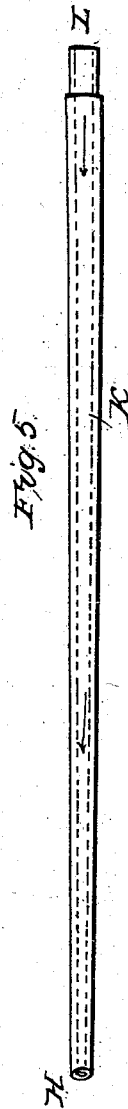
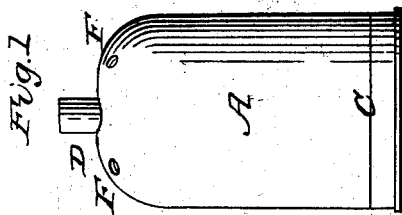
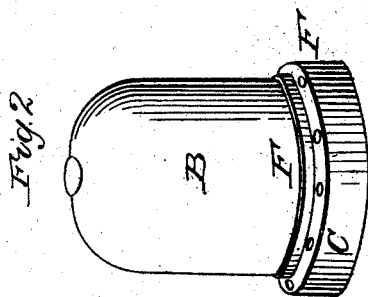
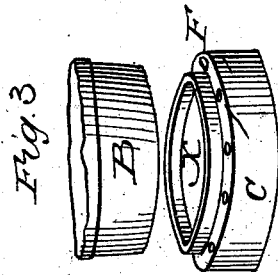
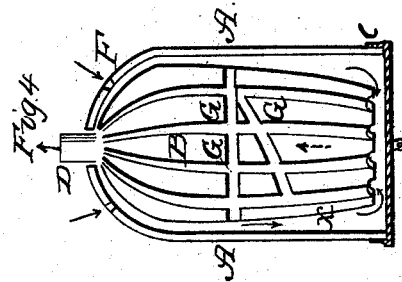


FRANCES & WOODS.

Tobacco Pipe.

No. 47,199.

Patented April 11, 1865.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE W. FRANCES AND WM. L. WOODS, OF WASHINGTON, D. C.

TOBACCO-PIPE.

Specification forming part of Letters Patent No. 47,199, dated April 11, 1865.

To all whom it may concern:

Be it known that we, GEORGE W. FRANCES and WILLIAM L. WOODS, of Washington, District of Columbia, have invented a new and Improved Tobacco-Pipe; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in constructing a tobacco-pipe of such peculiar formation that it will prevent the substance or fluid called "nicotine" from forming, collecting, or accumulating in the bowl of the pipe, but that the pipe will burn the nicotine as fast as it is generated or distilled, and will dissipate and dry up moisture as fast as it passes into the tobacco in the bowl from the stem, thus protecting the smoker against the foul inhalations from accumulations of nicotine, so common in ordinary tobacco-pipes; also, it can be worn during use, with a flexible stem, in the pocket, or attached by a pin or a loop over a button to the breast of the smoker's coat, without spilling the ashes, soiling, or burning the clothes, and it may be made in the form of an ornament, an army or a society badge.

The main peculiarity of our invention, and that which distinguishes it from tobacco-pipes in common use, is that the stem is attached to the upper instead of the lower end of the bowl; and the mouth of the bowl in its true position being just the reverse of ordinary tobacco-pipes, the tobacco is burned up to the vent, instead of down to the vent, and by this peculiar position of the bowl the moisture from the stem and the fluid which is generated and impregnated with nicotine during smoking must sink into the fire and be destroyed with the gradual combustion of the tobacco.

From a thorough test of our invention by an old and experienced smoker this pipe is declared by him to be "cleaner, sweeter, drier, more economical in its consumption of tobacco, and less liable to 'go out' than any pipe he has ever seen or used."

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

We construct our tobacco-pipe of any suitable material and of any practicable size, with

a bowl, B, Figures 3 and 4, the cavity of which is more or less conical, so that it will retain the tobacco, a case, A, Figs. 1 and 4, closing with a cap, C, Figs. 1 and 4, so as to entirely inclose the bowl, B, Fig. 4, except at the nipple D, Figs. 1 and 4, to which the stem of the pipe, Fig. 5, is attached to the bowl B, and sufficiently larger than the bowl to form an air space or chamber, X, between the bowl B and the case A, Fig. 4. Apertures F F, Figs. 1 and 4, are made in the top of the case to admit air into the air-chamber X, Fig. 4. The bowl B may be made to fit snugly into the case A if it be provided with grooves G G G, Fig. 4, which grooves we consider as equivalent to the air-chamber. When the pipe, Figs. 1 and 4, is adjusted in all its parts ready for smoking, a natural draft is formed through it, the air being drawn into the bowl B through the air-holes F F and the air-chamber X or grooves G G G, and from thence through the stem into the mouth.

Figs. 2 and 3 represent a modified form of our invention, wherein the cap C, with its air-holes F F, incloses the bowl B only in part and serves the double purpose of cap and case, and forming sufficient air-chambers.

Fig. 6 represents another modification of our invention, in which the bowl B is made sharply conical, and so arranged that the top, to which the nipple D is attached, can be taken off to charge the bowl with tobacco. The cap C is provided with perforations to admit the air. This bowl B may be made without the movable top, and the stem may be a part of the bowl—solid, like the ordinary white-clay pipe. This we consider the most simple modification of our invention.

Our invention in its peculiar construction, as above described, can be varied by any consequent changes or modifications growing out of its general form; but there must be no departure from the great first and most important individual and specific characteristic of our invention—that of a tobacco-pipe so constructed that when in use the bowl is vertical with the opening down, and the vent for the stem is at the top, wherein the tobacco is burned up to the vent instead of down to the vent, as in the ordinary tobacco-pipe—that is to say, in the construction of the bowl B it may be made more or less conical. It may be a round cone or a flat cone. Its sides, exte-

rior or interior, or both, may be grooved in any direction. It may be made solid or in sections, or jointed so that it will fold up like a spy-glass. The cap C may be made to extend any distance up the sides of the bowl B or the case A, and may join the same in any substantial manner by spring, hinge, screw, or shoulder. The case A may be made in any form to suit the bowl B, and may be formed in sections or halves hinged or otherwise joined; or the bowl B and case A may be made in one solid piece, in the form of a double cup joined at the nipple D.

Any shaped stem—stiff or flexible—may be used with our invention. Fig. 5 represents a very simple and practicable form for a tobacco-pipe stem, in which the cavity K gradually diminishes in diameter from the joint L to the mouth-piece H.

On investigation we believe it will be found that nicotine is the vital principle of tobacco, and without which, as an article of luxury or for medicinal purposes, tobacco would be useless and comparatively tasteless. By means of the peculiar construction of our invention,

when in use, the nicotine is preserved intact, and, being consumed with the other constituents of the tobacco by gradual combustion, gives its full wealth in pure rich smoke, and is not extracted, distilled, concentrated, and accumulated in the bottom of the pipe—a filthy and fearful cause of harm, greatly injuring the smoker and impoverishing the tobacco.

That which we claim as our invention, and wish to secure by Letters Patent, is—

1. The combination of case A, with its air-holes F F, with the bowl B and its nipple D, the cap C, the grooves G, and their chamber X, substantially as described.

2. The combination of the bowl B and cap C, with its air-holes F, substantially as described.

3. The bowl B, with its nipple D and its cap C, when arranged and operating substantially as described.

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Witnesses:

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