(No Model.)

F. W. SCHROEDER.

TOBACCO PIPE.

No. 565,183. Patented Aug. 4, 1896.

Fig. 1.

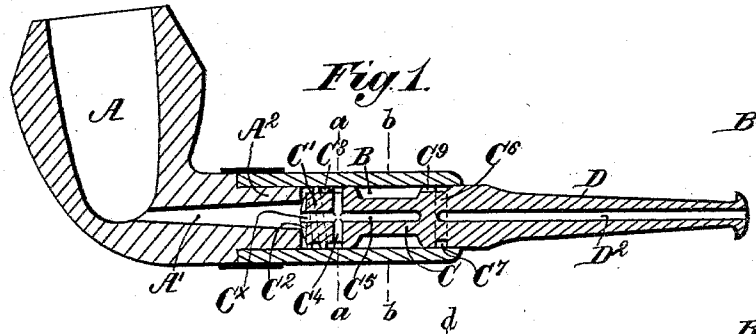


Fig. 2.

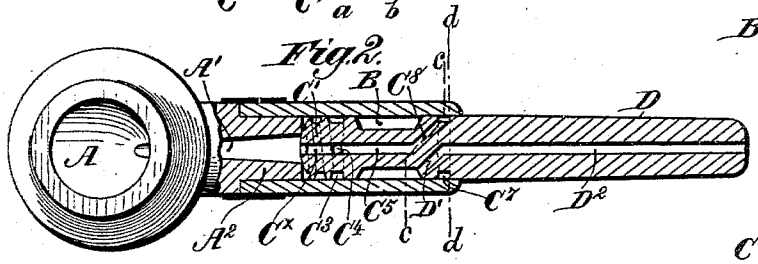


Fig. 3.

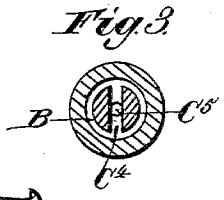


Fig. 4.

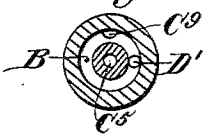


Fig. 5.

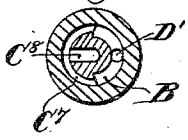


Fig. 8.

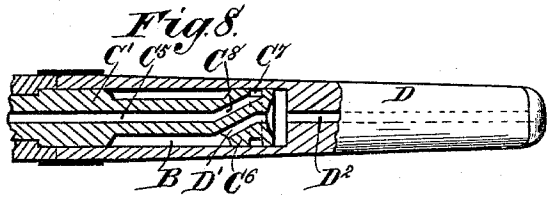


Fig. 6.

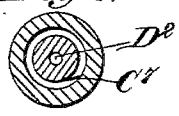
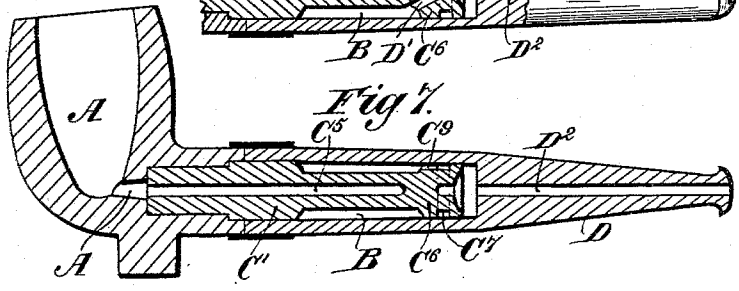


Fig. 7.



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By James L. Norris.
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UNITED STATES PATENT OFFICE.

FREDERICK WILLIAM SCHROEDER, OF NEWTOWN, NEW SOUTH WALES, ASSIGNOR TO HUGH DIXSON, OF SYDNEY, NEW SOUTH WALES.

TOBACCO-PIPE.

SPECIFICATION forming part of Letters Patent No. 565,183, dated August 4, 1896.

Application filed March 23, 1895. Serial No. 543,303. (No model.) Patented in England March 18, 1895, No. 5,644.

To all whom it may concern:

Be it known that I, FREDERICK WILLIAM SCHROEDER, engineer, a naturalized subject of the Queen of Great Britain, residing at Newtown, near Sydney, in the British Colony of New South Wales, have invented new and useful Improvements in Smoking-Pipes, (for which I have obtained Letters Patent in Great Britain No. 5,644, dated March 18, 1895,) of which the following is a specification.

This invention relates to certain improvements in smoking-pipes, whereby they may be almost instantly thoroughly cleansed of all fluid or other matter, and therefore insure a comfortable and healthy smoke, and at the same time be manufactured cheaply.

The essential feature of my invention consists in a plug, with scraper-heads, adapted to fit an enlarged chamber in the smoke-passage and having certain peculiarly-arranged passages, grooves, and ports so constructed as to allow the ready passage of the smoke, but prevent liquid or other matter from reaching the mouthpiece-orifice, as hereinafter more particularly described with reference to the accompanying drawings, wherein—

Figures 1 and 2 are sectional elevation and sectional plan views, respectively, of a smoking-pipe constructed according to my invention. Figs. 3, 4, 5, and 6 are cross-sectional views on lines *a*, *b*, *c*, and *d*, respectively, of Figs. 1 and 2; and Figs. 7 and 8 are similar views to Figs. 1 and 2, but of a slight modification, wherein the plug instead of being formed integral with the mouthpiece is fitted tightly into the bowl end, which practically makes no difference.

The bowl A of the pipe is made, as ordinarily, of wood, clay, meerschaum, or other suitable material, with orifice or channel A′ and with bowl A^2, having suitable connection to a chamber B of suitable material, preferably impervious to moisture, and preferably such as vulcanite, ebonite, and the like. This chamber B, as in Figs. 1 and 2, may be an independent casing or tube fitting tightly on the bowl end A^2 and having the mouthpiece-plug C fitting within it, or it may, as in Figs. 7 and 8, be made integral with the mouthpiece D and fit over the scraper-heads of plug C, which plug is in such case fitted tightly in the bowl end A^2.

In the pipe shown in Figs. 1 to 6 the scraper-head C′ has around it a helical channel C^3, having connection by channels C^2 or by a space with the bowl-orifice A′ and by holes or channels C^4 with the central passage C^5 of the plug or stem. The scraper-head has a groove or hollow channel C^7, connected by an inclined channel or passage C^8 with the central passage C^5 of the plug and connected by port or niche or opening C^9 with the chamber B. The bowl-orifice A′, in addition to the connection with the central passage C^5 by means of helical channel C^3 and holes C^4, may have and preferably has connection $C^\times$ through the scraper-head C′ to said passage C^5. In use the smoke from bowl A is drawn through plug C into chamber B by way of opening $C^\times$ and helical channel C^3 and holes C^4, the central channel or passage C^5, channel or passage C^8, and port or niche C^9. In this chamber B any moisture or condensation is deposited, and the smoke passes to the mouth by way of inclined passages D′ and central draw-off passage D^2, and no excess moisture or saliva can commingle with nicotine-oil in suck-passages D′ and D^2, as the nicotine-oil cannot pass out of chamber B until the plug C is removed, when the scraper-heads clear the chamber, and if both parts of the pipe be slightly shaken any remaining moisture, saliva, or nicotine will be entirely removed.

In the slight modification shown in Figs. 7 and 8, the plug C, instead of being formed integral with the mouthpiece, is fitted tightly in the bowl end A^2, and the casing of chamber B, being part of the mouthpiece D, fits over the scraper-heads C′ and C^6 thereon. The scraper-head C^6, as in Figs. 1 and 2, has a groove or hollow channel C^7 connected by an inclined channel or passage C^8 with the central passage C^5 of the plug, and connected by port or niche or opening C^9 with the chamber B, from which the smoke is drawn through inclined passage D′ to the central draw-off passage D^2 and mouthpiece-orifice, as hereinbefore described.

The pipe is cleared of any extraneous matter by simply removing the mouthpiece D,

(and consequently the casing of the chamber B,) and if both parts be slightly shaken any remaining moisture is entirely removed and the pipe rendered sweet and pure.

With pipes manufactured according to my invention there is but little opportunity of the material of the pipe or bowl becoming impregnated with nicotine-oil, as the stem and mouthpiece are, as before stated, preferably constructed of impervious material.

Having described my invention, what I claim is—

1. In a smoking-pipe, the combination with a bowl and mouthpiece provided respectively with central smoke-passages A′ and D^2 and an enlarged chamber intermediate said smoke-passages, of a plug arranged within said chamber and provided at its opposite ends with scraper-heads C′, C^6, the space between said heads communicating with the smoke-passage A′ by a central passage C^5, inclined channel C^8, peripheral groove C^7 and port C^9, and said chamber communicating with the smoke-passage D^2 by an inclined passage D substantially as described.

2. In a smoking-pipe, the combination with a bowl and mouthpiece provided respectively with central smoke-passages A′ and D^2 and an enlarged chamber intermediate said smoke-passages, of a plug arranged within said chamber and provided at its opposite ends with scraper-heads C′, C^6, the space between said heads communicating with the smoke-passage A′ by a helical channel C^3, transverse passages C^4, a central passage C^5, an inclined passage C^8, peripheral groove C^7 and port C^9, and said chamber communicating with the smoke-passage D^2 by an inclined passage D′ substantially as described.

Dated this 2d day of February, 1895.

FREDERICK WILLIAM SCHROEDER.

Witnesses:

FRED WALSH,

THOMAS JAMES WARD.