

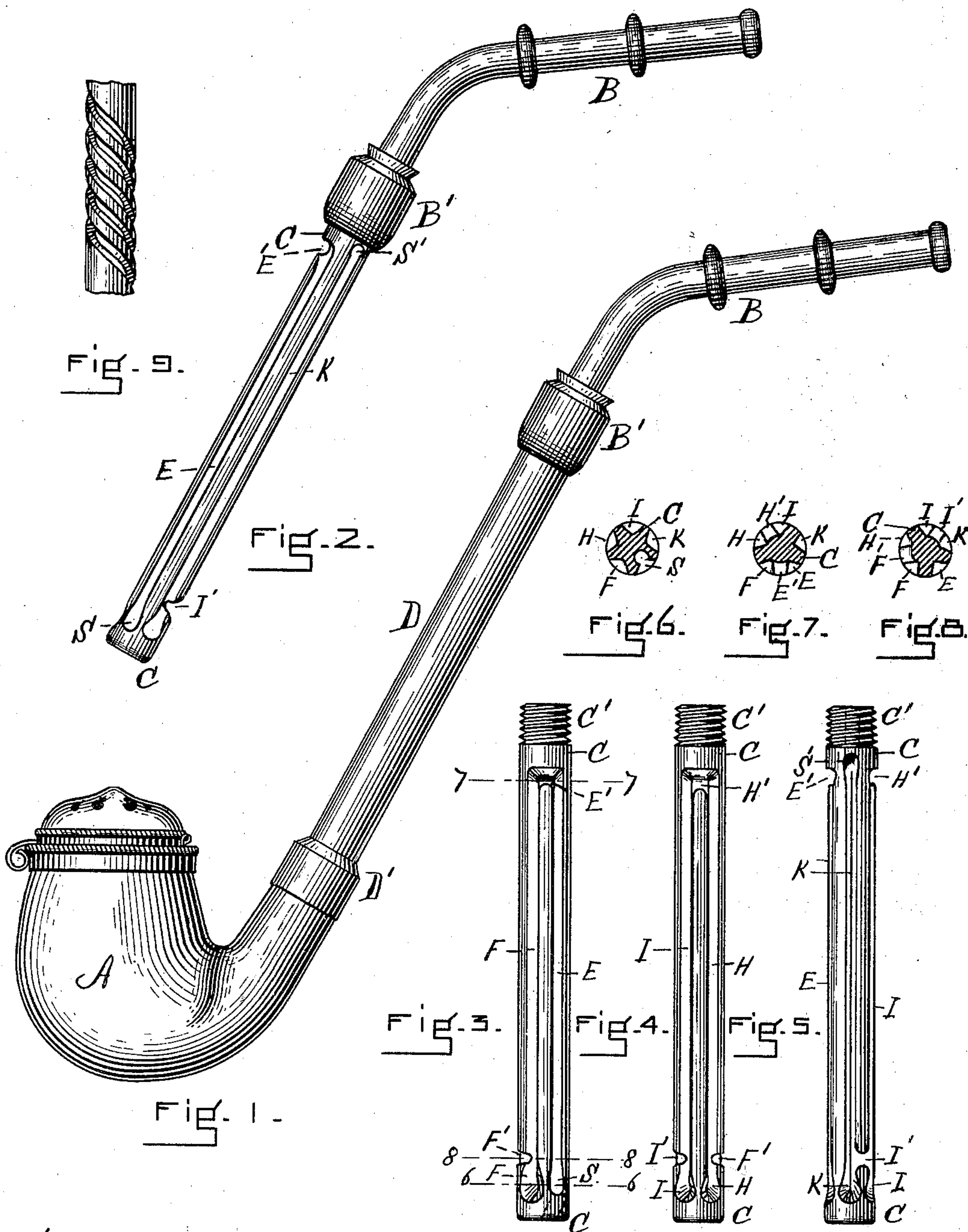
No. 610,757.

Patented Sept. 13, 1898.

P. JOHNSON.
TOBACCO PIPE.

(Application filed June 26, 1897.)

(No Model.)



WITNESSES
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TOBACCO-PIPE.

SPECIFICATION forming part of Letters Patent No. 610,757, dated September 13, 1898.

Application filed June 26, 1897. Serial No. 642,510. (No model.)

To all whom it may concern:

Be it known that I, PETER JOHNSON, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Tobacco-Pipes, of which the following is a specification.

This pipe is constructed with an internal stem between the mouthpiece and bowl and surrounded by an external tube which also extends from the mouthpiece to the bowl. The stem contained in said tube is provided with a number of parallel peripheral grooves, say five in number, all connected together and two connected, respectively, with the passages to the bowl and stem. The result is that the smoke from the burning tobacco is drawn through all these grooves one after another in its progress from the bowl to the mouthpiece, and as each groove is substantially or nearly as long as the stem the smoke travels over a surface which is approximately five times as long as the stem of the pipe. At one end of the stem the passages connecting these grooves are formed at a short distance from the ends of the grooves, and said grooves at that end are slightly enlarged, so as to form sockets or cells. As the smoke is traveling through the long smoke-passage produced by the peripheral groove it is not only cooled, but it is freed very largely of its poisonous elements, the nicotine being caught by and deposited for the most part in these sockets or cells, although of course a very small portion may be distributed along the grooves. Most of the nicotine, however, is caught and deposited in the sockets, which, being near the ends of the internal stem, are easily accessible, and hence readily cleaned by removing the stem proper from the tube which surrounds it.

In the accompanying drawings, in which similar letters of reference indicate corresponding parts, Figure 1 is a side view of a tobacco-pipe embodying my invention. Fig. 2 is a similar view of the mouthpiece and stem with the covering-tube and bowl removed. Figs. 3, 4, and 5 represent views of the different sides of the stem in order to illustrate the progress of the smoke between the bowl and the mouthpiece. Figs. 6, 7, and 8 are cross-sections taken, respectively, on

broken lines 6, 7, and 8 in Fig. 3. Fig. 9 is a view in elevation of a portion of a stem, illustrating a modification.

A represents the bowl, and B the mouthpiece.

C is a stem made with a solid center and screwing at the upper end at C' into the internally-threaded portion B' of the mouthpiece.

D is a tube rigidly secured at its lower end at D' to the bowl and inclosing the stem C, holding it friction-tight and smoke-tight along its grooved portions. This stem, as above mentioned, is not tubular, but is provided with a series of longitudinal parallel grooves, five being shown in the drawings, said grooves extending for practically the length of the stem and connected at their ends, and two of said grooves connecting, respectively, with passages extending into and through the stem to the mouthpiece and bowl. These grooves are lettered in the drawings E, F, H, I, and K. The lower end of the groove E connects with a passage S, which extends through the lower end of the stem C and opens into or toward the bowl. The upper end of the groove K connects with a similar passage S', which extends through the upper end of the stem C and opens into the mouthpiece. The upper ends of the grooves E and F are connected by the cross-groove E', the grooves F and H are connected at a short distance from their lower ends by the cross-groove F', the upper ends of the grooves H and I are connected by the cross-groove H', and the grooves I and K are connected at a short distance from their lower ends by the cross-groove I'. It will be seen, therefore, that the lower ends of the grooves F, H, I, and K extend below the passages connecting them, and by reference to the drawings it will be noticed that these extended portions are enlarged, so as to constitute sockets or deposit-cells.

As the smoke is drawn from the bowl toward the mouthpiece it passes through the passage S to the lower end of the groove E, thence along said groove to its upper end and through the cross-groove E' to the upper end of the groove F, down said groove F and through the cross-groove F' to the lower end of the groove H, up said groove H and through the cross-groove H' to the upper end of the

groove I, down said groove I and through the cross-groove I' to the lower end of the groove K, up said groove K and through the passage S' into the mouthpiece. The beds and side
 5 walls of all these grooves and cross-grooves serve to cool the smoke and to a very limited extent afford provision for the deposit of nicotine. By far the larger proportion of the
 10 nicotine, however, is caught by and deposited in the sockets or cells formed by the extension and enlargement of the lower ends of the grooves F, H, I, and K. These sockets are readily reached by removing the stem from
 15 the tube and are easily cleaned out by an ordinary brush or sponge and being off the direct path over which the smoke travels do not affect or impregnate the following smoke.

As shown in the drawings, the cells formed at the lower ends of the grooves are enlarged
 20 and extend below the cross-passage, so as to entirely obviate any filling or choking up of the smoke-passages.

I do not confine myself to the number of parallel grooves shown in the stem, for as
 25 many may be formed therein as is deemed advisable. In order that the smoke may be forced to travel the entire length of the different grooves, the tube D should fit snugly upon those portions of the stem which separate the grooves.
 30

The stem may be made of aluminium or

any other sufficiently light material and the tube of nickel or other substance adapted to receive a polish or ornamentation.

In the modification illustrated in Fig. 9 the
 35 grooves are spiral and the distance traveled by the smoke thus rendered longer than when the grooves are straight.

Having thus fully described my invention, what I claim, and desire to secure by Letters
 40 Patent, is—

In a tobacco-pipe, the combination with the mouthpiece and bowl, of a solid stem provided with a series of substantially parallel grooves connected together alternately at
 45 their upper and lower ends by cross-passages, one of said grooves being connected by a passage in the stem with the bowl and another groove being connected by a passage in the stem with the mouthpiece, an enlarged cell
 50 being formed in the stem at the lower end of each of the grooves below the cross-passages and adapted to receive and retain nicotine without obstructing the smoke-passages, the said enlarged cells being separated from each
 55 other by short partitions below the cross-passages.

PETER JOHNSON.

Witnesses:

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 A. N. BONNEY

*This won't
 hold smoke.*