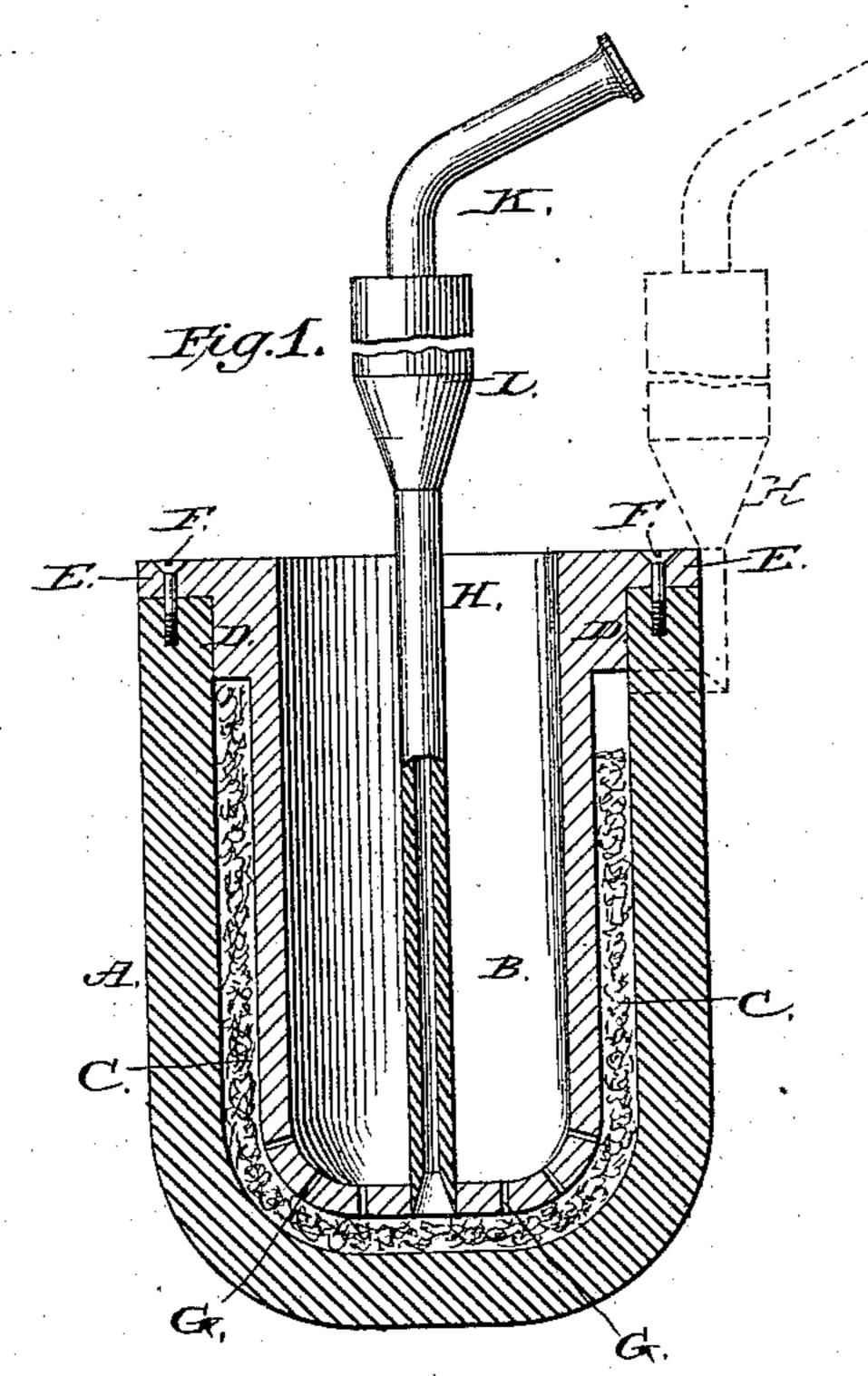
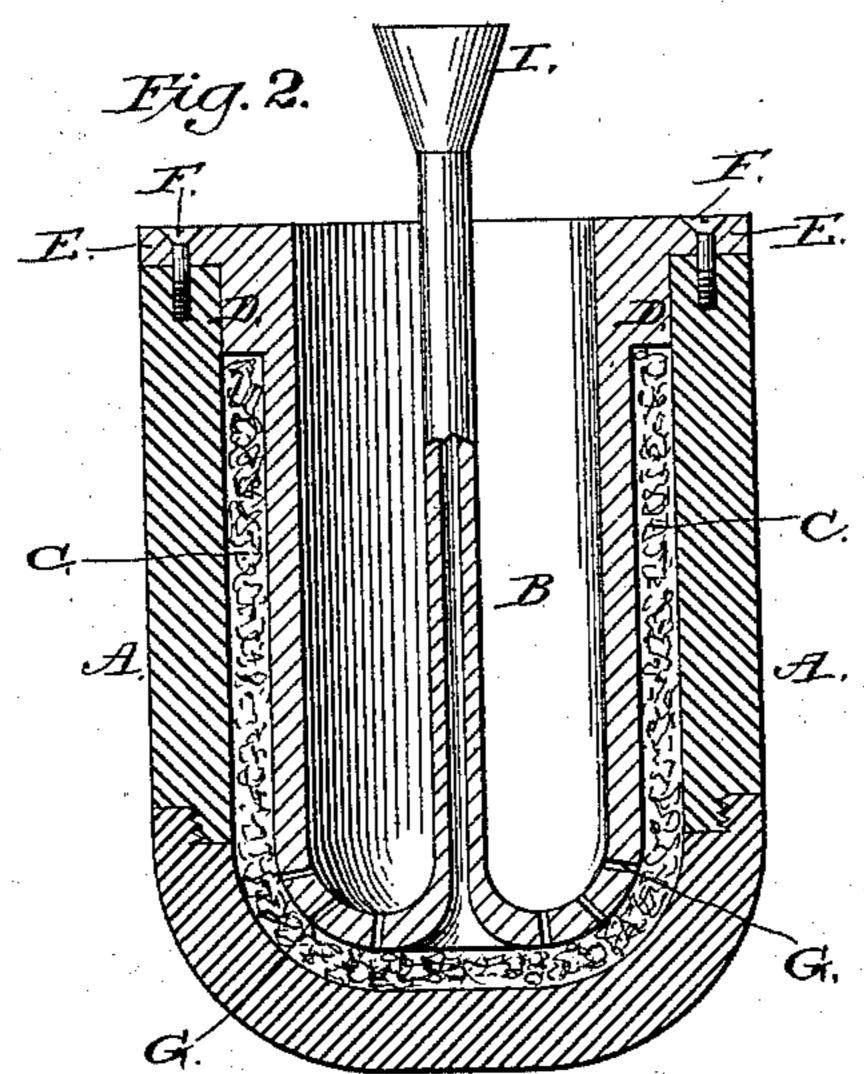
## F. ELLERY. Smoking-Pipe.

No. 219,571.

Patented Sept. 16, 1879.





John O'Rewi. E. Bradford Frank Elleny By H. Euris ATTORNEY

## UNITED STATES PATENT OFFICE.

FRANK ELLERY, OF CASTLETON, VERMONT.

## IMPROVEMENT IN SMOKING-PIPES.

Specification forming part of Letters Patent No. 219,571, dated September 16, 1879; application filed August 15, 1879.

To all whom it may concern:

Be it known that I, FRANK ELLERY, of Castleton, in the county of Rutland and State of Vermont, have invented certain new and useful Improvements in Smoking-Pipes; and do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in that class of smoking-pipes which are constructed with chambers for the condensation and collection of the nicotine and other empyreumatic products of the tobacco. Smoking-pipes have heretofore been constructed with chambers for the condensation and collection of such products; but in all cases the said products are removed from time to time, as they accumulate. The products thus thrown aside, however, are valuable in the process of coloring the pipe, and when thus wasted render the process of coloring very slow.

No attempt has been made heretofore to utilize the nicotine and empyreumatic products of the tobacco for any purpose whatever, the said products, as before stated, being wasted.

Again, in this class of pipes great difficulty has been experienced in securing the mouthpiece or stem to the pipe-bowl, particularly in the finer grades, such as meerschaum pipes, in a substantial and durable manner.

My invention is designed to obviate these defects by so constructing the pipe that the usual side connection for the pipe-stem or mouth-piece at the lower part of the bowl may be dispensed with, and a substantial connection for said stem or mouth-piece, extending from the pipe-bowl in such manner as to effectually prevent the entrance of any nicotine or empyreumatic products into said stem or mouth-piece, may be provided. By dispensing with the side connections of the pipe-stem or mouth-piece the continuity of the outer part of the bowl may be preserved uninterrupted, whereby a regular and highly ornamental contour may be given to the bowl, and the same may be provided with a uniform and

unbroken design over its entire surface, and its appearance thus greatly enhanced.

The invention also has for its object to provide for the absorption, utilization, and uniform distribution of the nicotine and the empyreumatic condensable coloring products of the tobacco to the bowl of the pipe uniformly throughout the same, as more fully herein-

after specified.

To this end the invention consists in constructing the bowl of the pipe in two parts, secured one within the other, with an intervening annular space, which may be filled with any suitable capillary or absorbent material, the inner portion of the bowl being provided with a tobacco-chamber communicating with the annular space, and with a stem-connection leading from the annular space, and so arranged that no free nicotine or condensed product can enter the same, the said nicotine or products being absorbed by the capillary or absorbent material and distributed uniformly to all portions of the bowl, whereby it is utilized to color the same, as hereinafter more fully specified.

Figures 1 and 2 represent vertical sections

of my improved pipe.

The letter A indicates the outer portion of a pipe-bowl, which may be constructed of clay, wood, meerschaum, or any other suitable material, and B the inner portion of the bowl, adapted to fit within said outer portion, the said inner portion being provided at its upper edge with a shoulder, D, which sets snugly within the mouth of the outer portion, A, so as to leave an annular chamber, C, between the inner and outer portions of the bowl.

The inner portion of the bowl at its upper edge is provided with a flange, E, which rests upon the upper edge of the outer portion, A, of the bowl, and is secured to the same by means of screws F, or otherwise, as may be deemed convenient. The inner portion of the bowl, at or near its bottom, communicates with the annular chamber C by one or more apertures, G.

The letter H indicates the stem-connection of the pipe. Said connection consists of a tube of metal or other suitable material extending from the annular space or chamber C through the inner portion of the bowl, and so arranged with respect to a capillary or absorbent filling, to be hereinafter more particularly described, that no condensed nicotine or empyreumatic products from the burning to-

bacco can possibly enter said tube.

In Fig. 1 the stem-connection is represented extending from the bottom of the inner portion of the bowl centrally upward through the tobacco-chamber therein, and also as extending through the side of the outer portion near its upper end, as indicated in dotted lines.

The extremity of the stem-connection is provided with a socket, I, for the reception of the stem or mouth piece K, which is secured therein

in any approved manner.

In the modification shown in Fig. 2 the stem-connection is represented as a continuation of the inner portion, being formed in one piece with the same and extending centrally upward through the tobacco-chamber, and the outer portion of the bowl is represented with a detachable bettom, which may be secured by a screw-thread, as indicated, or in any other convenient manner.

My improved pipe, as thus constructed, possesses the advantages of simplicity, durability, and strength of construction and economy of manufacture, and of extreme cleanliness, owing to the facility with which the parts may be detached and cleansed; and, moreover, all

liability to the usual deposit or caking, which prevents the absorption of the coloring-matter, is prevented on the outer portion of the bowl. Moreover, at any time, should the filling become supersaturated with nicotine or condensable products, it may be removed and replaced and a virtually new pipe thus produced. The said filling material may consist of tow, lampwick, cotton-batting, or any other porous material, and when in place it absorbs the nicotine and distributes it to the sides of the outer portion of the bowl, preventing the entrance of any free nicotine or condensable products to the stem-connection.

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

Patent, is—

The pipe herein described, consisting, essentially, of the outer bowl, A, removable inner bowl, B, having perforations and central stem H, and the absorbent filling C, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of

August, 1879.

FRANK ELLERY.

Witnesses:

John A. Ellis, H. J. Ennis.