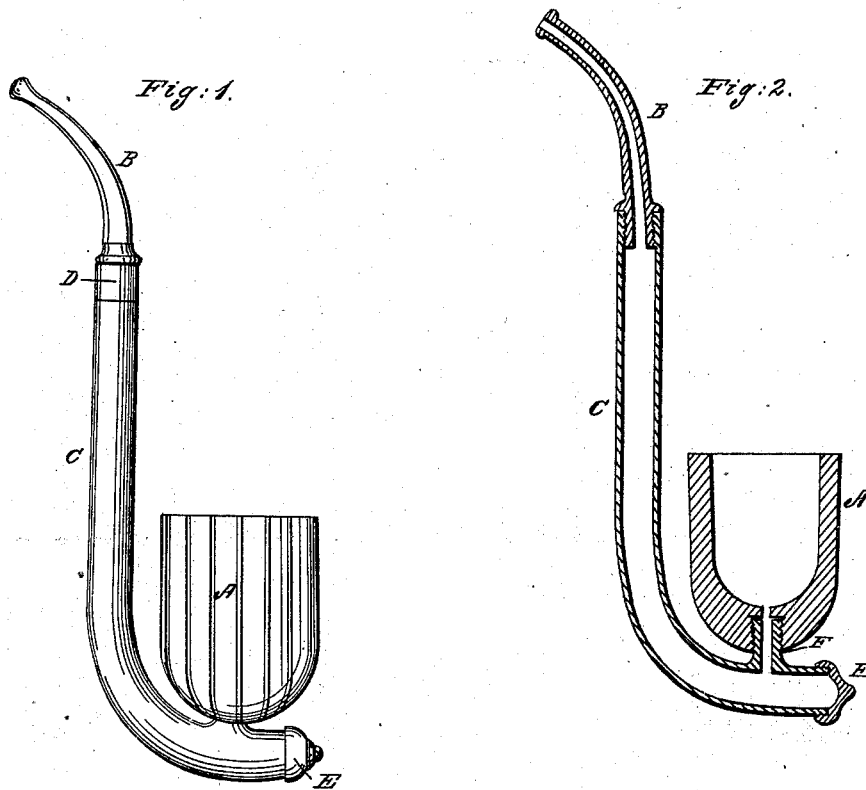


F. LILLER.
Tobacco Pipe.

No. 47,964.

Patented May 30, 1865.



Witnesses:

G. Breed
J. M. Holloway.

Inventor:

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Atty

UNITED STATES PATENT OFFICE.

FREDERICK LILLER, OF BALTIMORE, MARYLAND.

TOBACCO-PIPE.

Specification forming part of Letters Patent No. **47,964**, dated May 30, 1865.

To all whom it may concern:

Be it known that I, FREDERICK LILLER, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful Improvement in Smoking-Pipes; and I 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.

It is well known that the destructive distillation of tobacco, or the common process of smoking in a pipe, generates many products of decomposition—as watery vapor, carbonic acid, the organic alkaline nicotine, nicotianine, and various extractive and pyroligneous products not yet investigated—all of which leave the bowl of the pipe as smoke. More or less of these substances condense and in part adhere to the cooler parts of the interior of the pipe, and there soon fall into putrefaction, rendering them more offensive, if not more poisonous, than the deadly nicotine itself.

The object of my invention is to produce a simple, cheap, and efficient pipe which will meet all the advantages of the known water-cup and cooling-chamber, and which can be washed, brushed, and burnished throughout its interior, or so far as condensation takes place.

My invention consists, mainly, of a pipe-stem which serves as a cooling-chamber, a water-cup, a passage for the smoke, and is capable of being washed, brushed, and burnished throughout the entire interior of the stem or chamber.

In the accompanying drawings, Figure 1 is a side elevation of my improved pipe. Fig. 2 is a vertical section of the same.

In the construction of my improved pipe the bowl A and the mouth-piece B may be of the usual form and material. Instead of the well-known cooling-chamber and water-cup, I have made the stem C of very large internal diameter, so as to form in itself a spacious tubular chamber, which will effectually cool the smoke and condense the water and excess of nicotine and other poisonous or offensive products of destructive distillation or combustion of the tobacco in the bowl of the pipe. This tubular chamber is placed very near the bowl of the pipe, being connected to the same by a short tube, F, in which little, if any, condensation can ever take place. The lower end of this tubular chamber is curved downward to receive the water and other products of conden-

sation, and is closed by a simple cap, E, which is removable for the purpose of cleaning, or emptying the water. The upper end of the tubular chamber is provided with a ring, D, and a mouth-piece, B, making a close joint, (which is also capable of being opened for cleaning.) I prefer to make this tubular chamber C of tin, because this metal is not easily tarnished, and, being soft, can easily be burnished after being washed and brushed; yet other metals heretofore used for pipes, or any suitable material, may be used. The stem of my pipe is made of a gentle curvature, in order to pass a brush through the whole length of the stem; but I do not confine myself to the precise curvature or form of the stem or chamber, or to any particular size of pipe, so long as the main object of my invention is accomplished.

I am aware that water-cups and cooling-chambers are not new in smoking-pipes. Therefore I confine myself to the above-described tubular stem-chamber, when the same serves as an efficient cooling-chamber, water-cup, smoke-passage, and is capable of being brushed and burnished throughout its entire interior. Such a tube thus used I believe to be entirely new among manufacturers, (and I am a pipe-maker by trade, well acquainted with American, English, and continental European pipes.)

As nobody has proposed to brush out and burnish the interior of a pipe-stem prior to my invention, I believe the introduction of tin into use in making pipes is a new and valuable improvement in my art, and therefore a patentable invention. It is more easily cleaned and less liable to become tarnished than the metals commonly in use, and it is not so expensive as to prevent a fair profit to the manufacturers. It may be that an alloy of tin, or other metal coated with tin, will prove valuable; but I prefer the solid tin, and to have the wall of the tube very thin, in order to conduct off the heat very freely.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The above-described smoking-pipe as a new article of manufacture.

F. LILLER.

Witnesses:

DANIEL BREED,
JOHN S. HOLLINGSHEAD,