

C. E. KLEIN.  
SMOKING PIPE.

APPLICATION FILED JUNE 2, 1909.

952,816.

Patented Mar. 22, 1910.

Fig. 1.

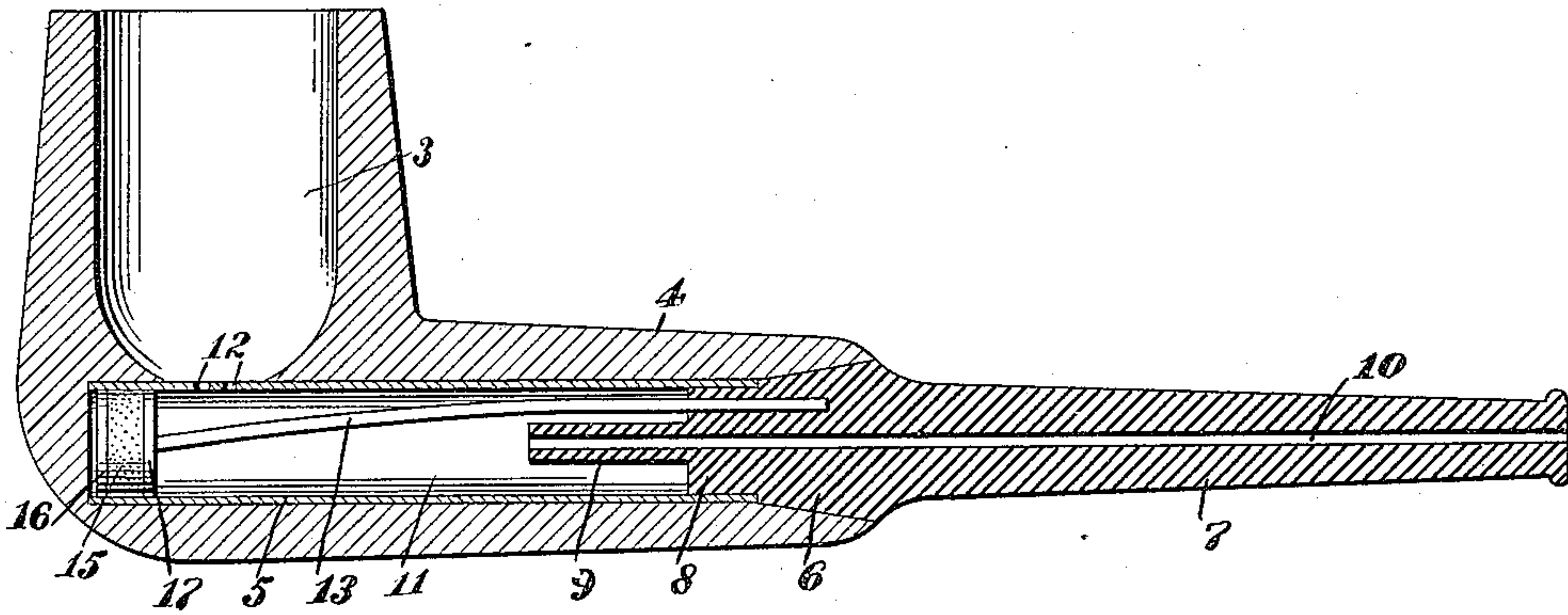
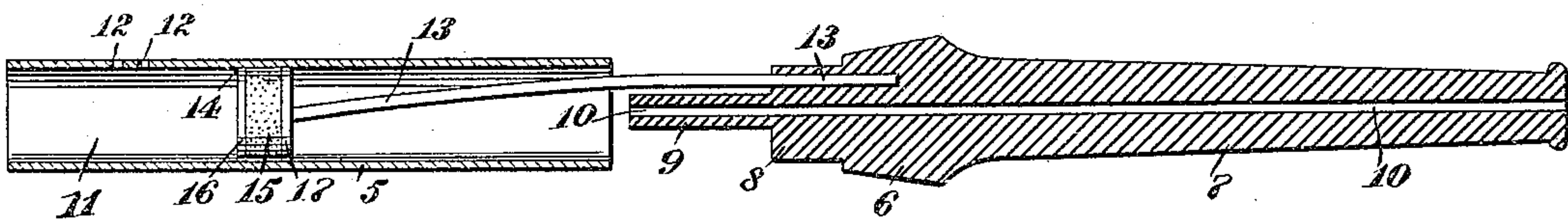


Fig. 2.



WITNESSES

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# UNITED STATES PATENT OFFICE

CARL ELOF KLEIN, OF FRANKLINVILLE, PENNSYLVANIA.

SMOKING-PIPE.

952,816.

Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed June 2, 1909. Serial No. 499,787.

*To all whom it may concern:*

Be it known that I, CARL ELOF KLEIN, a subject of the King of Sweden, and resident of Franklinville, in the county of Montgomery and State of Pennsylvania, have invented a new and Improved Smoking-Pipe, of which the following is a full, clear, and exact description.

The principal objects which the present invention has in view are; to provide a smoking pipe which may be readily and conveniently cleaned; to provide a pipe in which the nicotin bearing liquid of condensation is trapped in a member from which it is readily and quickly drawn; and to provide a simple construction whereby the ash and coked particles of the pipe structure may be readily removed.

One embodiment of the present invention is disclosed in the construction illustrated in the accompanying drawings, wherein like characters of reference indicate corresponding parts in both views.

Figure 1 is a vertical longitudinal section of a smoking pipe constructed in accordance with my invention; and Fig. 2 is a detail view in longitudinal section of the cleaning tube, swab and mouthpiece connected therewith.

The bowl 3 and stem 4 are made integral, as in the well known construction of the present day. The boring of the stem 4 is enlarged to receive an inner metallic tube 5, and the outer end of the stem 4 is flared to receive the conical end 6 of the mouthpiece 7. The junction between the boring of the stem 4 and the bottom of the bowl 3, is increased materially over and above that at present employed in the manufacture of smoking pipes.

The mouthpiece 7 is similar in all respects to the present plug seated mouthpiece up to the conical plug seated end 6. There is provided beyond the end 6 an extension 8 which is turned to fit snugly within the outer end of the tube 5. A further extension 9 is provided beyond the extension 8, whose office it is to carry the piercing 10 of the mouthpiece 7 within the chamber 11 formed by the tube 5. The extension 9 performs the function of raising the end of the piercing 10 within the said chamber 11, so that no products of condensation may readily attain admission within the said piercing 10. The tube 11 is preferably con-

structed from aluminum; I am not, however, limited to the use of aluminum, as there may be substituted therefor any of the known metals. The tube 5 is open at both ends, and is provided at the forward section with perforations 12, which open upwardly into the bowl 3 of the pipe and form the smoke channels from the pipe bowl downward into the chamber 11. This section of the tube, it will be observed by referring to Fig. 1 of the drawings, performs the function of the usual bottom with which many pipes are provided. Not only the smoke, but any condensation due to moisture within the tobacco, is carried from the bowl 3 into the chamber 11. It is, however, within the chamber 11 that the condensation of the nicotin from the saturated smoke, transpires.

Fixedly inserted in the plug end of the mouthpiece is a small spring wire 13. At the farther end of the said wire is a piston 14, provided with a cork packing 15 and face plates 16 and 17. The face plate 17 may be rigidly secured to the wire 13. I prefer to construct the plate 16 so as to be removably secured to the end of the rod, whereby the cork packing 15 may be removed if desired. The plates 16 and 17 are of a slightly less diameter than the tube 5, while the cork packing 15 is slightly larger than the diameter of the tube 5, to produce a wiping pressure upon the wall of the said tube. When in the normal position, the piston 14 is extended to the forward end of the tube 5 and beyond the perforations 12. In this position, the tube 5 is mounted over the extension 8 of the mouthpiece 7. The adhesion between the tube 5 and the extension 8 is greater than the adhesion between the tube 5 and the sides of the boring of the stem 4.

With a construction thus formed, the operation is as follows:—The piston 14 and wire 13 are inserted within the tube 5, which is threaded over the extension 8. The tube 5 is then inserted in the bore of the stem 4 until the plug seat 6 is in firm engagement with the stem. In this position, the perforations 12 will open directly into the bowl 3, with the piston 14 resting beyond the said perforations and forward of the opening of the bowl 3 into the chamber 11. The pipe is now handled as an ordinary pipe. When it is desired to clean the pipe, after emptying the ashes and old tobacco from the bowl, the



mouthpiece 7 is withdrawn from the stem 4. The adhesion of the tube 5 to the extension 8 being greater than to the stem 4, the tube 5 is withdrawn from the stem 4 by the removal of the mouthpiece 7. The tube 5 is now loosened from the extension 8, and the mouthpiece and said tube are drawn apart. In drawing these two members apart, the piston 14 is drawn through the tube 5, passing the perforations 12 and through the outer end of the tube 5. The piston 14, in thus moving through the length of the tube, wipes the same thoroughly. Should this wiping not be sufficient, it may be augmented by dipping into alcohol or submitting the tube to steam or any of the well-known sanitizing processes. When cleaned, the tube 5 is replaced upon the mouthpiece 7, the piston 14 being inserted therein, and the mouthpiece 7 is again placed within the stem 4 as with pipes of the usual construction. When the bowl and stem structure is separated from the tube and mouthpiece, the opening between the bowl and stem will be found large enough to freely and easily clean any adhering ashes or coking from within the bowl. When the tube 5 and the mouthpiece

are separated, it will be observed that access through the piercing 10 is free.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

A smoking pipe, comprising a stem having a suitable bore, a mouthpiece adapted to fit within said bore and having a contracted extension to rest within the chamber in said bore to leave a space between the sides thereof and the inner walls of the said stem, an open-ended tube adapted to fit said mouthpiece and to extend within said bore and to form the bottom of the bowl of the pipe, said tube being provided with perforations communicating with said bowl, a piston adapted to close the far end of said tube beyond said perforations, and a connecting member for securing said piston to the said mouthpiece.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CARL ELOF KLEIN.

Witnesses:

ADOLF MÜLLER,  
SVEN MALMQUIST.