

(No Model.)

H. G. SCHRAMM.

SMOKING PIPE.

No. 362,119.

Patented May 3, 1887.

FIG. 1.

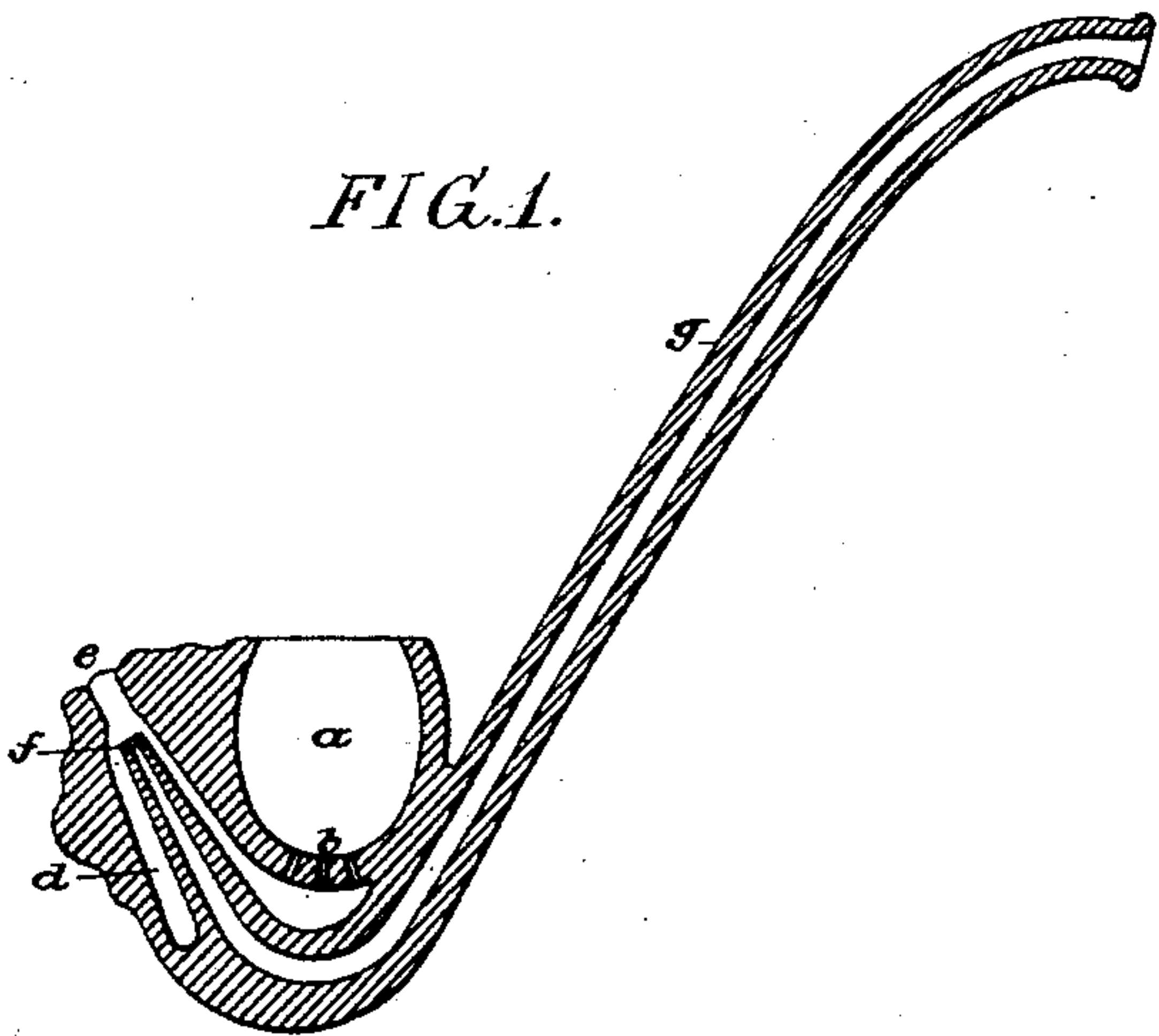


FIG. 2.

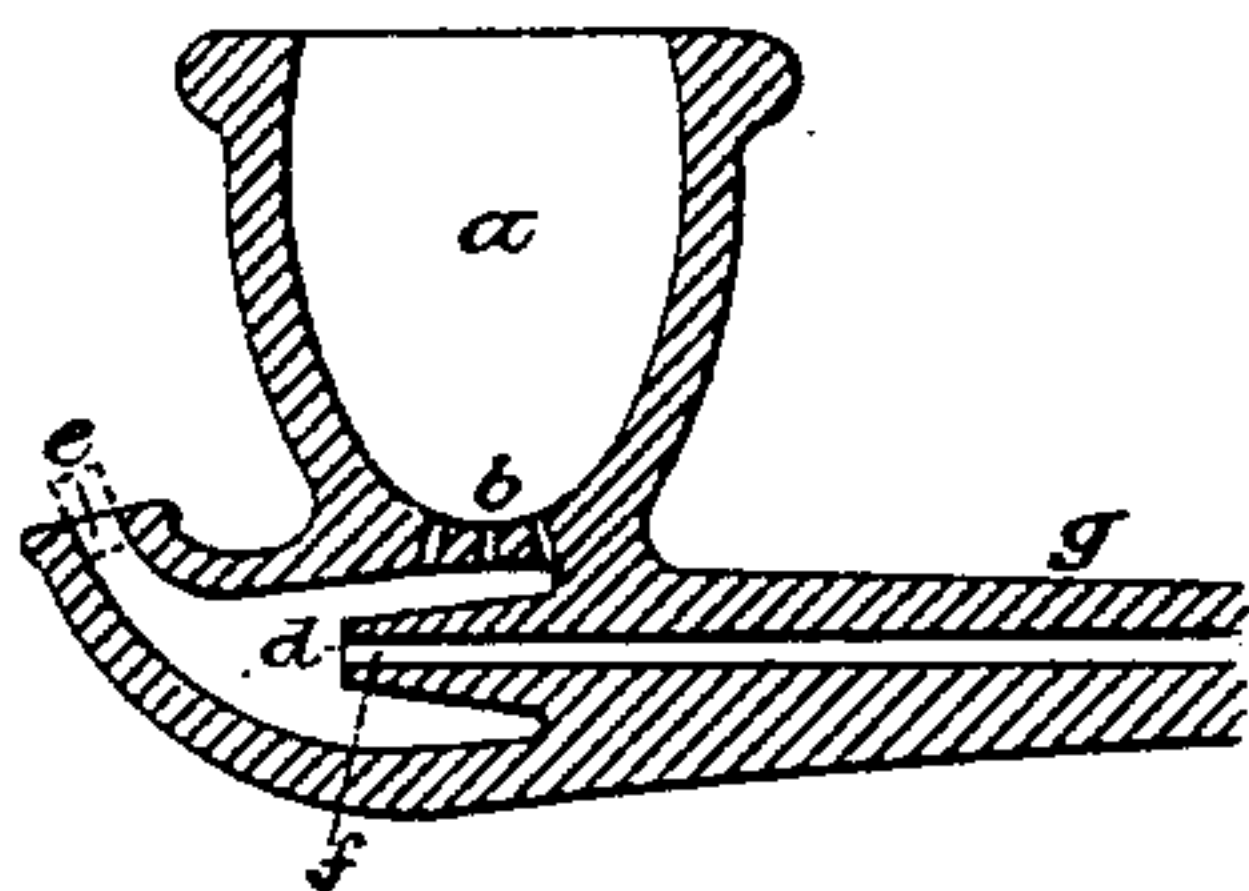


FIG. 3.

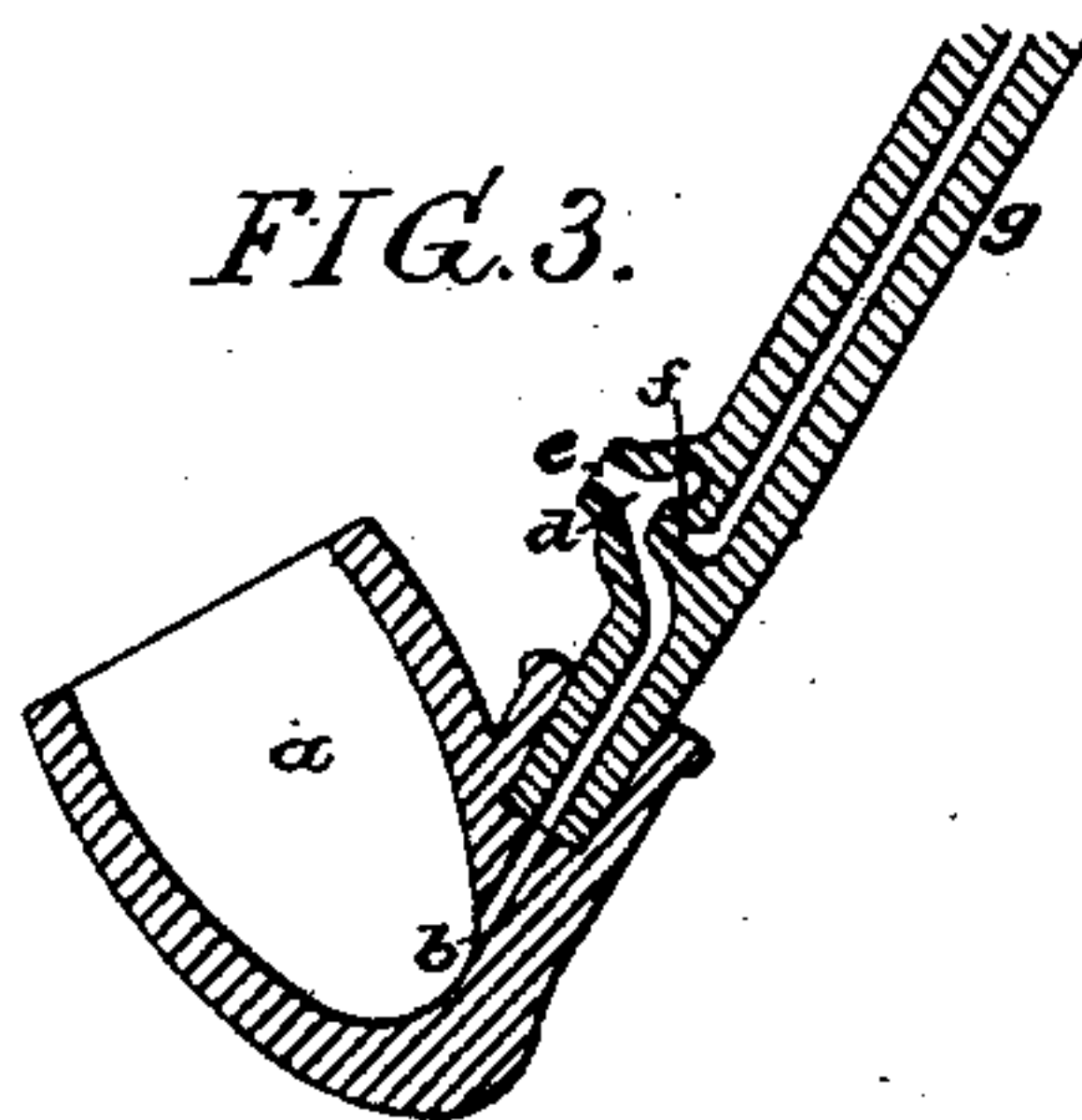


FIG. 5.

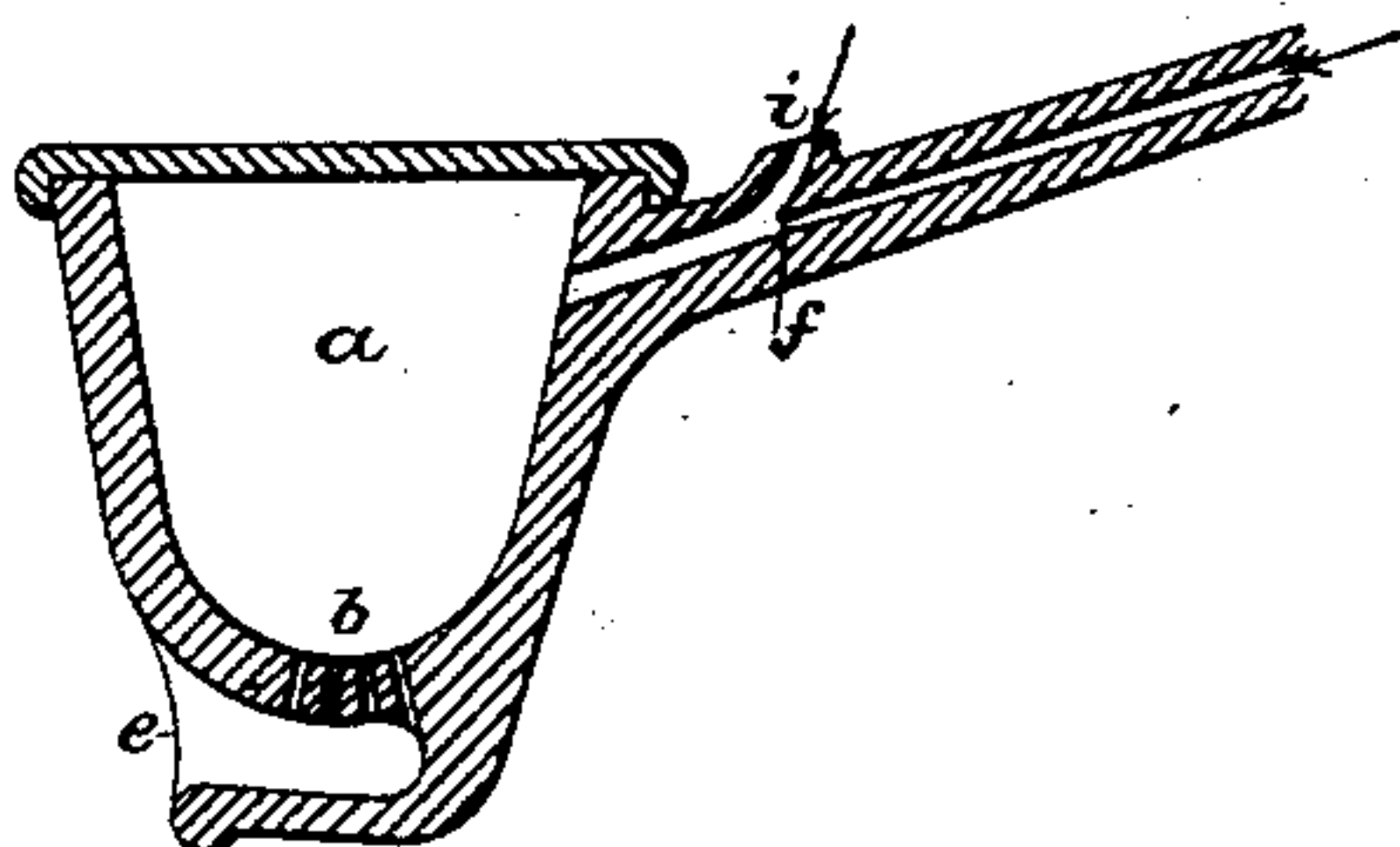
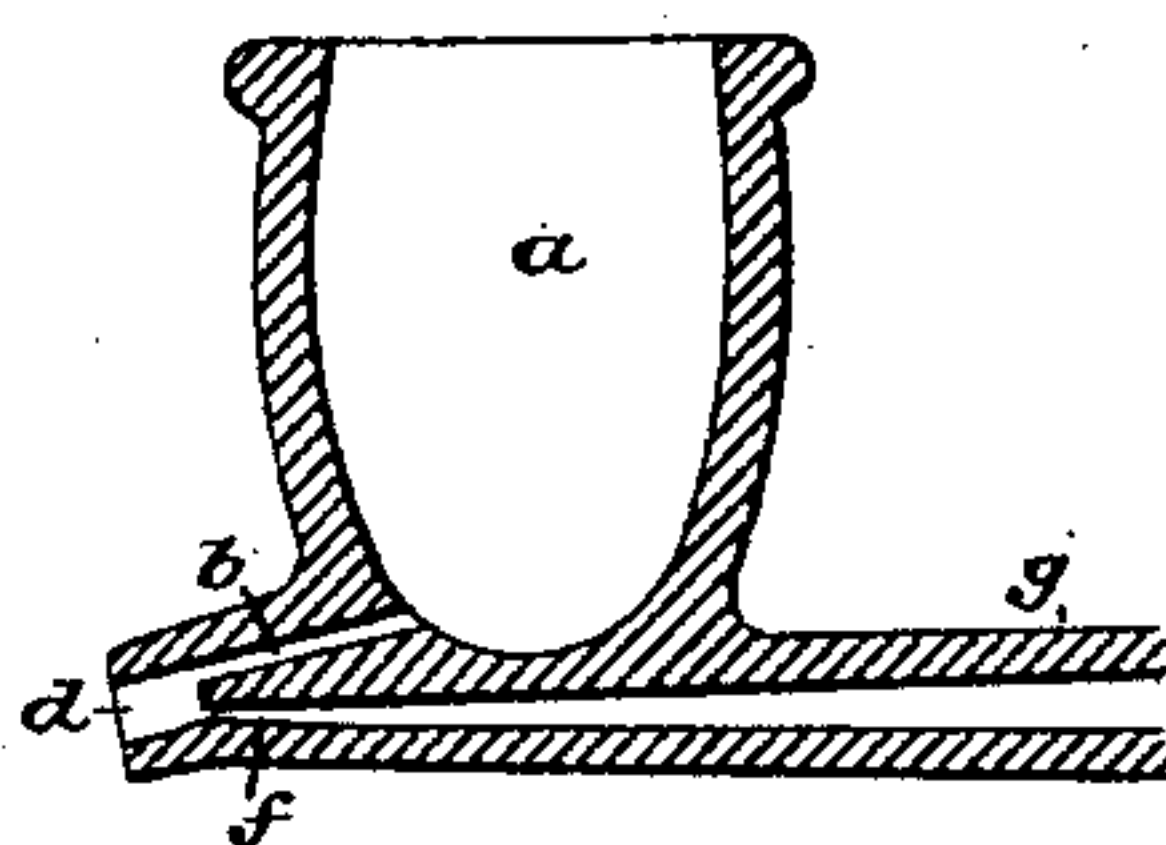


FIG. 4.



Witnesses:  
John E. Parker  
William D. Conner.

Inventor:  
Henry G. Schramm  
by his Attorneys  
Howson & Sons



# UNITED STATES PATENT OFFICE.

HENRY G. SCHRAMM, OF CAMDEN, NEW JERSEY.

## SMOKING-PIPE.

SPECIFICATION forming part of Letters Patent No. 362,119, dated May 3, 1887.

Application filed June 17, 1885. Serial No. 168,945. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY G. SCHRAMM, a subject of the Emperor of Germany, and a resident of Camden, New Jersey, have invented certain Improvements in Smoking-Pipes, of which the following is a specification.

The object of my invention is to so construct a smoking-pipe that tobacco or other material can be used therein without drawing the smoke into the mouth, and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional view of one form of pipe embodying my invention; and Figs. 2, 3, 4, and 5, sectional views of other forms of pipe, also made in accordance with my invention.

While the smoking of tobacco is advisable in many cases for sanitary reasons or for fumigating purposes, many persons so dislike the taste of tobacco that they are unable to use the ordinary tobacco-pipe, because of the necessity of drawing the smoke into the mouth. With the view therefore of providing a device which is not open to this objection, I construct the pipe in the manner shown in the drawings.

The bowl *a* of the pipe shown in Fig. 1 communicates through openings *b* in the bottom with a chamber, *d*, having an outlet, *e*, in front of the bowl. Into this chamber projects a nozzle, *f*, forming a continuation of the stem *g* of the pipe, which is constructed for being carried in the mouth in the usual manner, the nozzle terminating within the chamber *d* a short distance from the mouth of the same, so that a blast of air forced through the stem of the pipe will issue in a forcible jet from the end of the nozzle, the jet escaping from the mouth of the chamber *d* and acting as an ejector, to cause a partial vacuum in said chamber and induce air to pass down through the ignited tobacco in the bowl of the pipe, the smoke thus produced passing up through the chamber *d*, around the nozzle *b*, and escaping from the mouth of the chamber with the jet from said nozzle.

Fig. 2 shows a pipe having a somewhat different form of discharge-chamber and ejector-nozzle, and Fig. 3 shows a still further modification in the arrangement of these parts, the

discharge chamber and ejector-nozzle being located in the stem of the pipe; and, if desired, the discharge-chamber may have its outlet close to the mouth-piece, so that the escaping volume of smoke will appear to issue from the mouth. In fact, the construction and arrangement of the discharge-chamber and ejector-nozzle may be varied in many ways without departing from the main feature of my invention, one of the simplest forms of the device being that shown in Fig. 4, in which the nozzle *f* and a passage, *h*, leading from the bowl of the pipe, unite in a single outlet, *d*.

In Fig. 5 I have shown a modification of my invention in which the bowl of the pipe is closed at the top, the stem *g* communicating with the bowl above the tobacco therein. In this case the blast from the ejector *f* causes air to enter the opening *i*, this induced current, with the blast from the ejector, being forced through the tobacco and the smoke escaping from the outlet *e*.

In all the forms of pipe shown the smoking of the tobacco is effected without drawing the smoke into the mouth, so that tobacco of the strongest character can be smoked by persons unaccustomed to the use of tobacco of any kind. Moreover, the choking of the stem of the pipe with nicotine or saliva is prevented.

A more uniform draft, and one which can be continued for a longer time, is possible with a forced blast through the stem, as in my improved pipe, than with the inward draft of an ordinary pipe.

My improved pipe can, however, be smoked in the same manner as an ordinary pipe, if desired, the mouth *e* of the discharge-chamber in this case being provided with a suitable damper or valve or closed by a simple plug—such, for instance, as shown by dotted lines in Fig. 2.

In all of the pipes shown in the drawings certain elements are found which are essential to the proper carrying out of my invention, these elements being a bowl or receptacle for the tobacco or other material, the stem having a nozzle or jet-pipe, and a passage communicating with the bowl and with the atmosphere, and receiving the jet from the nozzle, the discharge end of said passage being of greater area than the nozzle-opening; otherwise there



will be no induced current of air and the pipe will be inoperative. The induction-passage should also extend backwardly from the discharge end or mouth of the nozzle, in order to insure the proper action of the jet issuing from said nozzle, this being also a feature which is common to all the forms of pipe shown in the drawings.

I claim as my invention—

- 10 1. The combination, in a smoking-pipe, of a bowl or receptacle for the tobacco, a stem having a jet-pipe or nozzle, and a passage communicating with the bowl and with the atmosphere, and receiving the jet from the nozzle, said passage comprising two portions—namely, 15 a discharge portion in advance of the nozzle and having an opening of an area greater than that of the passage of said nozzle, and an induction-passage extending rearwardly from

said discharge end or mouth of the nozzle, all substantially as specified. 20

2. The combination of the bowl, the discharge-chamber communicating with the lower portion of the bowl and having an open end, and the stem having a nozzle, the opening in which is less in area than the discharge-opening, said nozzle delivering the jet into the discharge-chamber at a point between its discharge end and the communication with the bowl of the pipe, all substantially as specified. 25 30

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

H. G. SCHRAMM.

Witnesses:

HARRY SMITH,  
HUBERT HOWSON.