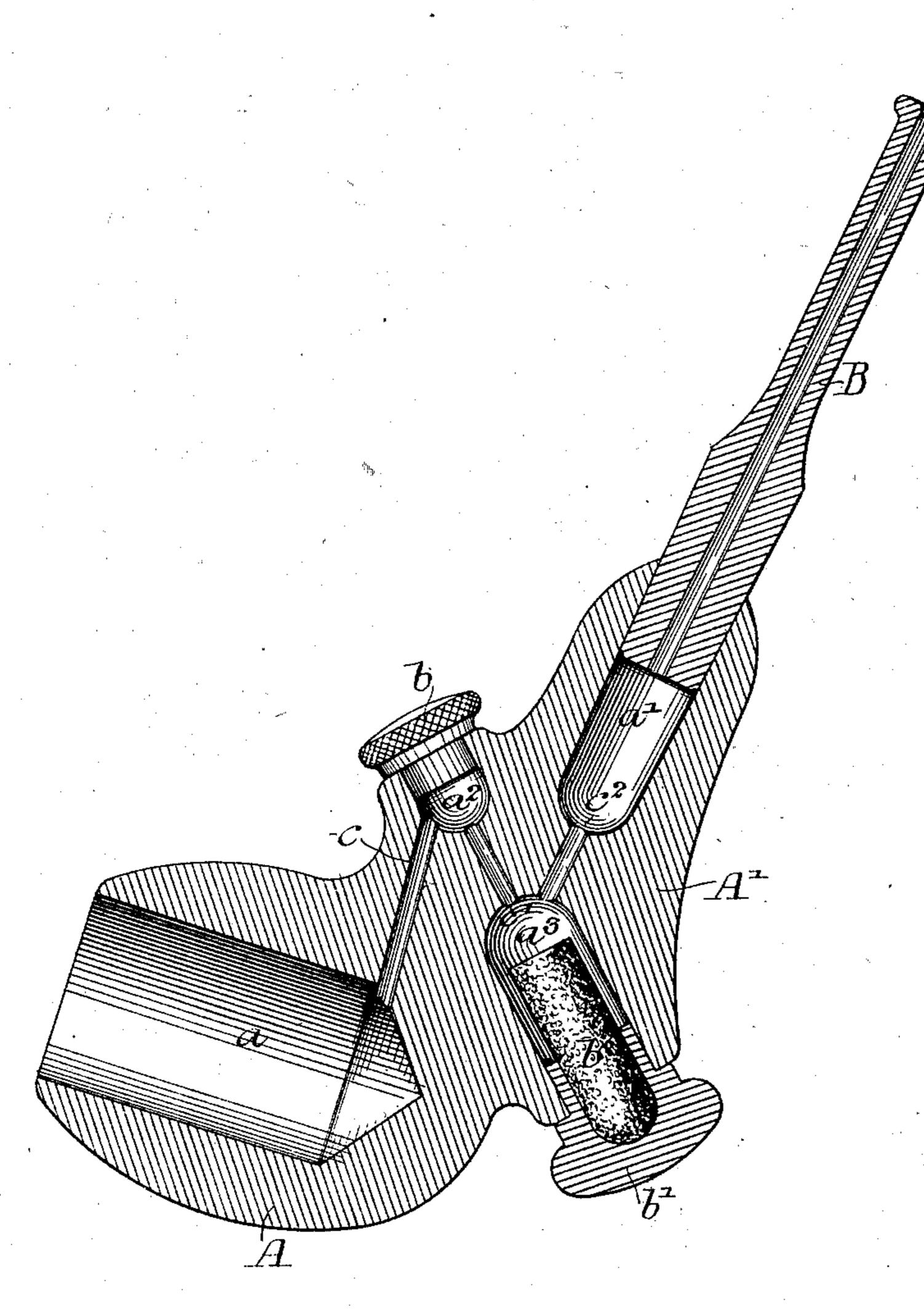
No. 702,249.

Patented June 10, 1902.

T. M. SAURMAN. PIPE.

(Application filed Jan. 28, 1902.)

(No Model.)



WITNESSES:

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United States Patent Office.

THOMAS M. SAURMAN, OF NORRISTOWN, PENNSYLVANIA.

PIPE.

SPECIFICATION forming part of Letters Patent No. 702,249, dated June 10, 1902.

Application filed January 28, 1902. Serial No. 91,634. (No model.)

To all whom it may concern:

Be it known that I, THOMAS M. SAURMAN, a citizen of the United States, and a resident of Norristown, Pennsylvania, have invented certain Improvements in Tobacco-Pipes, of which the following is a specification.

My invention relates to certain improvements in tobacco-pipes, and more particularly to an improved pipe having a particular comto bination of smoke passages and chambers connecting its bowl with the stem or bit thereof.

The object of the invention is to so construct a pipe that it will be practically impossible for tobacco to pass from the bowl to the mouth of the person smoking, a further and most important object being to provide means for collecting the nicotin from the smoke and that in such a manner that it will not subsequently contaminate the smoke passing through the pipe.

In addition to the above my invention contemplates a construction of parts such that the absorbent material used for collecting nicotin or moisture may be readily removed and replaced, the various passages through the pipe being disposed in such a manner that they may be quickly and easily cleaned.

These objects I attain as hereinafter set forth, reference being had to the accompany30 ing drawing, in which the figure is a longitudinal sectional view of my improved pipe, showing the preferred arrangement of passages, chambers, &c., therein.

In the above drawing, A is the bowl portion of the pipe, which has in addition a body portion A'. There is the customary cavity or bowl a for the reception of tobacco in the portion A and a cavity a' for the reception of a stem B in the body portion A'.

In addition to the above cavities there are two other cavities in the body portion of the pipe, preferably formed in line with one another. One cavity a^2 extends into the said body from the upper portion or top of the same, and the second, a^3 , extends upwardly from the bottom.

The above-mentioned cavities are closed respectively by plugs or caps b and b', the latter having in it a recess or depression, in which is fitted a cylindrical roll b^2 of absorbent material. It is to be noted that this ab-

sorbent material does not extend all the way to the upper end of the cavity, nor is it equal in diameter to the same, the cap b being constructed so that there is a space between the 55 walls of the cavity and said roll of material.

There is a passage c extending at right angles from the lower portion of the bowl a into the cavity a^2 and a second passage c' connecting the cavities a^2 and a^3 , the said latter passage being preferably made in the line of these two cavities. A third passage c^2 connects the cavity for the pipe-stem and the upper part of the cavity a^3 , this passage being preferably made in continuation of the line a^3 of the cavity a^3 and substantially parallel to the passage a^2 .

It is to be noted that the passages c, c', and c^2 are of small cross-section relatively to the various cavities a', a^2 , and a^3 , such construction being necessary in order to prevent particles of tobacco being drawn from the bowl into the mouth of the person smoking the pipe and also for the purpose of causing the smoke drawn through the pipe to be successively expanded in the above-mentioned cavities, such action best conducing to a perfect deposit of the nicotin as well as the solid particles carried by said smoke.

In use any particles of tobacco or ash which 80 would ordinarily be drawn through the bowl into the mouth of the smoker are compelled to go through the passage c', being thus caught in either of the cavities a^2 and a^3 . It is further noted that the smoke from the bowl on 85 its passage to the stem Bexpands not only in the cavities a^2 and a', but particularly in the relatively large cavity a^3 , depositing in this latter the nicotin contained in it as well as any moisture. Such deposition is most effec- 90 tually accomplished by the peculiar construction shown, for the smoke in the said cavity passes over and around the absorbent material b² without having to pass through the same in the manner usually required in de- 95 vices of the class to which my invention belongs. Since the passage c^2 leads from the upper portion of the cavity it is practically impossible to draw any liquid which may collect in said cavity into the mouth.

It will be seen that by causing the passage c to leave the bore of the bowl a at a right

angle I secure the thickest possible walls to said bowl, thus avoiding the burning out and ultimate destruction of the pipe, which invariably takes place when the smoke-passage from the bowl runs at an angle which causes a reduction of the thickness of the walls at any point

5 from the bowl runs at an angle which causes any point. When desired, the plug b' may be taken out and the absorbent material renewed. For to this purpose I employ a small roll of ordinary blotting-paper, this being easily obtained and amply fulfilling all requirements. It will be seen that the arrangement of passages illustrated form what is known as a "siphon" and 15 that concealed, the arrangement being such that the smoke from the bowl as it is sucked toward the stem is allowed to expand in the various cavities, and thereby become cool, while depositing the objectionable nicotin in 20 or upon the absorbent material. This latter being placed out of the line of passage of the smoke does not after it becomes more or less saturated with nicotin contaminate the smoke subsequently passing, inasmuch as this 25 latter is not compelled to pass through it. It is further to be noted that all the various passages c, c', and c^2 are readily accessible for purposes of cleaning, since all are in line with and open into the various large cavities in 30 the body of the pipe and the bowl, thus mak-

ing it possible for an ordinary straight cleaner to be employed.

While throughout the foregoing specification I have described my improved arrangement of passages, cavities, &c., as used in 35 connection with a tobacco-pipe, it will be understood that this is equally applicable for use in a cigar-holder or as forming part of a pipe-stem detachable from the bowl.

I claim as my invention—

A tobacco-pipe having a chamber closed at the outer end and containing a mass of absorbent material less in diameter and length than said chamber so that it is exposed both at the end and sides, a passage leading from 45 said chamber to the stem of the pipe and a passage leading from the chamber to the bowl of the pipe, said latter passage comprising two parts separated by a chamber of larger diameter than each of said parts, and a resonwable cap closing the said chamber, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

THOMAS M. SAURMAN.

Witnesses:

WILLIAM E. BRADLEY, Jos. H. KLEIN.