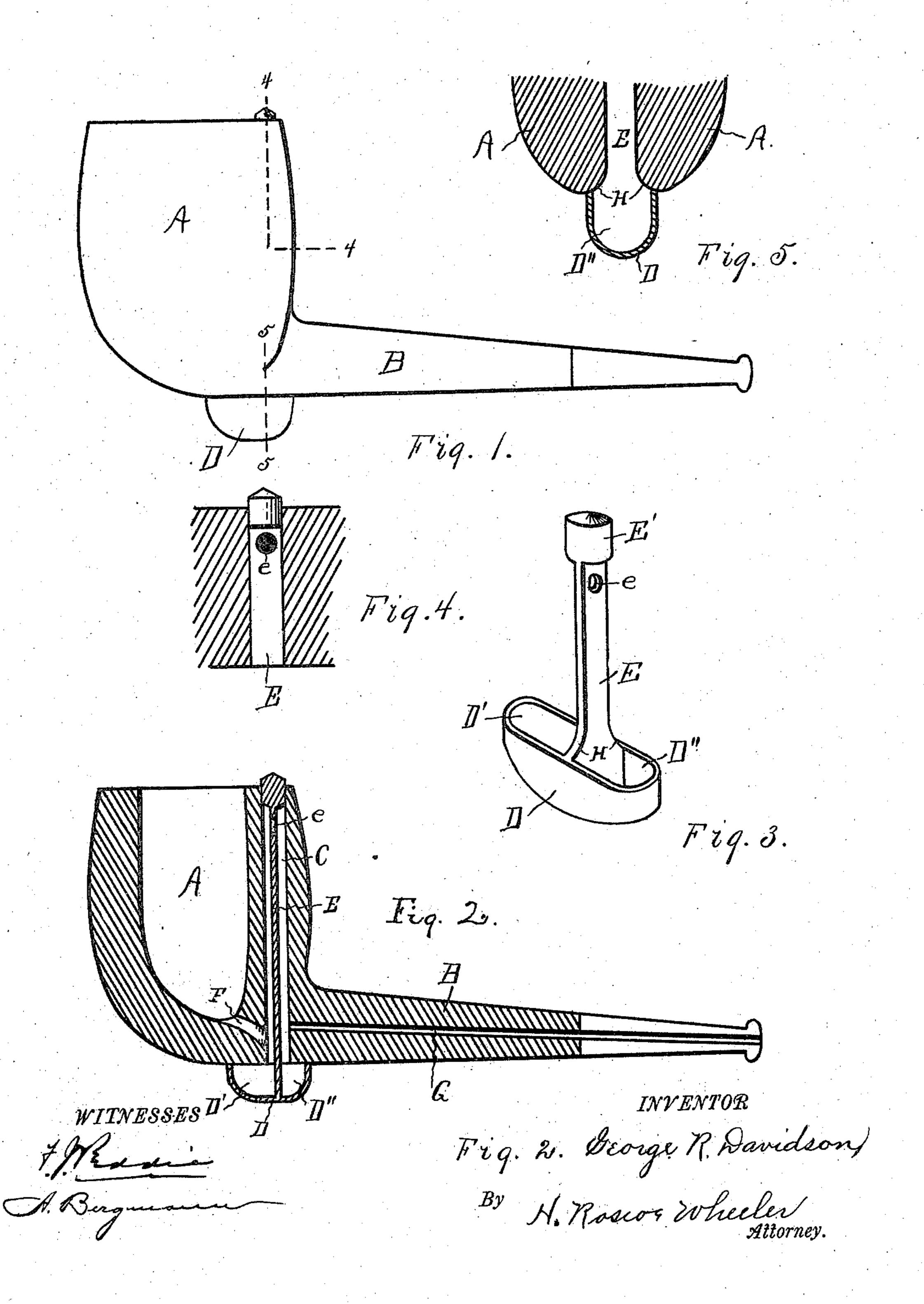
## G. R. DAVIDSON. TOBACCO PIPE.

No. 575,334.

Patented Jan. 19, 1897.



## United States Patent Office.

GEORGE R. DAVIDSON, OF PORT HURON, MICHIGAN.

## TOBACCO-PIPE.

SPECIFICATION forming part of Letters Patent No. 575,334, dated January 19, 1897.

Application filed March 30, 1896. Serial No. 585,415. (No model.)

To all whom it may concern:

Be it known that I, George R. Davidson, a citizen of the United States, residing at Port Huron, in the county of St. Clair and State of Michigan, have invented certain new and useful Improvements in Tobacco-Pipes; and I 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, forming a part of this specification.

This invention relates to new and useful improvements in tobacco-pipes; and it consists in the construction and arrangement of parts, as hereinafter fully set forth, and pointed out

particularly in the claim.

The object of the invention is to provide a tobacco-pipe wherein provision is made for 20 directing the moisture that gathers in the bottom of the bowl and stemout of the course in which the smoke is drawn in passing from the bowl of the pipe outward through the discharge end of the stem and collecting such 25 moisture in a suitable receptacle, so that it may be withdrawn from the pipe without passing through the stem thereof and being taken into the mouth of the smoker, which arrangement also lengthens the draft, thereby 30 cooling the smoke, and which arrangement permits only dry smoke to be taken from the stem in the act of smoking, thereby overcoming the ill effects of nicotine by preventing said nicotine being drawn into the mouth of 35 the smoker, which object is attained in the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved pipe. Fig. 2 is a central longitudinal section through Fig. 1. Fig. 3 is a perspective view of the divided vessel or basin for catching the drippings that accumulate in the pipe while tobacco is being smoked therein, said view also showing the blade or tongue that divides the flue, as hereinafter more fully set forth. Fig. 4 is a section of a portion of the pipe as taken on dotted line 4 4 of Fig. 1, said view showing the upper end of the tongue and plug in position in the flue of the pipe. 50 Fig. 5 is a section on dotted line 5 5 of Fig.

1, showing the catch-basin and portions of the sides of the pipe in section.

Referring to the letters of reference, A designates the bowl of the pipe, and B the stem, that projects at an angle from the lower 55 portion thereof

portion thereof.

Between the opening in the bowl A and the side of the pipe from which the stem leads I provide a circular aperture or flue C, said flue extending vertically within the shell of 60 the bowl, one end of said flue opening upward through the upper edge of the bowl, and the other end extending downward and opening through the under side of the pipe, as clearly shown in Fig. 2.

D designates a basin or vessel, which may be of any suitable form, and E designates a tongue or blade which extends upward from the bottom of said basin, dividing said basin D into two divisions D' and D". Extending 70 through the tongue E, near the top thereof, is an aperture e, and the end of the tongue E beyond said aperture e terminates in the plug E', said plug being of such a caliber as to snugly fit the bore of the aperture or flue C. 75

F designates a short passage-way leading from the lower end of the opening in the bowl A in a downward direction and opening into the lower end of the flue C, as shown in Fig. 2, and G designates the central longitudinal opening through the stem B of the pipe, one end of said opening leading into the flue C, and the opposite end leading outward through the mouthpiece on the outer end of the stem.

The operation of smoking and cleaning this improved pipe is as follows: The position of the parts, as shown in Figs. 1 and 2, is the normal condition of the pipe. When it is desired to smoke tobacco or other narcotic, 90 such tobacco is placed within the bowl A and lighted in the ordinary manner, and the course of the smoke will be seen by reference to Fig. 2. As a suction is formed at the mouth piece of the stem B by drawing thereon, the smoke 95 from the burning tobacco is drawn downward through the opening F into the lower end of the flue C, thence upward between the front side of the tongue E and the opposite adjacent side of the flue C to the opening e 100 through said tongue, thence through said opening and downward between the back face of said tongue and the opposite adjacent wall of the flue C, as will be understood, thence

outward through the opening G in the stem and mouthpiece of the pipe.

It is well known that after smoking a pipe of the ordinary pattern for a length of time 5 the nicotine is extracted from the tobacco by the passage of heat and smoke through it and said nicotine deposited in the lower portion of the bowl, and frequently said nicotine is drawn into the mouth of the smoker, leav-

10 ing a disagreeable effect.

It will be seen that with the pipe I have herein shown when the nicotine gathers in the lower portion of the bowl A it will run and be drawn downward through the short 15 opening F, and as it gathers on the walls of said opening it will flow down into the division D' of the basin D, the smoke being drawn upward toward the opening e in the tongue E. Should any of the nicotine in the 20 swift passage of the smoke fail to be deposited in the division D' of the basin, a portion of said nicotine will be collected upon the front face of the tongue E and also upon the face or wall of the flue Copposite said tongue, 25 and when a sufficient amount of nicotine has been collected upon either face to be moved by gravity said nicotine will have a free passage-way in which it may run straight downward into said division D' of the catch-basin. 30 Should it happen that any of the nicotine be carried beyond these collecting parts, it will gather upon the back face of the tongue E and the wall of the flue opposite said back face, and when a sufficient amount has been 35 collected in this way it is permitted to run down and lodge in the division D" of the basin D, as will be well understood.

> The division D" of the basin need not be as large as division D', for the reason that 40 the greater portion of the nicotine is caught and directed into the division D' before it reaches division D''. It will be seen that there is no possibility of raising the nicotine out of either of the divisions D' and D', as 45 said nicotine is out of the draft of the passage of the smoke from the bowl to the stem.

> It will be seen by referring to Figs. 4 and 5 that tongue E is so closely fitted in the flue C that it is impossible for anything to pass 50 or be drawn into the stem of the pipe except that it passes through the opening e near the top of the tongue, and said smoke is caused to pass through said opening e by reason of the plug E' being tightly fitted into the bore 55 of the flue C, and Fig. 5 clearly shows the flared opening of the lower end of the flue C, the sides of which opening are adapted to snugly fit against the shoulders H of the tongue E. It will be understood, however, 60 that said tongue may be of the same width throughout its entire length and the flared opening be dispensed with.

When it is desired to clean the pipe after tobacco has been smoked therein, the basin 65 is grasped on opposite sides with the fingers and drawn straight downward until the plug E' comes out of the flue C, and it will be seen

that, as said plug closely fits the bore of the flue C, it will, in its downward movement, scrape all sides of said flue, thereby thor- 70 oughly cleaning it throughout its entire length. After said tongue has been extracted from the flue C the deposit of nicotine or other accumulation may be poured out of the divisions D' and D" and the walls of the flue, 75 the sides of the tongue E, and said divisions thoroughly cleansed.

It will be seen that when the basin D and tongue E have been removed from the pipe a clear and direct opening is formed, whereby 80 all parts of the interior of the pipe may be

thoroughly cleaned and dried.

It will also be seen that if this improved pipe be smoked with the stem thereof above the bowl any saliva passing down said stem 85 from the mouth of the smoker will be caught and retained in the division D" of the basin. thereby preventing its soaking into the tobacco in the bowl, and affording, with the arrangement of the other parts, a cool, dry 90 smoke, said smoke being cool by reason of the distance it travels in passing up and down the double flue, said double flue being formed, as will be seen, by the opening C with the tongue E extending centrally therein. Then 95 said smoke passes outward through the stem and mouthpiece of the pipe.

Should the tongue E be found to tightly adhere within the flue C, so that it would be difficult to withdraw said tongue and basin, 100 the plug E', projecting above the upper edge of the bowl, may be rapped or pressed downward until it comes flush with said upper edge, when it will be found that said tongue, plug, and basin may easily be withdrawn.

Having thus fully set forth my invention, what I claim as new, and desire to secure by

Letters Patent, is—

The tobacco-pipe described and shown consisting of the bowl, the tobacco-receptacle  $\Lambda$  110 having a vertical flue C extending entirely through the inner side wall thereof and having a downwardly-inclined passage-way F leading from the bottom of the tobacco-receptacle to said flue, the same projecting from 115 said bowl opposite said flue C at a right angle and having a smoke-passage therethrough which communicates with said flue near the lower end thereof opposite the passage-way F, the blade E, adapted to be inserted in said flue 120 to form separate compartments therein, and having an opening e therethrough near its upper end, the plug on the upper end of said blade adapted to fit the upper end of the bore of said flue and the drip-chamber on the lower 125 end of said blade adapted to communicate with the respective divisions of the flue, and fit against the bowl.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE R. DAVIDSON.

Witnesses:

H. Roscoe Wheeler,

C. A. SULLIVAN.