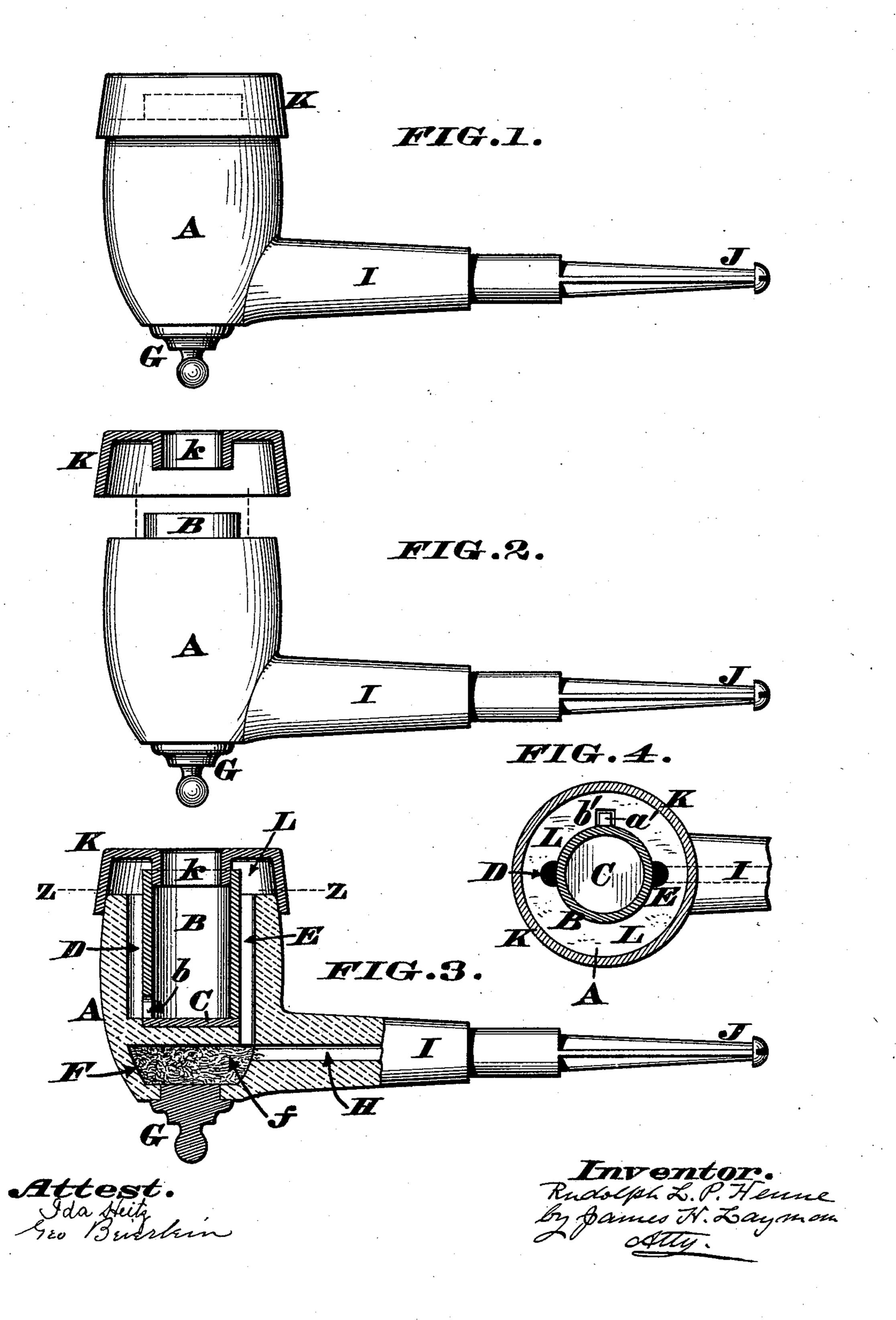
R. L. P. HENNE. TOBACCO PIPE.

No. 582,423.

Patented May 11, 1897.



United States Patent Office.

RUDOLPH L. P. HENNE, OF CINCINNATI, OHIO.

TOBACCO-PIPE.

SPECIFICATION forming part of Letters Patent No. 582,423, dated May 11, 1897.

Application filed March 25, 1897. Serial No. 629,149. (No model.)

To all whom it may concern:

Be it known that I, RUDOLPH L. P. HENNE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State 5 of Ohio, 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, reference being had to the annexed drawings, o which form a part of this specification.

My invention consists in providing a smoking-pipe with a novel arrangement of channels, bushing, and cap, which devices cause nicotine and other deleterious matters given 15 off by burning tobacco to be deposited within a special chamber, where they are arrested by a suitable absorbent, so as to prevent them being drawn out through the pipe-stem or mouthpiece, as hereinafter more fully de-

20 scribed.

In the annexed drawings, Figure 1 is a side elevation of my improved tobacco-pipe. Fig. 2 is a similar elevation, but showing the cap detached from the bowl and sectioned. Fig. 25 3 is an axial section of the complete pipe. Fig. 4 is a horizontal section of the cap and bushing, said section being taken at the line Z Z of the preceding illustration.

The bowl A of the pipe may be made of any 30 suitable material; but it is preferably composed of "brier-root," and has a central bore, within which is inserted a metallic tube or bushing B, open at top, but closed at bottom, as seen at C in Fig. 3. Furthermore, this 35 tube B and bottom C may be a single piece of metal; but usually they are two separate pieces, the object of these devices B and C being to prevent burning tobacco coming in direct contact with the brier-root bowl.

Tube B has on one side and near the bottom C a lateral port b, communicating with a vertical channel D of the bowl, which channel is closed at bottom, but open at top.

E is another vertical channel diametrically 45 opposite the channel D and leading down to a special chamber F at the base of the pipe, this chamber being charged with cotton or sponge or other suitable absorbent filling f.

G is a plug, the removal of which affords

50 access to the chamber F.

H is a passage traversing the pipe-stem I,

and J is a customary mouthpiece applied to said stem.

K is a metallic cap that fits snugly over the bowl A and has a short neck k, that en- 55 gages with the upper part of tube B. This neck usually fits within the tube, as seen in Fig. 3, but it may surround it, as indicated

by dotted lines in Fig. 2.

The arrangement of the above-described 60 devices and the operation and advantages of the pipe will be apparent by referring to Fig. 2, which illustration shows that the tube B projects above the top of bowl A, while the cap K fits snugly around the latter. It will 65 also be noticed that the neck k fits snugly within the upper part of said tube. Consequently an annular chamber L is formed between said tube and the interior of the cap, as more clearly seen in Fig. 4. Therefore 70 when this tube is charged with tobacco, the latter ignited, and a draft created through the mouthpiece J the smoke and other products of combustion first escape at the port b and enter the channel D. They then ascend 75 within this channel, enter the annular chamber L, divide into two currents, and thus pass around to the other channel E. The smoke then descends within said channel E, and any nicotine, oil, or other objectionable 80 matters are precipitated into the chamber F. and absorbed by the filling f. Consequently the smoke traversing the stem-passage H is perfectly pure, and for this reason the pipe can be used many months without requiring 85 cleaning of any kind.

At intervals the plug G can be pulled out and a new filling inserted within the chamber F, and by simply detaching the cap K the channels D E can be readily cleaned out 90 by passing a nail or wire through them.

It is advisable to have the three channels. DEH in the same vertical plane, to arrange the channel D diametrically opposite the one E, and to insert the tube B in such a man- 95 ner as to bring its lateral port b in line with the lower end of said channel D, which insertion of said tube will be facilitated by the construction seen in Fig. 4. Here the bowl A has a vertical groove or notch a' to admit 100 a rib or pin b', projecting outwardly from the tube, said groove being equidistant from the

channels D E. Consequently when this pin is inserted within the notch the tube-port b will be in line with the channel D. Finally it is preferred to first insert the tube within 5 the central bore of the bowl and then drill out the channels D E on the opposite sides of said tube, but this procedure is merely a matter of convenience and may be departed

from, if desired.

I claim as my invention—

 A tobacco-pipe provided with channels
 B, E, H, chamber F, and plug G; a ported tube B b, inserted within the bowl A, and projecting above the top of the latter, and a

detachable cap K, surrounding said bowl, 15 and having a neck k, engaged with said tube, in the manner described, and for the purpose stated.

2. A tobacco-pipe having the channels D, E, H, chamber F, plug G, tube B b, and cap 20 K k, arranged as herein described, the notch a', and projection b', for the purpose stated.

In testimony whereof I affix my signature

in presence of two witnesses.

RUDOLPH L. P. HENNE.

Witnesses:

JAMES H. LAYMAN, JOHN C. ROGERS.