

(No Model.)

J. P. LANGE.  
PIPE STEM.

No. 296,417.

Patented Apr. 8, 1884.

Fig. 1

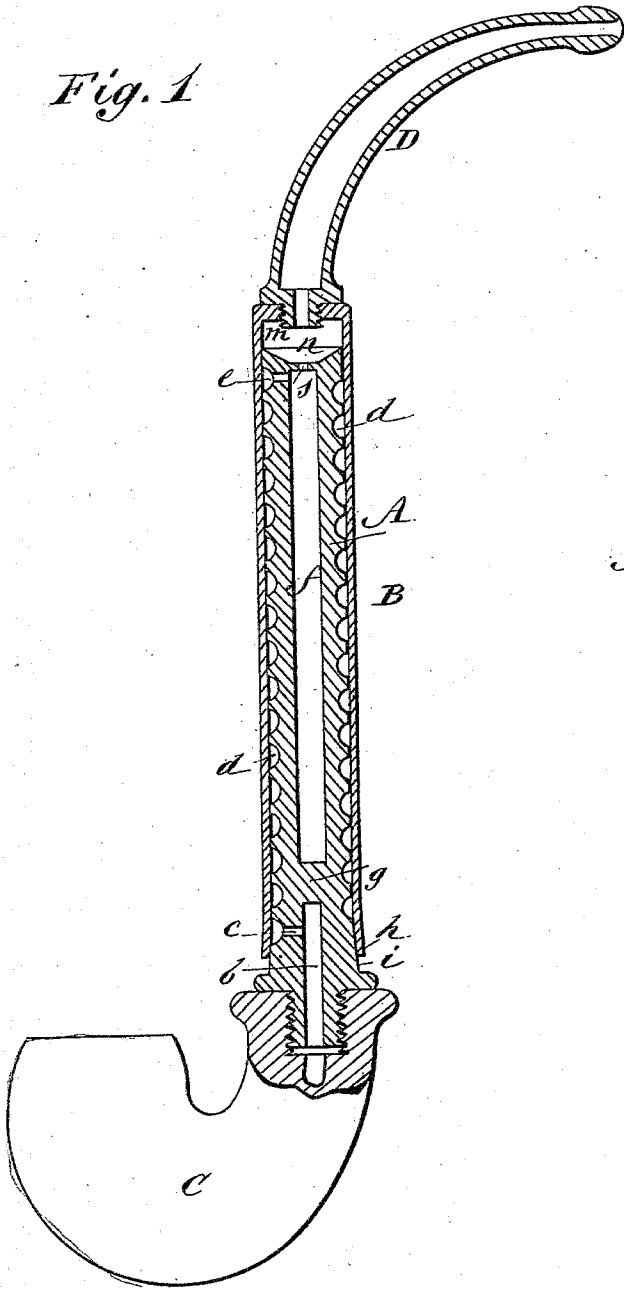
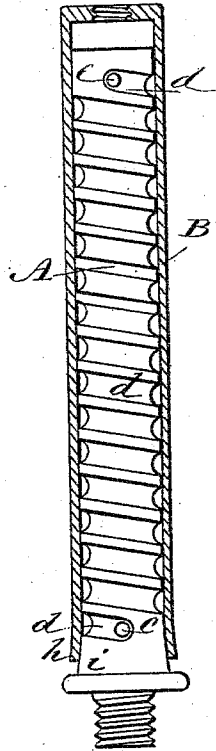


Fig. 2



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JURGEN PETER LANGE, OF BUTLER, NEW JERSEY.

## PIPE-STEM.

SPECIFICATION forming part of Letters Patent No. 296,417, dated April 8, 1884.

Application filed January 28, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JURGEN P. LANGE, of Butler, in the county of Morris and State of New Jersey, have invented new and useful

Improvements in Pipe-Stems, of which the following is a full, clear, and exact description.

My invention relates to improvements in pipe-stems; and it consists in the peculiar construction and arrangement of parts, as herein after fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate

corresponding parts in both the figures. Figure 1 represents a longitudinal section of a pipe-stem embodying my invention, with mouth-piece attached, as also the bowl, which is shown partly broken away at its connection with the stem. Fig. 2 is a longitudinal exterior view of the central main or core portion of the stem, with a surrounding-tube in section.

The stem, which may be made of hard rubber or any other suitable material, consists of a main or central portion, A, and an outer casing or tube, B. The main piece A, which screws or otherwise fits at its lower end into the bowl C, is constructed, for a short distance up said end, with a straight hole, *b*, that communicates with a small branch hole, *e*, leading to and through the side of the piece A, where it connects with the lower end of a spiral groove, *d*, formed in and around the exterior of the core-piece A, said groove preferably being of such pitch as to make it of considerable length for a comparatively short length of stem. The upper end of this spiral groove connects in like manner, by a side hole, *e*, with a prolonged central hole, *f*, in the piece A. This hole is separated from the lower longitudinal hole, *b*, by a partition or solid portion, *g*.

The tube B, with which the mouth-piece D connects, is made to fit snugly over the central piece, A, inclosing the spiral groove *d*, and is formed slightly flaring at its lower end, *h*, to fit a corresponding taper, *i*, on the lower end of the piece A, whereby the tube will be securely held to its place, and will admit of easy removal when required to clean the stem, which may be done with very little trouble. In the top of the piece A is a small hole,

*s*, connecting the hole *f* with the mouth-piece or with a small chamber, *m*, between the mouth-piece and upper end of the piece A. The separation of the holes *b* and *f* by the partition *g* makes the longer hole *f* a reservoir for nicotine rising with the smoke through the holes *b c* and spiral groove *d*, and from thence by the side hole, *e*, into the hole *f*, where the nicotine is deposited, while the smoke passes out by the aperture *s* to the mouth-piece. The separation of the nicotine-reservoir *f* keeps dampness from the bowl. What little nicotine may be precipitated in the mouth-piece will pass out through the aperture *s* into the reservoir *f*, the upper end of the piece A being cup-shaped on its exterior, as at *n*, to collect and conduct such nicotine to the aperture *s*; and this aperture *s*, by reason of its central position and reduced size relatively to the hole or reservoir *f*, will prevent any nicotine passing from the reservoir into the mouth-piece when the pipe is tipped or laid on one side.

I am aware that a hollow core divided into two compartments and provided with spiral grooves on its outer surface communicating with said compartments has been inclosed within an outer shell, and I therefore do not claim such invention.

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

1. In a pipe-stem, the combination, with the spirally-grooved core A, having the longitudinal passages *b f* and the transverse passages *c e*, of the outer casing, B, having the mouth-piece D secured to it, and projecting beyond the end of the core to form the chamber *m* between its end and the end of the core, substantially as herein shown and described.

2. In a pipe-stem, the spirally-grooved core A, having its upper end cup-shaped, as at *n*, and provided with longitudinal passages *b f*, the transverse passages *c e*, and the hole *s*, in combination with the outer casing, B, having the mouth-piece D secured to it, and projecting beyond the end of the core to form the chamber *m*, substantially as herein shown and described.

JURGEN PETER LANGE.

Witnesses:

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