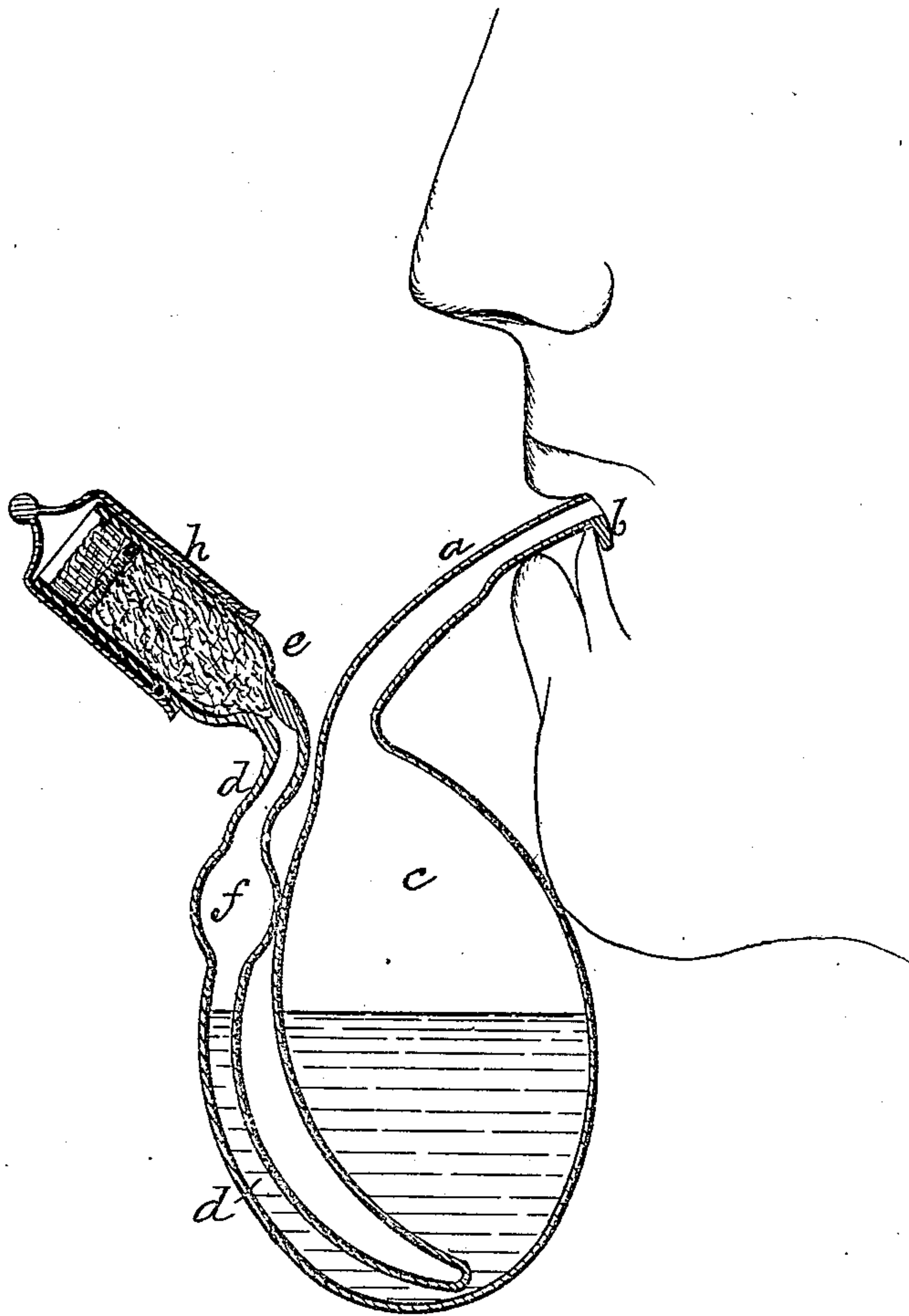


H. BRADFORD.
TOBACCO PIPE.

No. 39,987.

Patented Sept. 15, 1863.



Witnesses.

Thos. Geo. Harold.
Chas. H. Smith.

Inventor.

Hezekiah Bradford.

UNITED STATES PATENT OFFICE.

HEZEKIAH BRADFORD, OF NEW YORK, N. Y., ASSIGNOR TO HORATIO BOGERT, OF SAME PLACE.

IMPROVEMENT IN TOBACCO-PIPES.

Specification forming part of Letters Patent No. 39,987, dated September 15, 1863; antedated May 5, 1863.

To all whom it may concern:

Be it known that I, HEZEKIAH BRADFORD, of the city and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Smoking-Tubes; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein I have represented a vertical section of my improved smoking-tube.

My invention consists in a smoking tube or pipe provided, first, with a spur to take inside the teeth, so that the pipe can hang thereby; second, with a chamber or bulb containing water or other liquid, from the bottom of which the tube passes away to the bowl containing the tobacco, said pipe being provided, third, with a small reaction-bulb to prevent the liquid going up to the tobacco when the smoke is exhaled; fourth, with a return-bend in the tube coming nearly to the place where the smoke is drawn off to the mouth, so that the level of the water consequent upon the angle at which the pipe may hang or be held while being smoked will be as far below the bottom of the bowl containing the tobacco as possible; and, fifth, with an exterior cylinder surrounding the bowl, so that the air drawn into the pipe is heated between the bowl and exterior cylinder, and renders the combustion more perfect, and radiation of heat from the outside of the pipe, which might be unpleasant, is avoided.

In the drawing, *a* is the mouth-piece, formed with a spur or projection on the under side at *b* sufficient to take behind the teeth of the lower jaw and suspend the pipe, thereby preventing the pipe dropping when the teeth may be parted in the act of speaking. The mouth-piece *a* is formed with or attached to the bulb or chamber *c*, that has a pipe, *d*, passing away from the lower side thereof and curved around to near the place where the mouth-piece *a* unites with said bulb, near which point the bowl *e* of the pipe is formed on or attached to the said pipe *d*. In this pipe *d* is a chamber or bulb, *f*, and the bulb *c* is to receive water or other liquid, as shown. The tobacco or material to be smoked being lighted in the bowl *e*, as usual, the smoke is inhaled through

the pipe *d*, and bubbles up through the liquid in *c*, which liquid condenses and retains the oily matter and other impurities thrown off in the combustion of the tobacco, preventing the same from passing into the mouth and throat, and hence avoiding the injury arising, to a greater or less extent, to the smoker from such oily vapors and impurities. When the smoke is exhaled, the slight pressure ensuing in the bulb *c* causes the liquid to rise in the tube *d*, and the bulb *f* prevents the same going up into the bowl *e*, because, under ordinary circumstances, such reaction in the pipe would cease before the bulb was full. The bowl *e* is provided with the cylindrical cap *h*, that sits loosely over said bowl, so that when the smoke is drawn through the said pipe the air passes up between this cap *h* and the bowl *e*, and abstracts heat from the bowl, and hence said air is better adapted to promote the combustion of the tobacco than if cold, and any unpleasant radiation from the heated bowl is prevented. The returning of the pipe *d* to near the point where the pipe *a* unites with the bulb *c* prevents the water in said bulb running into the bowl *e* by any ordinary change of inclination in holding or smoking the pipe.

This pipe may be made of glass or any other suitable material, and the size and shape of the parts may be varied to suit the convenience and taste of the smoker, and the bowl *e* may be at a greater distance from the return-bend, if desired.

I do not claim the well-known pipe designated the "Turkish pipe," in which the smoke is drawn through a liquid for its purification; but

What I claim, and desire to secure by Letters Patent, is—

1. The spur or projection *b* to hook behind the teeth in the lower jaw and suspend the pipe, in the manner and for the purposes specified.

2. The pipe *d*, formed with the bulb *c*, and entering said bulb at the bottom, in combination with the mouth-piece or pipe *a*, passing away from the upper part of said bulb, in the manner and for the purposes specified.

3. The pipe *d*, returned or bent around from the bottom of the bulb *c* to the mouth-piece

or tube *a*, or nearly so, as specified, and for the purposes set forth.

4. The reaction bulb or chamber *f* in the pipe *d*, for the purposes specified.

5. The cylinder or cap *h*, surrounding the bowl *e*, for the purpose of directing the air against the heated bowl in its passage into the pipe, for the purposes specified.

In witness whereof I have hereunto set my signature this 9th day of October, A. D. 1862.

HEZEKIAH BRADFORD.

Witnesses:

CHAS. H. SMITH,

THOS. GEO. HAROLD.