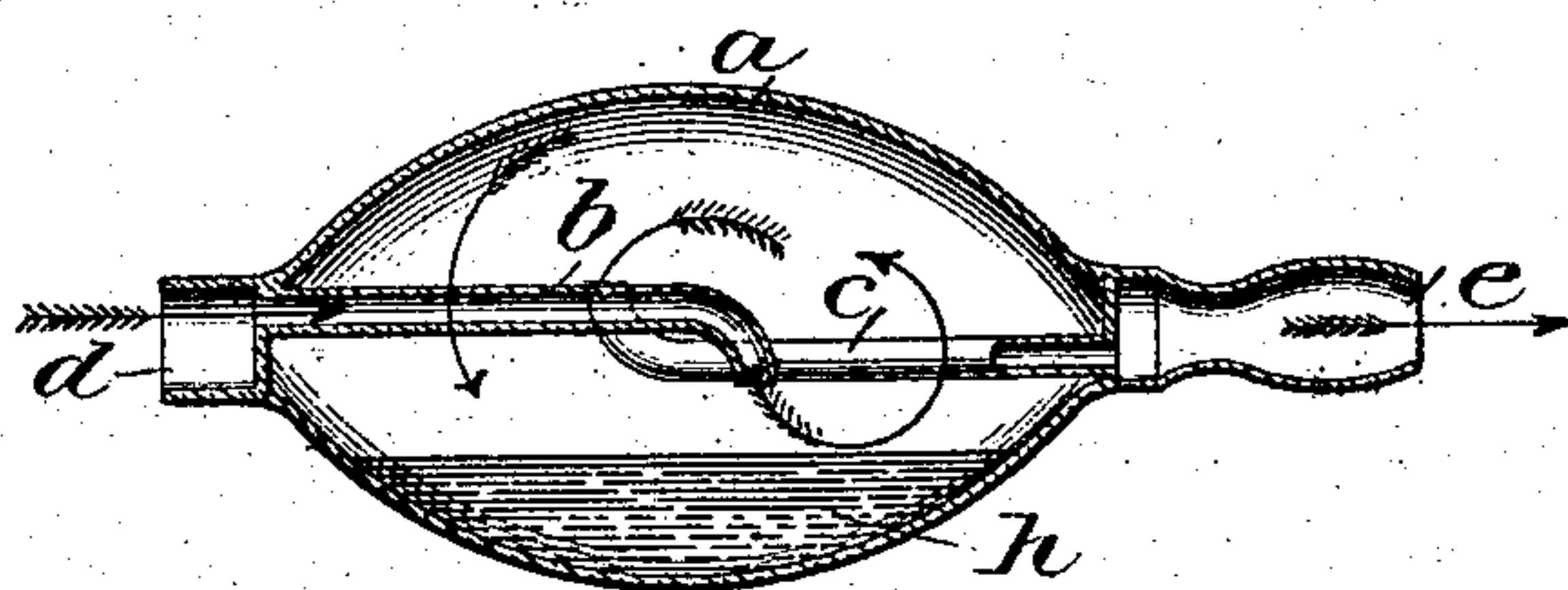


(No Model.)

W. B. HIDDEN.
INHALER.

No. 604,935.

Patented May 31, 1898.



Witnesses
Joseph E. Patrick
A. Jackson Curtis

Inventor:
William B. Hidden

UNITED STATES PATENT OFFICE.

WILLIAM B. HIDDEN, OF BOSTON, MASSACHUSETTS.

INHALER.

SPECIFICATION forming part of Letters Patent No. 604,935, dated May 31, 1898.

Application filed May 13, 1897. Serial No. 636,405. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. HIDDEN, a citizen of the United States, residing in Boston, county of Suffolk, State of Massachusetts, have invented an Inhaler, of which the following is a specification.

The object of my invention is to provide a simple, convenient, and efficient inhaler which can be carried about the person and available to use at any time. It is so constructed that the inhalant in liquid form can be carried in it without spilling and be ready for use when needed. Either end is adapted for its special use with equal effect. It is easily filled, has no stopples, and yet there is no appreciable evaporation of the medicament when not in use. There are no outside complications, and it is so arranged and proportioned as to get the most complete medicinal effect. My inhaler can be made of glass, metal, vulcanized material, or any materials that can be formed and joined, as hereinafter described.

The inhaler consists of an elongated egg-shaped glass shell *a*, whose diameter increases from the ends toward the center, with openings *d* and *e* at respective ends. Into the opening *d* is sealed tube *b*, with its opening more or less toward side of shell *a*. Into the opening *e* is sealed tube *c*, with its opening more or less toward side of shell *a* and opposite tube *b*. The tubes *b* and *c* are of such length that a sufficient quantity of the inhalant will be retained in the shell *a* in all

positions and the diameter of the tubes may be such as the medicament may require. The medicament is shown in the lower part of shell *a* at *h*.

The operation is as follows: When *e* is placed in the mouth and inhalation begins, the air is drawn through opening *d* and tube *b*, creating a strong current over the surface of *h*, within the shell *a*, causing rapid evaporation, which is drawn with the air through *c* and opening *e* into the lungs, the shape of the shell and arrangement of the tubes effecting the most complete medication of the air within the shell. The opening *d* is intended for use through the nostrils, when the same results are obtained in an opposite direction. The best results are secured when the incoming air is projected in the direction of the fluid.

My inhaler is replenished through opening *e*, which is slightly enlarged for that purpose.

I claim—

An inhaler, consisting of an elongated shell, of greater diameter at the center than at the ends, having tubes extending from the opposite ends inwardly to the larger diameter, the inner ends of said tubes being curved in opposite directions, substantially as described.

WILLIAM B. HIDDEN.

Witnesses:

JOSEPH E. PATRICK,
A. JUDSON CURTIS.