

(No Model.)

A. S. JOHNSTON, Dec'd.

M. R. JOHNSTON, Administratrix.

INHALER.

No. 422,420.

Patented Mar. 4, 1890.

Fig. 1.

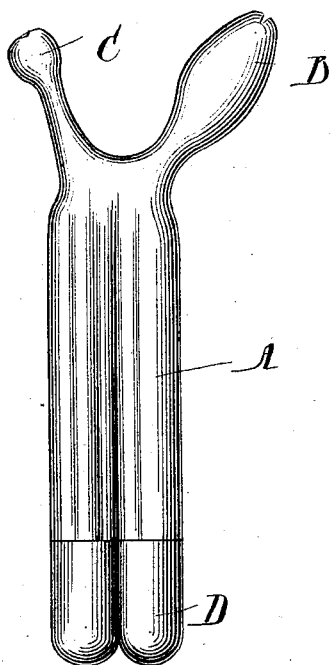
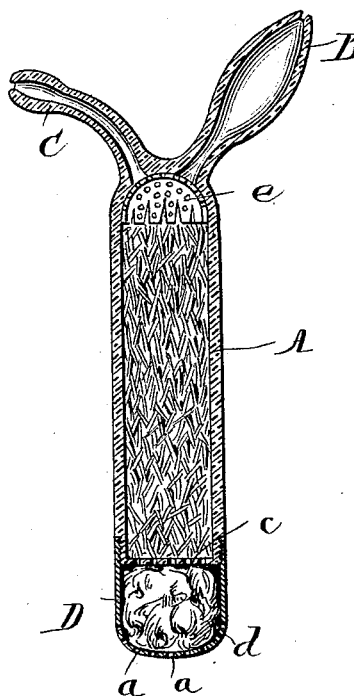


Fig. 2.



Witnesses:

W. Baird
Harry T. Jones

Inventor:

Austin S. Johnston

UNITED STATES PATENT OFFICE.

AUSTIN S. JOHNSTON, OF CHICAGO, ILLINOIS; MARIETTA R. JOHNSTON ADMINISTRATRIX OF SAID AUSTIN S. JOHNSTON, DECEASED.

INHALER.

SPECIFICATION forming part of Letters Patent No. 422,420, dated March 4, 1890.

Application filed September 7, 1889. Serial No. 323,281. (No model.)

To all whom it may concern:

Be it known that I, AUSTIN S. JOHNSTON, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Inhalers, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of a double inhaler. Fig. 2 is a central longitudinal section through a single inhaler.

This invention relates to inhalers; and its object is to produce an improved inhaler which will be very effectual in its operation and will be simple in construction, which I accomplish as illustrated in the drawings, and as hereinafter described.

That which I claim as new will be pointed out in the claim.

In the drawings, A represents a tube made of metal or other suitable material and adapted to contain an inhalent.

In Fig. 1 a double tube is shown, which is adapted to contain two inhalents, either one of which may be used, or the vapors of both of which may be mingled and used together.

B represents a hollow bulb adapted to be inserted in one of the nostrils. It is made of such size and form as to fill the nasal passage, and is provided with a hole or opening at its end.

C represents a mouth-piece, adapted to be held in the mouth for purposes of inhalation. It is provided with an air or vapor passage and an opening at its end.

The tube A, bulb B, and mouth-piece C, as shown, are cast or made in a single piece, and, as shown in Fig. 2, the bulb B has a communication with the tube A near the place of communication of the passage C with the tube A.

D represents a cap, which is screwed or otherwise secured on the lower end of the tube A. The lower end of the cap is perforated or provided with a piece of wire-cloth, through which air may pass into the cap, as at *a*. The cap

D is filled with cotton, wool, or any other suitable and similar filling material *d*. The tube A is filled with the inhalent, and between the tube A and cap D is placed a piece of wire-cloth *e*, which keeps the inhalent and wool or cotton *d* separate and permits the passage of air. At the upper end of the tube is placed a piece of wire-cloth *e*, which prevents the passage of any of the inhalent into the bulb B or mouth-piece C.

The user, for diseases of the throat, takes the mouth-piece C in the mouth and inhales the vapor from the tube A by drawing in a full breath, keeping the end of the bulb B closed by placing a finger over the opening, then removing the finger from the opening and drawing in a second full breath. The first breath will draw in the vapor of the inhalent, as the passage through the tube A is the only open passage. Then when the opening in the end of the bulb is open the air will be drawn through the bulb B and not through the tube A, and little, if any, vapor from the inhalent will be drawn in. The second breath will draw the inhalent to the seat of the disease and render it much more effective than when a second inhalation is taken, or a full inspiration of air taken, as in natural breathing.

When the disease is one of the nasal passage, the bulb B is inserted in the nostril and the end of the mouth-piece C closed by the finger and the inhaler is used, as before described, for diseases of the throat. This construction and method of using the inhaler has been found to be very effective in use.

The inhalent to be used may be varied to suit the requirements of the particular disease to be cured, and will cure such diseases as hay-fever, catarrh, hoarseness, sore throat, headache, and similar disease, which can be reached by the inhalent.

The cotton, wool, or other material *d* in the cap D filters the air and prevents the passage of dust into the inhalent.

I am aware that inhalers are in use con-

sisting of a tube filled with an inhalent, and I therefore do not claim such construction broadly; but

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

In an inhaler, the combination of a tube A containing an inhalent, a bulb B adapted to be inserted in the nostril and having communication with the upper end of the tube

A, a mouth-piece having communication with 10 the tube A near the point of communication of the bulb B, a wire-cloth *e*, cap D, having perforations, a wire-cloth *c*, and a filtering substance *d*, substantially as specified.

AUSTIN S. JOHNSTON.

Witnesses:

I. C. BAIRD,

HARRY T. JONES.