

G. VON ACH.
 INHALER.
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1,084,182.

Patented Jan. 13, 1914.

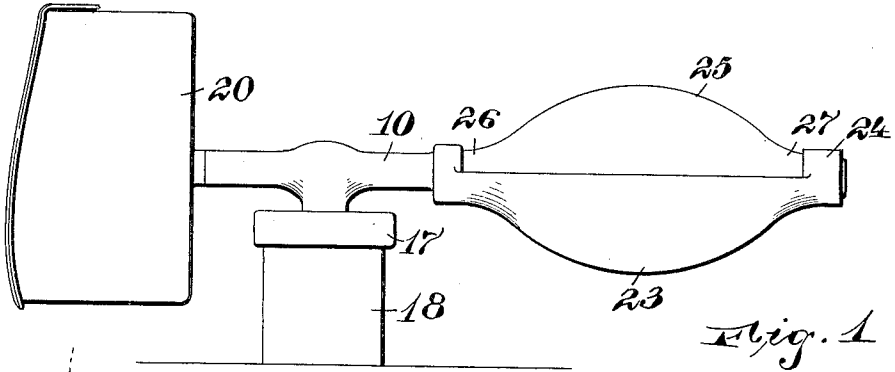


Fig. 1

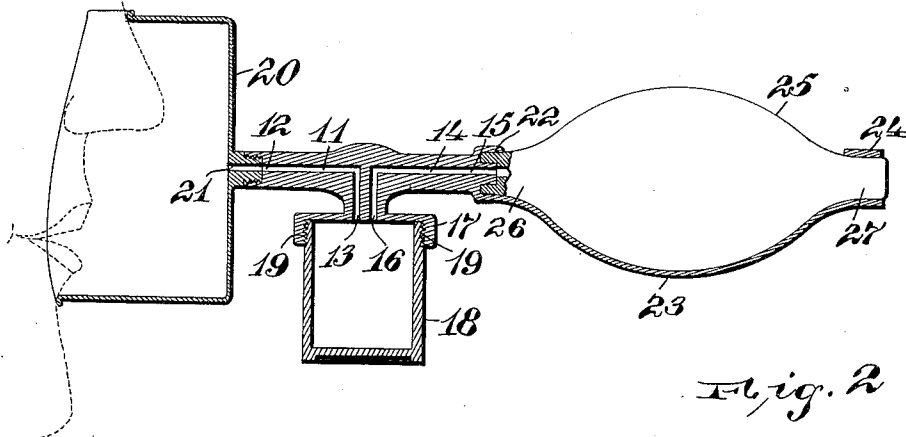


Fig. 2

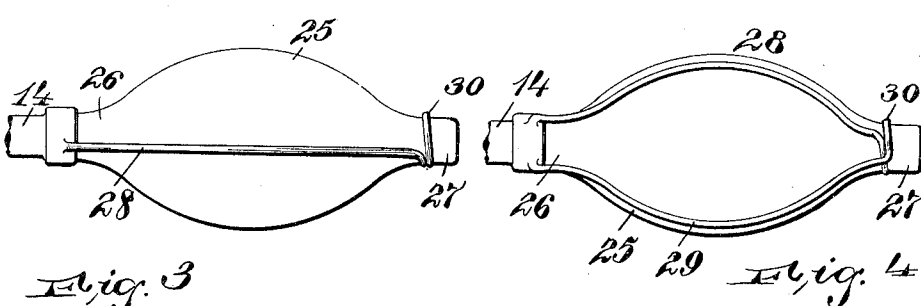


Fig. 3

Fig. 4

WITNESSES:
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INHALER.

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To all whom it may concern:

Be it known that I, GEORGE VON ACH, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Inhalers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to an improved inhaler which is of a construction that is easily balanced, is very compact and is stable.

The invention further relates to an inhaler to which the face-plate, through which the inhalation is taken, and the bulb-support are arranged across the top of the receptacle, whereby the receptacle can be used as a handle for the device, the bulb-support also being constructed to permit the ready removal of the bulb, if desired.

The invention is of a character that permits the easy substitution of one material for another in the receptacle, and one in which the receptacle, in fact the whole device, can be quickly and easily cleaned.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a side view of an inhaler. Fig. 2 is a vertical section of the same with the bulb shown in section except for one end. Fig. 3 is a side view of a modified form of bulb-support, and Fig. 4 is a bottom view of Fig. 3.

The inhaler comprises a tube 10 which has conducting passages, one of which, as at 11, has one end 12 emerging from one end of the tube and its other end 13 emerging from the side of the tube. Another conducting passage 14 has one end 15 emerging from the end of the tube opposite the end 12 of the passage 11, the passage 14 having its other end 16 emerging from the side of the tube, the two passages not being connected within the tube. A cap 17 is constructed on the tube, and the receptacle 18 is adapted to be fastened to the cap 17 in any suitable manner, preferably by the screw-threads 19. The receptacle 18 is preferably in the shape of a flat bottom jar on

which the inhaler is adapted to rest as shown in Fig. 1 when it is set down on a suitable support.

The end of the tube from which the passage 11 emerges as at 12 can be fitted with any suitable sort of inhaler or applying fixture, but I prefer to use a face-plate 20 which has a perforation 21, which perforation is in line with the passage 11 when the face-plate 20 is in place. The face-plate 20 can be of any of the usual types now in use, or any type convenient for its application to the face of the user. The end of the tube opposite the face-plate is provided with a recess 22, and this end of the tube is also provided with a bulb-support 23 which has a thimble 24 on its outer end. A compressible bulb 25, preferably of the usual rubber type with the usual check-valves therein, which check-valves are not shown, has necks 26 and 27, one of the necks fitting in the thimble 24, the thimble and the support being so disposed that when the neck 27 is in the thimble 24 the neck 26 is forced within the recess 22 and becomes seated therein with the outlet of the bulb connecting with the passage 14. To remove the bulb it is only necessary to collapse it in the center and pull its two necks from engagement with the recess 22 and the thimble 24. This easy removal of the bulb and the easy removal of the receptacle 18 and the consequent bare appearance of the device after this removal, makes the cleaning of the inhaler easy, since it can be quickly stripped of its bulb and also of its receptacle. This also provides for a quick changing of a receptacle containing one kind of material for a receptacle containing another kind.

In Figs. 3 and 4 I show a modified form of support for the bulb 25, the support consisting of a wire having the two side strands 28 and 29 which are fastened at one end to the end of the tube 14 and are bent into a shape slightly smaller than the bulb at its widest diameter so that the bulb rests easily between these strands. The strands 28 and 29 are bent at their ends into a loop 30 which is the equivalent of the thimble 24 and acts to receive the neck 27 of the bulb 25 the same as the thimble 24 does, and thus force the other end or neck 26 of the bulb in its proper position against the tube.

This device can be used for a great many

uses, and is not adapted to be used as an atomizer, but to force gas or vapor arising from a suitable material to the user when the bulb is compressed, the bulb forcing the
 5 air from its inlet at the neck 27 through the passage 14 into the receptacle 18, thus forcing some of the gas or vapor therein to emerge through the passage 11 and from the outlet of the passage 11 can be taken in
 10 by the user. This apparatus, by forcing the air through the bulb, dilutes the material coming from the jar 18, as will be evident.

The jar 18 can be used to contain different materials such as oxygen salts, oxyiodid,
 15 eucalyptus, creosote, and all tinctures such as iodine, in fact all materials that are usable by inhalation can be placed in the jar 18, and by pressing the bulb can be forced from the other end of the tube for use by the operator.
 20

The receptacle or jar acts as a base for supporting the inhaler, and when sitting on a suitable support it serves to hold the parts out of contact with the surrounding surfaces, and the bulb-support acts as a handle
 25 whereby the inhaler is held for use and can be operated with one hand, since the parts are rigid and the bulb-support can be used to compress the bulb to force the air through
 30 the inhaler.

Having thus described my invention, what I claim is:—

An inhaler comprising a tube having a conducting passage emerging from one end of the tube, the tube having a second conducting passage emerging from the opposite
 35 end of the tube, a bulb-support on one end of the tube, the bulb-support having a thimble on its outer end and having a recess at its other end, the recess and the thimble being adapted to removably receive a bulb,
 40 the bulb-support covering the lower half of the bulb and acting to support it horizontally, a cap on the tube, a receptacle secured to the cap, the receptacle having a flat bottom and acting as a support for the inhaler,
 45 the tube having its passages emerging through the cap so as to communicate with the receptacle, and a face-plate secured to the tube on the end opposite to the bulb-support
 50 whereby the face-plate and the bulb and its support are on opposite sides of the receptacle and act to balance the same.

In testimony that I claim the foregoing, I have hereunto set my hand this 12th day of
 55 June 1911.

GEORGE VON ACH.

Witnesses:

WM. H. CAMFIELD,

M. A. JOHNSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."