

(No Model.)

E. S. WERNER & J. P. S. GIFFORD.

INHALER.

No. 369,849.

Patented Sept. 13, 1887.

Fig. 1.

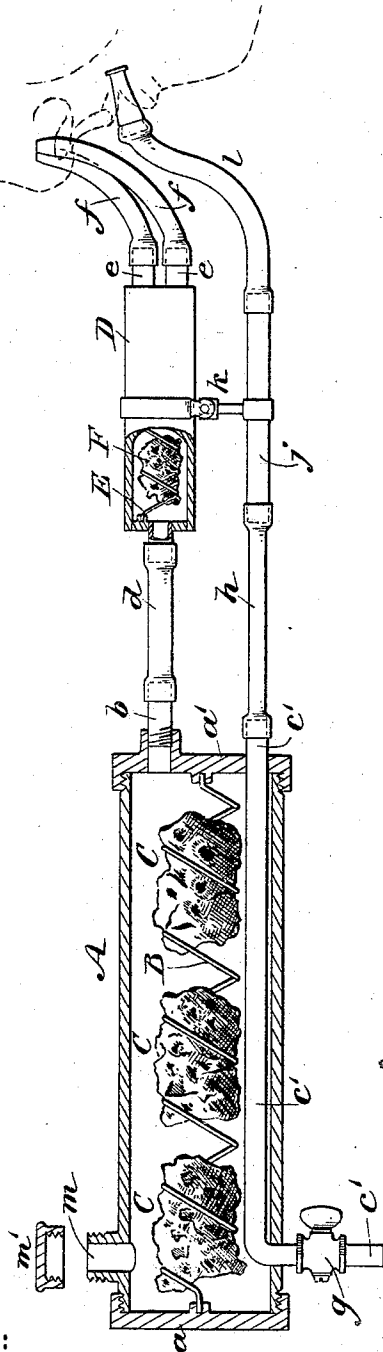
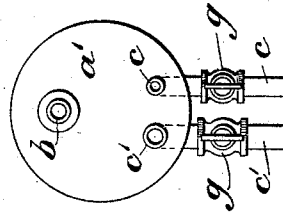


Fig. 2.



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INHALER.

SPECIFICATION forming part of Letters Patent No. 369,849, dated September 13, 1887.

Application filed December 10, 1886. Serial No. 221,189. (No model.)

To all whom it may concern:

Be it known that we, EDGAR S. WERNER, of the city, county, and State of New York, and JOHN P. S. GIFFORD, of Chatham, in the
5 county of Columbia and State of New York, have invented a new and Improved Voice and Lung Developer, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying
10 drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional elevation of our invention, and Fig. 2 is an end elevation of the
15 main chamber.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

A represents a cylindrical chamber, made
20 preferably of metal and provided with removable end caps, *a a'*, which support a wire or other device, B, for holding pieces of sponge or other absorbent material, C, in the center of the chamber. The cap *a'* has fitted in it
25 the inhaling-tube *b* and the exhaling-tubes *cc'*. The inhaling-tube *b* is a short tube, preferably of metal, and is connected to the small inhaler D by the tube *d*. The small inhaler D is provided with two nostril-tubes, *e e*, each
30 having a flexible tube or suitable tip, *f*, to enter the nostrils of the user, and within the small inhaler D is fitted the wire E, similar to the wire B of the casing A, to hold the pieces, F, of sponge or other absorbent material. The
35 exhaling-tubes *e'* are of considerable length and reach out of the casing A, as shown clearly in Figs. 1 and 2, and the outer ends are provided each with a cock, *g*, by which the tubes may be entirely closed or opened to any
40 desired extent to retard exhalation. To one or the other of the tubes *e e'* is attached, by the tube *h*, the metal tube *j*, which is suspended from the small inhaler D by a link-connection, *k*, and the tube is provided with a mouth-
45 piece or tip, *l*, to enter the mouth of the user, as shown in Fig. 1. The pieces, C F, of sponge or other material may be charged with medicating substances, or the said pieces may be omitted, if desired. The air inhaled enters

the device through the opening *m*, which may 50 be closed by a cap, *m'*.

In use the cap *m'* is removed and the user applies the tips *f* to the nostrils and the tip *l* to the mouth. Then he inflates the lungs through the nostrils and exhales from the
55 mouth through the tip *l* and tubes *l, j, h*, and *e* or *e'*, which retards the exhalation and retains the air a comparatively long time in the lungs, which is a practice very beneficial to elocutionists, public speakers, and singers for de-
60 veloping the voice and lungs.

The tube *e'* is somewhat larger than the tube *e*, and is to be used for a considerable length of time, and then the connecting-tube *h* is to be transferred to the smaller tube *e*, which
65 prolongs the exhalations.

The device may also be successfully used for administering medicine in various diseases.

Having thus fully described our invention, 70 we claim as new and desire to secure by Letters Patent—

1. The casing A, provided with the opening *m* and tube *e'*, provided with the cock *g*, in combination with the pipe reaching from the
75 tube *e'* to the mouth of the user, and the tips *f* for the nostrils, connected to the casing A, substantially as described.

2. The casing A, provided upon the inside with the coiled wire B, for holding the sponges
80 C out of contact with the interior of the casing, in combination with the mouth and nostril tubes connected to the casing A, substantially as and for the purposes set forth.

3. The casing A, having opening *m* and in- 85 haling and exhaling tubes, in combination with the small inhaler D, having tips *f* and tubes *h j l*, the tube *h* being connected to the small inhaler, substantially as described.

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