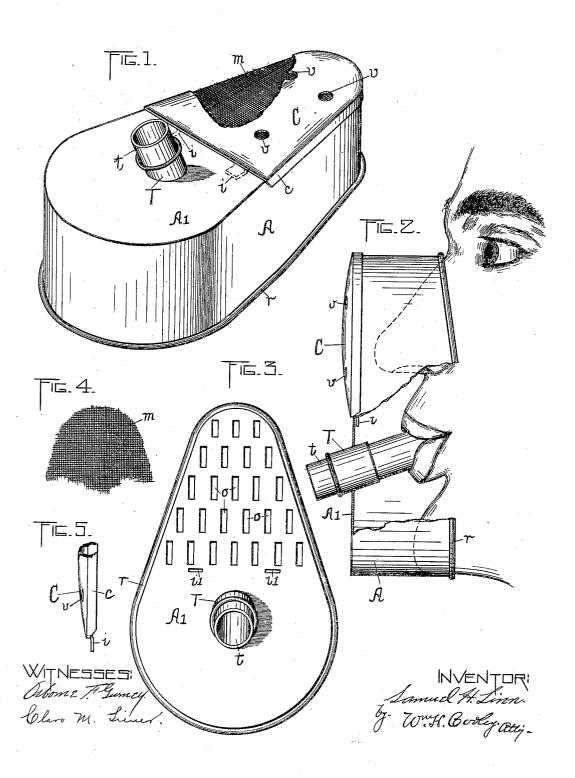
S. H. LINN. INHALER.

APPLICATION FILED APR. 14, 1904.

NO MODEL.



UNITED STATES PATENT OFFICE.

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INHALER.

SPECIFICATION forming part of Letters Patent No. 770,013, dated September 13, 1904.

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To all whom it may concern:

Be it known that I, Samuel H. Linn, a citizen of the United States, and a resident of Rochester, in the county of Monroe and State of New York, have invented a new and Improved Inhaler, of which the following is a specification.

The object of my invention is the production of an inhaler which the operator shall be able to hold in its operative position by the mouth or teeth in such a way that the normal inhalation through the nostrils will result in the breathing of the medicated air, and that, too, without in any way closing the nostrils or forcibly grasping the nose of the user.

With this object in view my invention consists in a casing for inclosing loosely the lower part of the face of the user, including also the lower part of the nose. This casing is arranged to be held in place by a tube somewhat 20 flexible and also adjustable longitudinally within a short fixed tube secured to the casing proper, affording a ready means for the proper adjustment of the instrument to the user. The casing is preferably made considerably wider 25 at the bottom than at the top, being wide enough at the top to be readily insertible over the nose of the user. The upper portion of this casing contains a grating between which and a removable and perforated cap-piece 30 there is arranged to be inclosed or retained in place a suitable absorbent material, which is saturated with the desired inhalent just prior to the inhaler being used.

The accompanying drawings, illustrating 35 an inhaler made in accordance with my inven-

tion, are as follows:

Figure 1 is a perspective view of the inhaler complete with a part of the removable cap-piece broken away so as to show the absorbent material beneath. Fig. 2 is a side view of an inhaler in accordance with my invention with a part thereof broken away so as to show the method of using the same and with a part of the face of the user seen with the inhaler in position. Fig. 3 is a face view of the inhaler with the cap-piece removed. Fig. 4 is a view of a portion of the absorbent material. Fig. 5 is a side view of the lower portion only of the removable cap-piece of my 50 inhaler.

Similar letters refer to similar parts throughout the several views.

Referring to the drawings, A represents the side of the case to my inhaler, and A' the fixed front or face piece thereto, in which there are 55 formed the openings o (seen at the upper half thereof) and also the two horizontal openings i', arranged to receive the ears i on the removable cap-piece in a manner to be explained. Through the front of face-piece A' 60 of the inhaler there is formed an opening in which there is fixed the tube T, slightly inclined, as indicated in the drawings. this tube T there is arranged to fit tightly a somewhat flexible tube t, but not, however, 65so tightly as to prevent the longitudinal adjustment thereof within the outer tube T. This tube t is preferably of semiflexible material, such as rubber, and it is capable of longitudinal adjustment within the tube T, so 7° as to adjust it to the mouth of the user. In using the inhaler this tube t is grasped by the mouth of the person using it in the manner indicated in Fig. 2.

Over the opening o seen in the upper half 75 of the face A' to my inhaler there is arranged to be spread or located a suitable pad or sheet of absorbent material, such as indicated in Fig. 4, which is saturated with the desired inhalent, and after being thus saturated and placed over 80 the holes o the removable cap-piece is sprung into place by first inserting the ears thereon, i, within the openings therefor, i', in the face A', and then forcing the cover C down, so that the rim or flange thereon, c, shall come over 85 the sides of the case A, and thus hold the same firmly in place thereon. Through this removable cover C there are perforations or holes v for the admission of air therethrough, which by passing through the pad m becomes 9° charged with the inhalent with which such pad is saturated.

In using my inhaler the tube t is adjusted longitudinally within the tube T to the desired position to suit the user and is held there 95 by frictional engagement with the inner surface of the tube T. The inhaler is then grasped by the mouth of the user, as indicated in Fig. 2, and the tube t may, if desired, be closed at its outer end by the finger of the 100

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operator or at its inner end by the tongue of the user while inhaling through the nostrils. The air as it is inhaled is drawn mostly through the openings v in the cover C and through the 5 saturated pad m. The user will exhale, preferably, through the tube t. It is not intended to exclude entirely the external air from the nostrils when the inhaler is being used, but it will at once be seen that the larger portion 10 of the air inhaled through the nostrils of the user is caused to pass through the pad m and become charged with the inhalent with which such pad is saturated. Any desired inhalent may of course be used, according to the sys-15 tems and conditions to be treated. A rim ris turned up on the edge of the case A toward the face of the user, so as to present a smooth and satisfactory surface. In charging the pad of my inhaler the cap-piece C may be opened 20 downwardly or entirely removed, as desired. What I claim is-

1. In an inhaler, a case for loosely inclosing the lower part of the face including the lower part of the nose of the user, means for supporting within such case a pad of absorbent material in the normal direction of the currents of air to the nostrils of the user and affording also a free passage for the air to and through such absorbent material, and a tube arranged to be held by the mouth of the user and constituting a support for the entire inhaler, such inhaler removable upon disengagement of such tube from the mouth of the user.

2. In an inhaler, a case for loosely inclosing 35 the lower part of the face including the lower part of the nose of the user, means for supporting within such case a pad of absorbent material in the normal direction of the currents of air to the nostrils of the user and affording 40 also a free passage for the air to and through such absorbent material, and a tube arranged to be held by the mouth of the user and constituting a support for the entire inhaler, such

inhaler removable upon disengagement of such tube from the mouth of the user, such tube ad-45 justable relatively to and within such casing.

3. In an inhaler a casing for inclosing the lower part of the face and also the lower part the nose of the user, the tube adjustable in and relatively to such casing and constituting 50 means for supporting such casing from the mouth of the user, openings through the upper part of the front of such casing and a cappiece constituting with the upper part of the front piece of such casing a receptacle having 55 perforated walls for retaining a pad of absorbent material and holding the same in the normal pathway of inhalation through the nose of the user, such cap-piece articulating with such case upon devices permitting the removal 60 of such cap-piece from such case.

4. In an inhaler a casing for inclosing the lower part of the face and also the lower part of the nose of the user, a tube constituting means for supporting such casing from the 65 mouth of the user, openings through the upper part of the front of such casing and a cappiece constituting with the upper part of the front piece of such casing a receptacle having perforated walls for retaining a pad of absorbent material and holding the same in the normal pathway of inhalation through the nose of the user, such cap-piece articulating with such case upon devices permitting the removal of such cap-piece from such case.

5. In an inhaler a tube arranged to be held by the mouth of the user, a pad of suitably absorbent material and means for supporting such pad from such tube and in the normal pathway of inhalation through the nostrils of 80 the user.

SAMUEL H. LINN.

Witnesses:

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