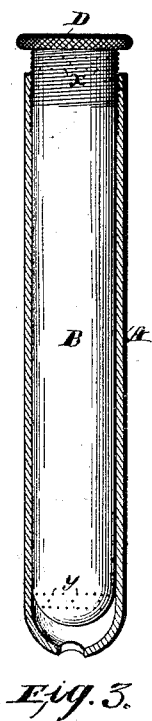
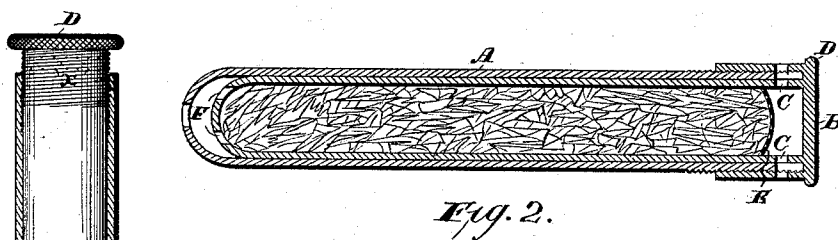
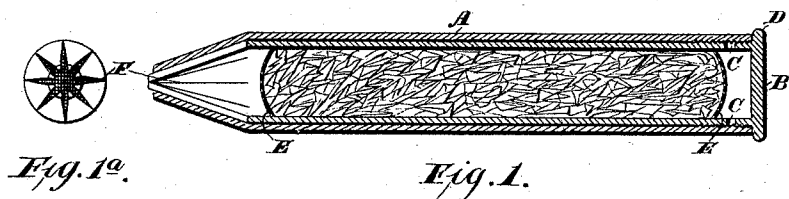


(No Model.)

H. D. CUSHMAN.
INHALER.

No. 476,132.

Patented May 31, 1892.



Witnesses.

Louis F. Julihn.
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UNITED STATES PATENT OFFICE.

HENRY D. CUSHMAN, OF THREE RIVERS, MICHIGAN.

INHALER.

SPECIFICATION forming part of Letters Patent No. 476,132, dated May 31, 1892.

Application filed May 18, 1891. Serial No. 393,188. (No model.)

To all whom it may concern:

Be it known that I, HENRY D. CUSHMAN, of Three Rivers, county of St. Joseph, and State of Michigan, have invented certain new and useful Improvements in Inhalers, of which the following is a specification, reference being had to the accompanying drawings.

My improvements relate more particularly to the class of inhalers known as "menthol-inhalers," in which crystalline menthol is the medicament used.

The object of my invention is to provide an inhaler of simple construction that can be conveniently opened for use and readily closed when not in use to prevent volatilization and escape of the menthol.

My present invention relates to the menthol-inhalers of the kind in which a rotating screw-threaded sleeve is employed, and in which by the rotation of the sleeve the casing is opened or closed at will at both ends, so that when opened air will pass through from end to end and carry the menthol to be inhaled in the usual way and when closed the menthol will be protected.

Referring to the accompanying drawings, Figure 1 is a longitudinal section of one form of my inhaler. Fig. 1^a is an end view of the sleeve. Fig. 2 is a similar longitudinal section of a modified form in which the screw part of the sleeve is outside of the casing. Fig. 3 is like Fig. 1, except as to details explained below.

Referring to Figs. 1 and 2 upon the drawings, A indicates the casing, which is open at both ends and screw-threaded at one end to receive what I will call a "sleeve" B, also correspondingly screw-threaded.

C indicates openings in the sleeve, and D a thumb-piece for rotating the sleeve to screw it in and out.

E indicates perforated stoppers within the

sleeve, and F indicates openings in the opposite tapered end of the sleeve. In Fig. 1 these openings consist of slits. When the sleeve in this instance is forced inward by screw action, the tapered parts between these slits are driven against the tapering open end of the casing, and thus closed tightly together. When the sleeve is rotated in the opposite direction, so as to screw it back, the tapered strips formed at the slitted end of the sleeve will by their resiliency separate from each other enough to open an air-passage through the inhaler.

There are various other formal modifications in which the substance of my invention might be embodied, its principle consisting in the employment of an open-ended casing and a screw-threaded sleeve adapted to open and close both ends of the inhaler simultaneously, so as to prepare it for use or preserve its contents.

The perforations X and Y will permit the air to pass through and are so small as to prevent crystals from coming out when the sleeve is moved out. When it is moved in, both sets of perforations are closed. This is a very simple and excellent form of my invention.

What I claim is—

In an inhaler, the combination, with a screw-threaded casing open at both ends, of a sleeve, also open at both ends and screw-threaded and adapted to be rotated to simultaneously unstop the openings in the casing and to close them, substantially as set forth.

In testimony of all which I have hereunto subscribed my name.

HENRY D. CUSHMAN.

Witnesses:

W. A. HUNTLEY,
GEO. E. MILLER.