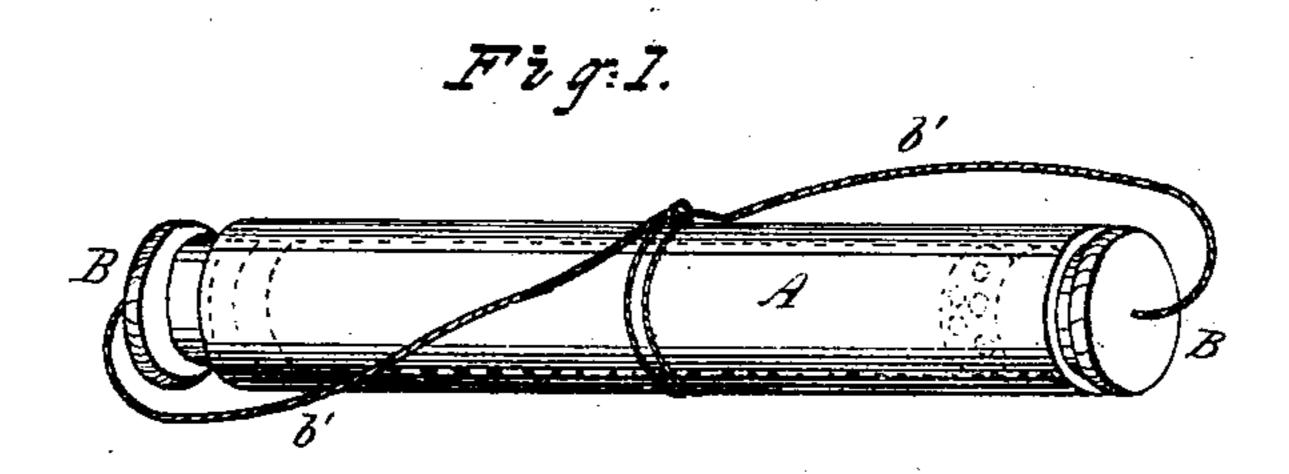
W. H. CUTLER.

Inhalers.

No. 135,411.

Patented Feb. 4, 1873.



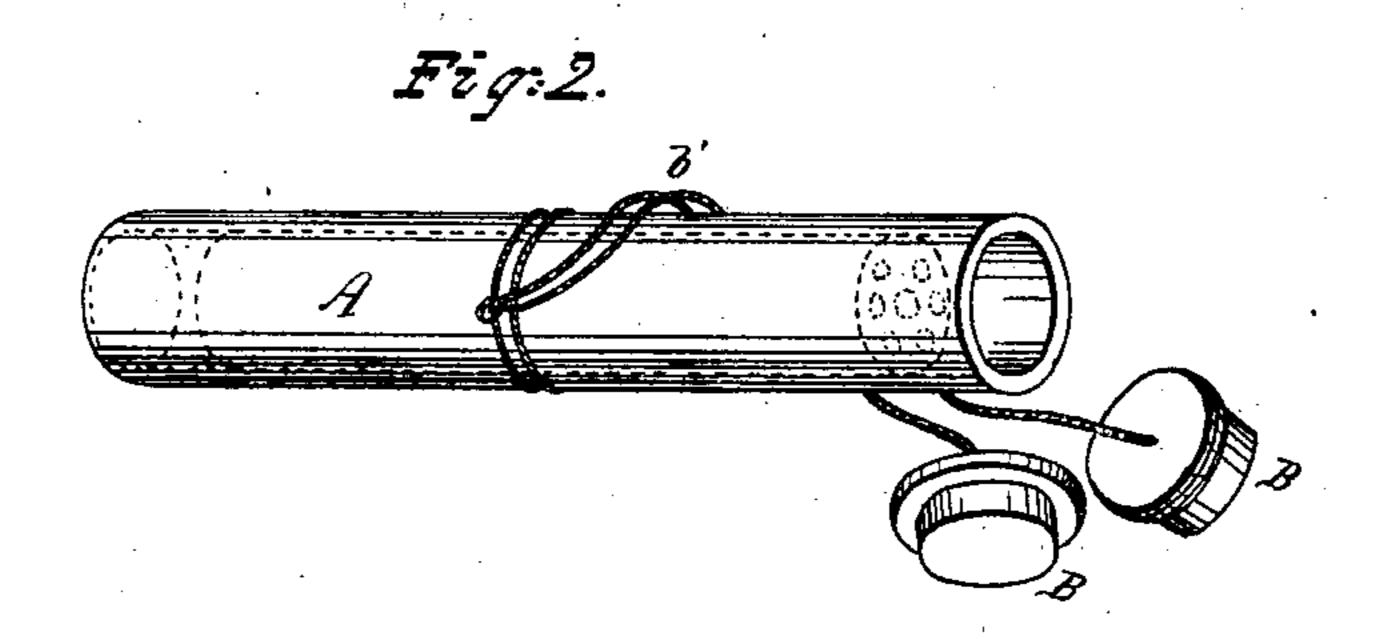
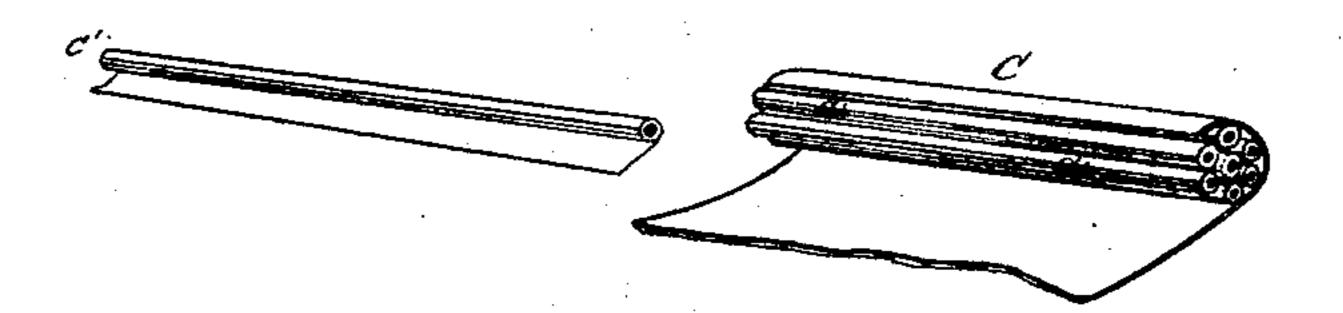


Fig.3.



Wilnesses

Inventor

B.H. Imrehler Stylls. Milieme H. Cutler_

UNITED STATES PATENT OFFICE.

WILLIAM H. CUTLER, OF BUFFALO, NEW-YORK.

IMPROVEMENT IN INHALERS.

Specification forming part of Letters Patent No. 135,411, dated February 4, 1873.

To all whom it may concern:

Be it known that I, WILLIAM H. CUTLER, of the city of Buffalo, county of Erie and State of New York, have invented a certain new and useful Portable Inhaling-Tube; and I do hereby declare that the following is a full and ex-

act description thereof.

The nature of this invention relates to a portable instrument for applying medicine by inhalation, the core of which consists of one or more tubes, made of a fibrous and capillary or porous material, so arranged within the casing of the instrument that the air contained in or circulating freely through the tube or tubes aforesaid will be charged with a medical compound retained in a fluid state, by the material of which said tube or tubes are formed.

In the accompanying drawing, Figure I represents a perspective view of the instrument when corked up. Fig. II represents the same when open for inhalation through either end of the tube. Fig. III represents the core, showing the details of its construction.

A represents an ordinary inhaling tube or casing, which may be made, as usual, of glass, silver, or such other material as will effectually resist the action of an acid or other medical compound which may be brought into contact therewith. This tube or casing is open at both ends, as shown, each opening being provided with a cork, B, which is suspended and connected by a cord, b', to the body of the instrument. C represents the subject of my invention, viz., the core or filling of the tube or casing, which core is made of filtering-paper or other capillary or porous substance, and consists of one or more tubes, C', held together or surrounded by an outer wrapping of the same material.

In order to charge my inhaler, a few drops—say twenty-five to fifty—of the solution or

medical compound are introduced through one or both ends of the tube, opened for that purpose. The fluid so introduced will immediately enter the material of which the core is made and be held there ready for use.

The principal advantages of my invention over others lie, first, in its retaining its form, absorbent power, and flexibity, neither shrinking or swelling, nor becoming perceptibly denser, nor otherwise essentially altered in character under the action of such reagents as iodine, carbolic acid, &c., (which it is expedient to use in concentrated form;) whereas sponge—the common and hitherto preferred material for inhalers—is subject to all these changes, and is, hence, wholly unreliable as to the quantity of air-contact surface it will present at a given time, in a given space, and to a given quantity of inhaling substance. Second, by reason of the definite and constant form of the inhaling-tubes the quantity of air which may be drawn through them is always known or determinate, as well as unvaryinga matter of the highest importance to the physician or other person intending the use of inhalents of a more or less dangerous or powerful nature. Third, the cost of the material of my inhaling instrument, as compared with sponge, is as one to sixteen, or thereabout, · thus enabling it to be furnished to the trade or medical profession at a much lower price.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

A core, C C', for inhaling instruments, formed of a tube or tubes of bibulous paper or analogous material, as specified.

WILLIAM H. CUTLER.

Witnesses:

B. H. MURHLE, S. MOYES.