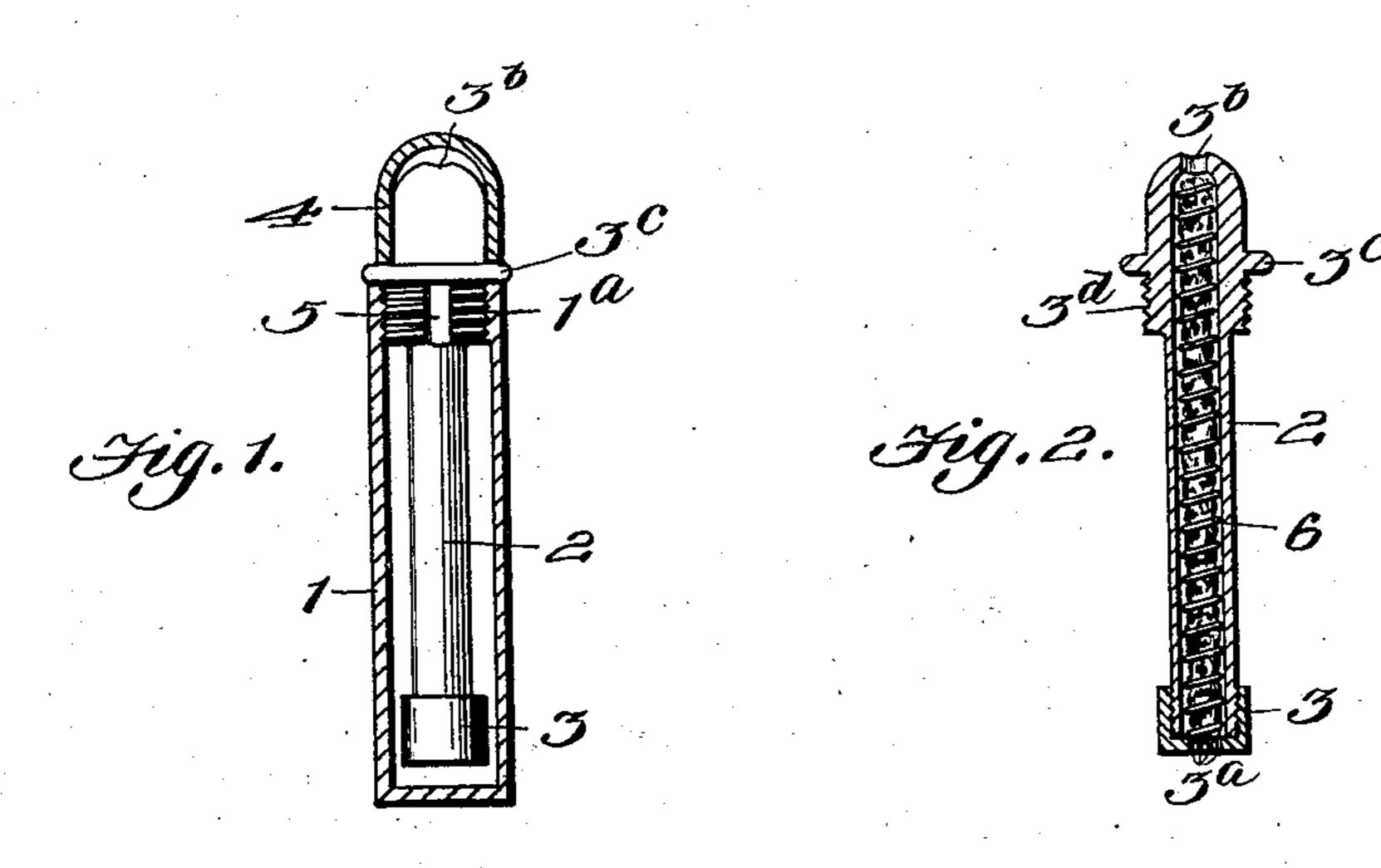
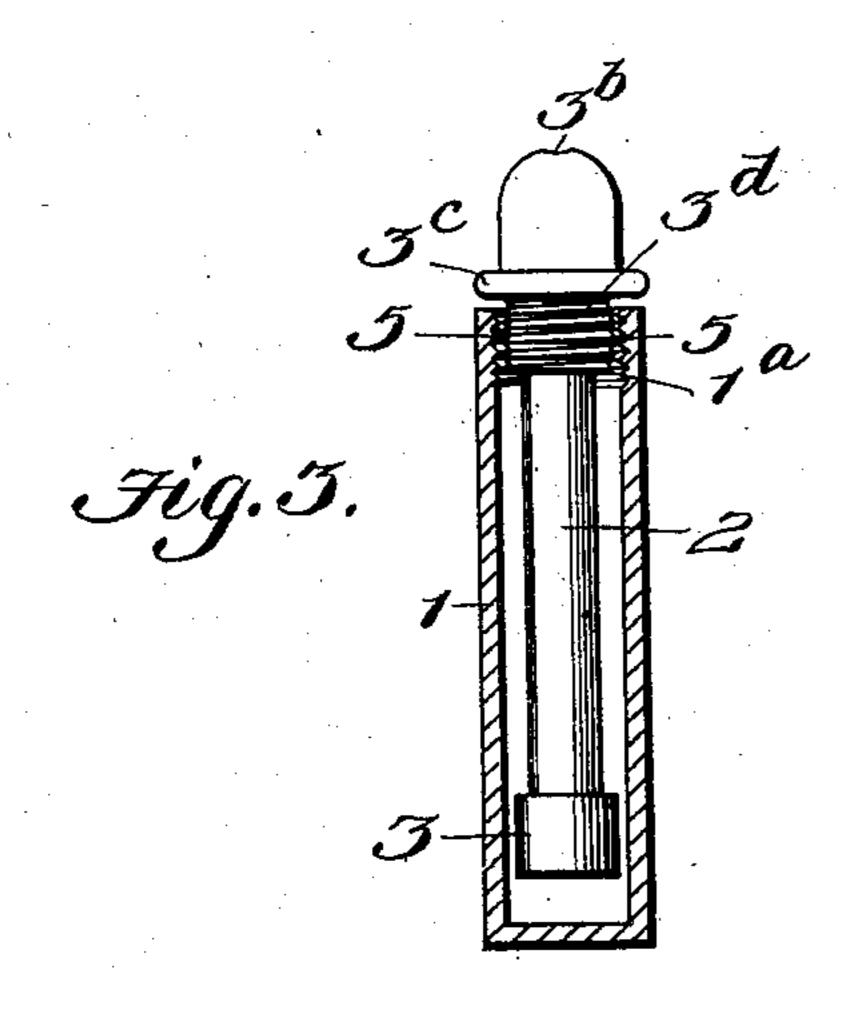
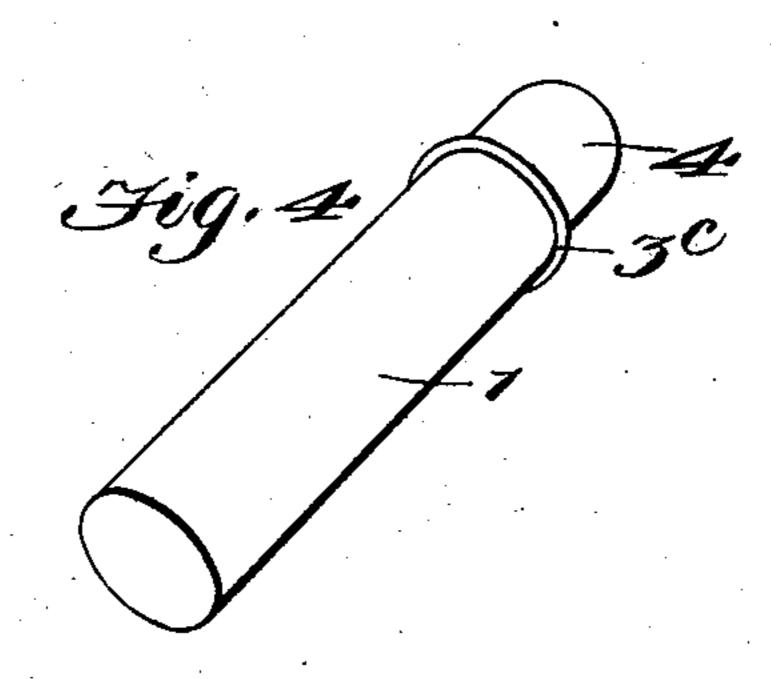
A. DOW. INHALER.

APPLICATION FILED JUNE 14, 1902.

NO MODEL.







Witnesses Educa B. H. Tower, J. Alonza Downtor; Edoon Boot, Ottorneys

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## United States Patent Office.

ALONZO DOW, OF WOOSTER, OHIO.

SPECIFICATION forming part of Letters Patent No. 724,680, dated April 7, 1903.

Application filed June 14, 1902. Serial No. 111,676. (No model.)

To all whom it may concern:

Be it known that I, Alonzo Dow, a citizen of the United States, residing at Wooster, in the county of Wayne and State of Ohio, have s 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 ro to make and use the same.

My invention relates to certain improvements in inhalers designed more especially for nasal catarrh, throat troubles, as hoarse-

ness, &c.

It consists of the detailed construction, combination, and arrangement of parts substantially as hereinafter more fully disclosed, and specifically pointed out by the claims.

In the accompanying drawings, illustrating 20 the preferred embodiment of my invention, Figure 1 is a sectional elevation. Fig. 2 is a similar detailed view. Fig. 3 is a brokenaway enlarged view showing more especially the passage or admission of the air into the 25 closure or device. Fig. 4 is a perspective

view of the device.

In carrying out my invention I provide a suitable outer casing or closure 1, adapted for convenient handling in the treatment of the 30 affected parts. Said casing or closure comprises an upper open - ended body portion with an internal screw-thread 1ª at or near said end for a purpose presently seen, it being somewhat contracted or reduced diamet-35 rically at that point and slightly bulging therebelow the rest of its area. Within this casing or closure is fitted and yet removable an inner receptacle or tube 2, having a lower open end, through which is inserted the con-40 tents of said tube or receptacle. Over said end is placed a cap 3, adapted to have screwthreaded connection with the tube or receptacle 2 and provided centrally with a number of perforations, as 3a, for the passage there-45 through of air to the interior of said tube or receptacle into contact with the contents therein, presently made more apparent. Said tube or receptacle has a preferably-rounded normally upper end provided with a number 50 of perforations or holes 3b for the exhalations in the use of the device. Also said tube or receptacle has preferably a flange 3° a suit-

able distance below its upper or outer end to limit the extent of its insertion into the closure 1. It also has directly below said flange 55 an external screw-thread 3d, adapted to effect engagement with the internal screw-thread 1ª of the closure, thus providing for holding said tube in said closure. Over said end of the tube or receptacle 2 is adapted to be 60 placed a cap or cover 4 for preventing the evaporation of the contents thereof when the device is not in use.

Provided laterally in the tube or receptacle 2, at or near its upper end, are vertical pas- 65 sages or grooves 5 for the admission of external air first into the closure 1, whence it passes up through the perforations in the lower end cap of the tube or receptacle 2 in contact with the medicinal preparations or 70 contents of said tube. The cap 4 of course is first removed, and said tube is sufficiently screwed outward to admit external air into its passages for the purpose pointed out. Within said tube or receptacle is arranged or 75 inserted a helix 6 to aid in the proper retention therein of a suitable absorbent, as a piece of sponge or other means, preferably tubular in contour, placed in said helix and saturated with the remedial agent for the 80 treatment of catarrhal and throat troubles or diseases.

The entire device or inhaler, exclusive of the helix and absorbent, is preferably produced of hard rubber.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An inhaler comprising an outer closure, a plug screw-threaded in said outer closure 90 and provided with a central passage and an external longitudinal groove to provide airpassages between said plug and said outer closure, a lateral flange integral with said plug and adapted to bear upon the edges sur- 95 rounding the mouth of the outer closure and close said air-passage, and a tube depending from said plug into said outer closure adapted to contain a medicament and communicating with the central passage of said plug.

2. An inhaler comprising an outer closure, a plug screw-threaded in said outer closure and provided with a central passage and an external longitudinal groove to provide air-

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passages between said plug and said outer closure, a lateral flange integral with said plug and adapted to bear upon the edges surrounding the mouth of the outer closure and 5 close said passage, a tube depending from said plug into said outer closure adapted to contain a medicament and communicating with the central passage of said plug, and a perforated cap for the lower end of said tube.

3. An inhaler comprising an outer closure, a plug screw-threaded in said outer closure and provided with a central passage and an external longitudinal groove to provide airpassages between said plug and said outer 15 closure, a lateral flange integral with said plug and adapted to bear upon the edges surrounding the mouth of the outer closure and close said air-passage, a tube depending from said plug into said outer closure and 20 communicating with the central passage of said plug, and an absorbent adapted to con-

tain a medicament surrounded by a helix ar-

ranged within said tube.

4. As a new article of manufacture, an inhaler comprising an outer closure, a plug 25 screw-threaded in said outer closure and provided with a central passage and external grooves to provide passages between said plug and said outer closure, a flange integral with said plug and adapted to bear upon the edges 30 of the mouth of said outer closure to close the passages between said plug and said outer closure, a tube communicating with said central passage depending into said outer closure from said plug and made integral there- 35 with, and an absorbent for a medicament surrounded by a helix arranged within said tube, and a perforated cap screw-threaded upon the lower end of said tube, and a cap for closing the central passage in said plug.

In testimony whereof I affix my signature

in presence of two witnesses.

ALONZO DOW.

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Witnesses:

H. P. SAMUEL, F. M. LEWIN.